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Indicators of active ageing for sustainable development: A comparative insights of ageing elderlies from Chiang Mai (highland) and Nakhon Pathom (lowland) Provinces, Thailand

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Abstract

There is a growing importance in the research of longevity, active ageing and its indicators as ageing has profound social and economic consequences in the 21st century with implications for nearly all sectors of society. As active ageing is a global goal in today's ageing world for meeting the challenges of older people and for improving their quality of life, it is important to understand the indicators of active ageing for developing policies and programs focused on active ageing in an ageing society like Thailand. This article aims to provide comparative insights of the important indicators of active ageing in the two provinces.

The data was collected through in-depth semi-structured interviews, including 6 participants from Chiang Mai and 6 from Nakhon Pathom, based on convenience and purposive sampling method.

The findings provide insights of the important indicators as family or neighborly support, community participation, health care improvement and social security to improve the well-being of elderly and concluded with the need of innovative policies and public services specifically targeted to elderlies' active ageing indicators, including those addressing, health care, social security, family support, social participation, activities and social protection for the ageing elderly.

Keywords: Active ageing, indicators, longevity, well-being of elderly
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1. Introduction

The proportion of ageing population is increasingly increased in the recent decades due to the significant advancement of medical science and technology, which enable to improve health, decreasing mortality, greater longevity and declining fertility [1 – 4]. As a result, the global share of older or ageing people (aged 60 years or over) is expected to be increased more in the next few decades, from 841 million people in 2013 to more than 2 billion in 2050 and by 2060, the elderly population will grow from 17.4% to nearly 30% worldwide [5]. This pattern is expected to continue over the next few decades with many important socio-economic and health consequences, including the increase in the old-age dependency ratio [6]. Therefore, ageing of population is expected to be among the most prominent global demographic trends of the 21st century.

There has been a both global and local promotion of the term 'active ageing' in order to develop policies related to the ageing population [7]. Active ageing for sustainability is concerned with promoting rights of older people to be healthy, so as to reduce the costs of health and social care, providing longer employment to reduce pension costs, along with active participation in social and community activities. However, the concept of active ageing lacks uniformity [8]. This lack of uniformity makes difficult in developing and comparing policy implementation, both internationally and nationally [9]. The current article used WHO definition of active ageing as "continuing participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labor force" [10] (p. 12). This definition stresses elderlies to remain active which needs promotion of health, social participation and providence of social security.

It is important to study active ageing indicators

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as longevity has profound social and economic consequences in the 21st century with implications for nearly all sectors of society. The 2030 Agenda for Sustainable Development aims to achieve sustainable development in a balanced manner, including human rights of all people for all segments of society, at all ages, with a particular focus on the most vulnerable—including older persons [11]. For achieving this sustainable goal, the first and foremost indicator is to give increasing priority to promoting the well-being of the growing number and proportion of older persons in most countries of the world and stresses the importance of considering ageing elderlies as the active agents of societal development in order to achieve truly transformative, inclusive and sustainable development outcomes [12]. The study is carried out with the following objectives:

- to find the indicators of active ageing from socio demographic characteristic, social participation, health improvement and available social security for the ageing elderly
- to compare between the two Thai provinces in order to evaluate, monitor and recommend directions for policy making on active ageing, health and longevity of the older people
- to develop the indicators of active ageing of the elderly through grounded theory from the result of the study The article is organized into the following parts as: Introduction, Literature Review, Methods, Results and Discussion and lastly, Summary, Conclusion and Recommendations.

2. Literature Review

Zaidi [13] had mentioned the following important points for active ageing: 1).As active ageing indicators do not capture fully the rights of older people – additional rights with specific indicators are essential. 2). The Active Ageing Index (AAI) can offer a framework (methodology) for the baseline assessment and monitoring of rights of older people. In addition, he stated the key feature of active ageing index as: contributions of older people and identify their potential; evaluate and monitor progress, and engage policy makers for mutual learning. He highlighted the important indicators and their relationships as: age discrimination and low employment, healthcare services and independent living, social protection and secured living. Similarly, Douglas et al [14] investigated the importance of the indicator of social participation in the life of older people and also to provide information to health services the importance of social participation as an indicator of successful aging. The study aimed to find the association between social participation and health in adults aged 65 years and older, using three concepts of social participation as: social connections, informal social participation and volunteering and discovered that all the three concepts have demonstrated associations with health indicators and also revealed that social participation at baseline is positively associated with mental and physical health. Finally, the study concluded that by using social participation indicator, researchers of health services can discover the relative effect of each form of participation on the health of older adults. This was supported by other studies too in Australia [15, 16].

There were many studies in Thailand that focus mainly to estimate and identify active ageing attributes among ageing population in Thailand using three dimensions: health, community participation and security in relation to socio demographic characteristics [17 – 22]. These studies identified some indicators of active ageing as: being self- reliant, being actively engaged with society such as social participation and social contribution; growing spirituality; maintaining healthy lifestyle; being active learners; and managing later life security and also reported the need to study variation of active ageing in different regions of Thailand. The studies concluded that active ageing level of elderly is yet to be improved in Thailand as it is far behind the sustainable goal and pointed out the needs to consider the intervention measures for the welfare of the elderly with a focus to improve health needs, economic security, to promote longer working lives, to arrange lifelong learning program, and to improve economic conditions for increasing their active ageing level along with active participation of community activities among the elderly in both formal and informal social activities such as engaging in religious activities or meditation as important indicators [23 – 25]. [26] further reported that the number of ageing populations is growing everywhere including Thailand due to improvement in health facilities, medical technologