

*Behavior Which Promoted Health Condition of Elders in Urban Areas: Effect of
Social Management in Thailand*

Prasopchai Pasunon, Thirawat Chantuk

Silpakorn University, Thailand

0321

The Asian Conference on Society, Education and Technology 2013

Official Conference Proceedings 2013

Abstract

This research concerns the study of behavior, which promoted health condition of elder in urban area which represented effect of Social Management in Thailand. The researchers applied the concept as a framework to develop a form of social management by creating health promotion activity for elder. There were 3 intentions from the research: 1) Study behavior which promoted health condition of elder in alternative medicine activity which was Thai massage, 2) Study behavior which really promoted health condition of elder in Yoga recreation activity, and 3) Develop social management approach under health promotion activity for elder by using quantitative research technique. The research included a case study of health promotion in elder by Thai massage with 400 samples, and a case study of health promotion in elder by Yoga recreation activity with 400 samples (Alpha 0.05). The statistics applied in the research were Descriptive Statistics, Factor Analysis, Relation Test, Multiple Regression Analysis, and Pearson's Chi-Squared test to analyze factors, which affected social management level.

According to the results, it was found that elder in Thailand who lived in urban area put an importance on health care trend. They were likely to choose Thai massage as alternative medicine activity. Public sector or any related agency must develop 3 level of continuous social management. The first level was to manage through mechanism of public sector which provided health promotion. The second level was to manage through municipal administration system. The last level was to manage sustainable health promotion with community-based approach.

Keywords: Health condition, elder, social management

Introduction

Thailand is currently going through demographic change and entering the era of aging population. According to the studies of relevant institutions, College of Population Studies, Chulalongkorn University and Institute for Population and Social Research, Mahidol University, it is estimated that the elder will be accounting for approximately 12% of the country's population (National Statistical Office of Thailand, 2013). National Economic and Social Development Board of Thailand has also projected the median age of population in Thailand in 2000 – 2030 and the projection indicated that in 20 years, the median age of population in Thailand will be reaching 40, which means half of the population is age 40 and over, while the other half is under age 40. The aforementioned situation showed that the number of elders in Thailand is constantly accelerating, as a result of technology advancement, education development and health care system improvement. (National Economic and Social Development Board of Thailand, 2013)

The aging demographic trend in Thailand has various impacts on social management, for examples, impact on productivity of labor intensive industry sectors, impact on the government's social welfare management, impact on elderly health promoting management as well as impact on measures, schemes and plans which may influence social management of both public and private sectors (Foundation of Thai Gerontology Research and Development Institute, 2012). Hence, the country's social management system has been compelled to prepare for such situation for over a decade; public and private sectors have readily formulated measures to address the challenges posed by aging population in Thailand. The major measures include promote health and wellness of elders and encourage communities to provide comprehensive care system for elders. (Research Strategic Plan: Aging Society during 2012 - 2016, 2013)

With the effort of Department of Health, Ministry of Public Health to put forward the elderly health promoting campaign, which is a part of the paradigm of social management aiming to develop a process that will enhance elders' ability to take care of themselves, various measures are formulated to control the factors that indicate good health and promote healthier life for elders in all dimensions –physical, mental and social. The important measures include promote good personal hygiene and health of the elders, enhance elders' ability to take care of themselves, encourage family members and communities to care for the elders and support elders to have a healthy life, give elders an opportunity to show their competency to take care of themselves, their families and their communities, as well as advocate health-enhancing Behavior such as exercising (Department of Health, 2013). If elders are able to fully maintain their physical and mental wellness, they will be able to care for themselves and lessen their dependence on communities and the government could further cut down on the budget using for elderly-related social management.

Amid various health promotion campaigns in Thailand, elderly health care trends are being applied as a measure for improving their quality of life and various healthy activities are being promoted to improve their physical and mental wellness. Since more and more older persons are facing health problems, due to lack of exercise, tension caused by urban environment, family and economy problems as well as food safety problems, the government therefore needs to encourage people to dependently

care for themselves, one of the most popular health promoting activities is Yoga recreation activity and Thai massage, which is one of alternative medical therapies. The achievement of social management in primary level is mostly seen in the elders in urban areas. (Noppawan Chongwattana and Kua Wongboonsin, 1998)

Elders are likely to maintain their physical strength by practicing Yoga as a recreation activity and getting Thai massage as an alternative medical therapy. The reason is that Yoga is believed to be able to help maintaining body balance and stretching muscles. Yoga practitioners will also feel relax because of better blood circulation. Moreover, there are a variety of yoga techniques available to cater to various age groups and genders, even the patients suffered from various illnesses can also practice Yoga. (Phyathai Hospital, 2013) While Thai massage as an alternative medical therapy is also becoming more well-known and more popular, not only among Thai people, but also among foreigners. Since Thai massage is believed to bring a great deal of benefits, for examples, improving blood circulation, relieving pain and muscle tension, increasing flexibility and energy (Ministry of Culture, Department of Cultural Promotion, 2013). Supposing the aforementioned activities can actually help to improve health condition of elders, it will represent a success of the country's social management in higher level and it could also help to cut down the budget using on elderly wellness and welfare promotion in a long term.

Considering aforementioned scenario, our research team is thus interested in studying Behavior which promotes health condition of elders in urban areas which represent effect of social management in Thailand. The researchers have applied the concept as a framework to develop a social management model by creating health promotion activity for elders. The research aims to achieve 3 purposes: 1) Study behavior which promotes health condition of elders in alternative medicine activity which is Thai massage, 2) Study behavior which promotes health condition of elder in Yoga recreation activity, and 3) Develop social management approach under health promotion activity for elders. The framework of research is illustrated in Figure 1.

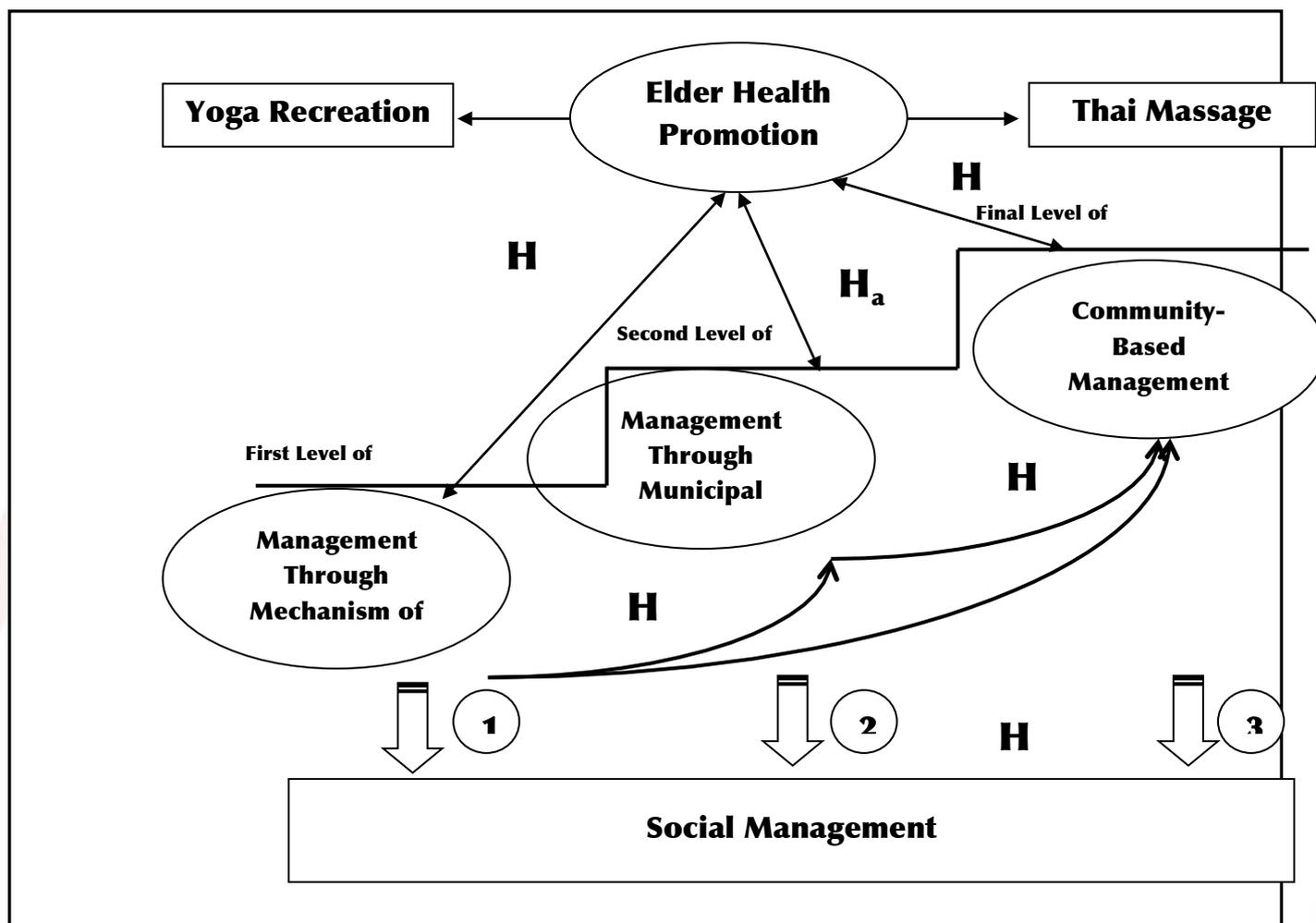


Figure 1 Research Framework

Research Methodology

The research team has applied Quantitative Research in order to analyze behavior that promotes health condition of elders which is Thai massage alternative medical therapy and study behavior that promotes health condition of elders which is Yoga recreation activity, using the analysis result of this two cases to develop social management model that will create elders' health promoting activities within the research framework. A sampling frame is restricted within the elders who live in Bangkok and metropolitan areas. The tools applied are survey letters and interview. Among 1,000 samples selected by probability sampling methods and accidental sampling techniques, 800 samples have fully completed the surveys. Survey results are collected and divided into 2 cases, 1) A case study of health promotion in elders by Thai massage alternative medical therapy with 400 samples and 2) A case study of health promotion in elders by Yoga recreation activity with 400 samples (Alpha 0.05) (Sirichai Pongvichai, 2009). As for social management model development, the team

has applied the model of health management in social management (Penchan Serrer et al, 2012), which introduces 3 levels of management. The first level is to manage through mechanism of public sectors which provide health promotion. The second level is to manage through municipal administration system. The last level is to manage sustainable health promotion with community-based approach.

The statistics applied in the research are Descriptive Statistics, including percentage and standard deviation and inferential statistics which are: 1) Factor Analysis: extracting factors effecting Behavior of the elders who practice Yoga recreation activity 2) Relation Test: testing a relationship between variables of Behavior of elders who use Thai massage as an alternative medical therapy and practice Yoga as a recreation activity and variables of social management by applying Multiple Regression Analysis (Kunlaya Vanichbuncha, 2003).

3) Factor Analysis: analyzing factors which affect social management level by applying Pearson's Chi-Squared test (Chusri Wongratana, 2007) in order to test the influence of social management levels that have continual effect within the aforementioned research framework.

Conclusion

Part I, Behavior of elders who use Thai massage as an alternative medical therapy can be analyzed and described using 4Ps marketing strategy, the research result is as following:

1. Product ($\bar{x} = 4.36$, $SD = 0.70$) the first 4 factors include 1) Safety of the massage practice 2) Confidence in quality and standard of the service, the massage service provider must be well-known and reliable. 3) Hygiene and cleanness of the service and 4) Service standards guaranteed by government agencies.

2. Price ($\bar{x} = 4.32$, $SD = 0.71$) the first 4 factors include 1) Price transparency 2) Reasonable price when comparing with service time 3) Competitive price and 4) Variable price, depends on types of services.

3. Place ($\bar{x} = 3.95$, $SD = 0.90$) the first 6 factors include 1) Spacious, convenient and relaxing service spaces 2) Open daily 3) Availability of facilities for examples, restroom and restaurant 4) Location near bus line 5) A lot of branches available to suit the customers' preference and 6) Availability of parking space.

4. Promotion ($\bar{x} = 3.95$, $SD = 1.07$) the first 4 factors include 1) Providing knowledge regarding Thai massage 2) Special services for elders 3) Discounts offered when using the service next time and 4) Advertising in wide range of media.

Part II, the factors effecting Behavior of elders who practice Yoga as a recreation activity can be extracted into 6 categories as following:

1. Social factor ($\bar{x} = 3.52$, $S.D. = 0.860$) is considered to be highly important. Its Eigen value is 8.003. It can be applied to explain 18.189% of variance in Yoga practice. It could be arranged in order of importance as following 1) Yoga practice helps to improve the relationship between the practitioners and their friends or their companies. 2) Yoga practice gives them a chance to share experiences and exchange

opinions with other people 3) Yoga practice makes it easier to make friends and 4) Yoga practice gives them a chance to meet a lot of people.

2. Health factor ($\bar{x} = 4.40$, S.D. = 0.526) is considered to be highly important. Its Eigen value is 6.482. It can be applied to explain 14.732% of variance in Yoga practice. It could be arranged in order of importance as following: 1) Practice Yoga in order to maintain physical wellness and strength 2) Practice Yoga in order to increase energy and agility 3) Feel that Yoga exercise is suitable for themselves and 3) Feel that their health condition has evidently improved after a short period of Yoga practice.

3. Economic factor ($\bar{x} = 3.20$, S.D. = 0.986) is considered to be moderately important. Its Eigen value is 5.214. It can be applied to explain 11.851% of variance in Yoga practice. It could be arranged in order of importance as following: 1) Choose to practice Yoga because of its price 2) Choose to practice Yoga because of commuting fares and 3) Choose to practice Yoga because of their level of income.

4. Environmental factor ($\bar{x} = 3.89$, S.D. = 0.651) is considered to be highly important. Its Eigen value is 4.733. It can be applied to explain 10.757% of variance in Yoga practice. It could be arranged in order of importance as following: 1) Safety of the Yoga practice place 2) Suitability of the practice place and 3) The practice place near their homes.

5. Psychological factor ($\bar{x} = 4.05$, S.D. = 0.660) is considered to be highly important. Its Eigen value is 4.306. It can be applied to explain 9.786% of variance in Yoga practice. It could be arranged in order of importance as following: 1) Yoga makes their body stronger and their mind calmer 2) Yoga improves their self-confidence and 3) See that other people get good result from Yoga and thus want to try doing Yoga too.

6. Cultural factor ($\bar{x} = 3.35$, S.D. = 0.833) is considered to be moderately important. Its Eigen value is 2.503. It can be applied to explain 5.689% of variance in Yoga practice. It could be arranged in order of importance as following: 1) Yoga practice is applicable in every culture 2) Yoga can promote mutual culture exchange and 3) Yoga is unique in its own way, just like 'Wai' (The Thai greeting consists of a slight bow, with the palms pressed together in a prayer-like fashion) culture of Thai people.

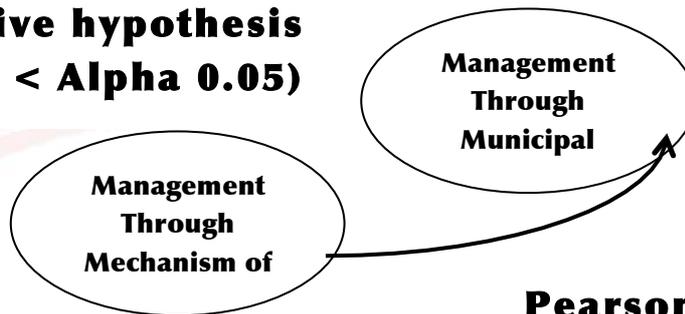
Part III, Test for relationships between the variables of Behavior which promote health condition of elders, which include Thai massage alternative medical therapy and Yoga recreation activity, and the variables of social management, using Multiple Regression Analysis. The result is shown in Table 1.

Table 1 Coefficient of correlation equation between the variables of Behavior which promote health condition of elders and the variables of social management.

Independent Variable (Marketing Mix in Activities Which Promoted Health Condition of Elders)	Dependent Variable (Social Management)								
	Management Through Mechanism of Public Sectors Providing Health Promotion (\hat{Y}_1)			Management Through Municipal Administration (\hat{Y}_2)			Community-Based Management (\hat{Y}_3)		
	bi	t	Sig.	bi	t	Sig.	bi	t	Sig.
Product (X_1)	0.31	6.35	0.00	0.28	5.17	0.00	0.09	1.66	0.10
Price (X_2)	-0.01	-0.08	0.94	-0.01	-0.10	0.92	-0.11	-1.66	0.10
Place (X_3)	0.10	2.01	0.05	0.13	2.29	0.02	0.42	7.75	0.00
Promotion (X_4)	0.01	0.23	0.82	-0.03	-0.88	0.38	-0.00	-0.03	0.97
Constant	0.40	2.93	0.00	0.71	4.69	0.00	0.76	5.10	0.00
* Alpha = 0.05	F-Test = 147.302 Sig. = 0.000 R = 0.851, R ² = 0.725 Adjusted R ² = 0.720, Durbin Watson = 2.005			F-Test = 104.268 Sig. = 0.000 R = 0.807, R ² = 0.651 Adjusted R ² = 0.644, Durbin Watson = 2.205			F-Test = 140.791 Sig. = 0.000 R = 0.846, R ² = 0.715 Adjusted R ² = 0.710, Durbin Watson = 2.348		
Accept to Ha Assumption									

Part IV, Test for the influence of social management between the variables of management through mechanism of public sectors that provide health promotion and the variables of management through municipal administration (H_b) (Nittaya Pensirinapa, 2012). See Figure 2.

**H_b: Accept to
Alternative hypothesis
(P-value < Alpha 0.05)**

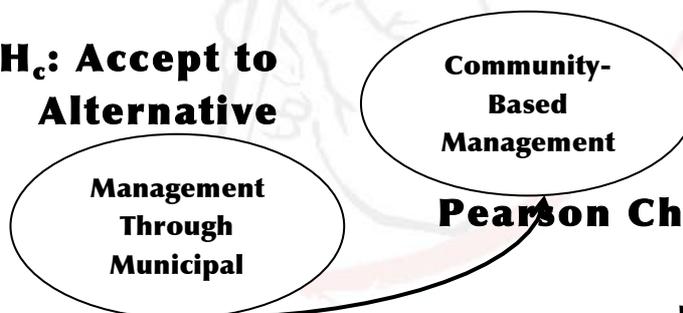


**Pearson Chi-Square
(X²) : 43.057
P-value: .000
N : 800**

Figure 2 Result of statistical test for the influence of social management between the variables of management through mechanism of public sectors that provide health promotion and the variables of management through municipal administration.

Part V, Test for the influence of social management between the variables of management through municipal administration and the variables of community-based management (**H_c**) (Bandit Piriyasaisanti, 2007). See Figure 3.

**H_c: Accept to
Alternative**



**Pearson Chi-Square (X²)
: 51.023
P-value: .000
N : 800**

Figure 3 Result of statistical test for the influence of social management between the variables of management through municipal administration and the variables of community-based management.

Part VI, Test for the influence of social management between the variables of management through mechanism of public sectors that provide health promotion and the variables of community-based management (H_d) (Dechrat Sukkarmnert, 2001). See Figure 4.



Figure 4 Result of statistical test for the influence of social management between the variables of management through mechanism of public sectors that provide health promotion and the variables of community-based management

Result and Discussion & Recommendation

The research indicates that the elders who lived in urban area of Thailand put an importance on health care trend. This phenomenon reflects the achievement of the government's social management, as the government has readily formulated plans to address the challenges posed by the acceleration of aging population in Thailand. The majority of elders are likely to choose Thai massage as alternative medical therapy to maintain health (Paichit Warachit et al, 2012). Most of them are also influenced by 4Ps marketing strategy -- Product, Price, Place and Promotion (Siriwan Serirath et al, 2009), when choosing Thai massage service. As for the elders who participate in Yoga recreation activity, the factors that lead to their participation are social factor, health factor, economic factor, environmental factor, psychological factor and cultural factor (Phyathai Hospital, 2013). The aforementioned data indicates that elders need to participate in health promoting activities, both Thai massage and Yoga practice. As a result, public sector or agency relating to elderly health promotion work should develop 3 levels of continuous social management. The first level is to manage through mechanism of public sector which provides health promotion. The public sector must act to allocate budget for health promoting activities. The second level is to manage through municipal administration system. As the municipal administrations and the people in their responsible areas are particularly close, so they can easily reach out to the elders in their areas. The municipal administration should hold health promoting activities for elders on regular basis and make the elderly health promotion a main strategy for municipal health promotion scheme (Bureau of Policy and

Strategy, Ministry of Public Health, 2011).The last level is to manage sustainable health promotion with community-based approach or regard elderly population as a center of continual health promotion activities. The process in this level could be executed by the authority of local leaders as well as activities held by local schools and local religious places. Since the religious places are the heart of communities, the people would be willing to unite and substantially work together to promote health. (Nakhon Si Thammarat Rajabhat University, 2013)

In order to execute the aforementioned social management, the important agencies responsible for promoting wellness of Thai people should proceed to continually hold health promotion activities, especially Thai massage and Yoga practice for elders, starting from the management through mechanism of public sectors which provide health promotion, then carry on to the management through municipal administration system and the final stage is the community-based management which will lead to sustainable health promotion for elders in Thailand.

Reference

- Department of Cultural Promotion, Ministry of Culture. (2013). Thai Massage. Retrieved January, 5, 2013, from http://folklore.culture.go.th/index.php?option=com_content&view=article&id=152:2010-04-04-18-57-33&catid=67:2009-11-21-07-28-12&Itemid=66.
- Department of Health. (2013). Health Promotion Campaign. Retrieved January, 15, 2013, from <http://hp.anamai.moph.go.th/soongwai/statics/about/soongwai/topic001.php>.
- Kunlaya Vanichbuncha. (2003). Statistical Analysis: Statistics in Administration and Research. Bangkok: Department of Statistics, Faculty of Commerce and Accountancy, Chulalongkorn University.
- Chusri Wongratana. (2007). Application of Statistics in Research. Bangkok: Srinakharinwirot University.
- Dechrat Sukkarmnert. (2001). Public Schemes for Health: Analysis of Health Impact Evaluation System. Bangkok: Health System Research Institute.
- Noppawan Chongwattana and Kua Wongboonsin. (1998). Illness Patterns and Elderly Welfare and Medical Care Schemes in Thailand. Bangkok: College of Population Studies, Chulalongkorn University.
- Nittaya Pensirinapa. (2012). Local Administration and Exercise Promoting Campaign in Local Areas. Journal of Health Science, (1)1. School of Health Science, Sukhothai Thammathirat Open University.
- Bandit Piriyasaisanti. (2007). Public Service Quality Management and Administration for Subdistrict Administrative Organization in Lumphun Province. College of Innovation Management, Rajamangala University of Technology Rattanakosin.
- Penchan Serrer et al. (2012). Social Management Model for Solving Violence Issues. Bangkok: Ministry of Social Development and Human Security of Thailand.
- Paichit Warachit et al. (2012). Municipal Health Promoting Hospital Administration and Management Handbook. Nontaburi: Bureau of Policy and Strategy.
- Nakhon Si Thammarat Rajabhat University. (2013). Health Promotion Project. Retrieved February, 5, 2013, from <http://www.nstru.ac.th/healthy/?action=ss4>.
- Foundation of Thai Gerontology Research and Development Institute. (2012). Situation of Elderly Population in Thailand in 2010. Bangkok: Foundation of Thai Gerontology Research and Development Institute.
- Research Strategic Plan: Aging Society during 2012 – 2016. (2013). Retrieved January, 10, 2013, <http://ird.rmuti.ac.th/newweb/research/download/s10.pdf>.
- Phyathai Hospital. (2013). Yoga is More Useful than You Thought. Retrieved January, 9, 2013, from <http://www.phyathai.com/medicalarticledetail/1/25/460/th>.
- Sirichai Pongvichai. (2009). Statistical Analysis Computing for Research. Bangkok: Chulalongkorn University Press.
- Siriwan Serirath et al. (2009). Modern Marketing Administration. Bangkok: Diamond in Business World.
- National Economic and Social Development Board of Thailand. (2013). Working Age and Older Age Dependency Ratio, Older persons Index, Older Population (aged 60 and over) and Total Population Ratio (2000 - 2030). Retrieved February, 12, 2013, from <http://social.nesdb.go.th/>

SocialStat/StatReport_Final.aspx?reportid
=212&template=1R1C&yeartype=M&subcatid=27.

National Statistical Office of Thailand (2013). Survey of Older Persons in Thailand.
Retrieved January, 11, 2013, from
http://www.nic.go.th/gsic/wsdata/ws_nso/p_17elderly.html.

Bureau of Policy and Strategy, Ministry of Public Health. (2011). Strategy
Framework: National Health Promotion and Illness Prevention Scheme 2011
– 2015. Nontaburi: Bureau of Policy and Strategy, Ministry of Public Health.



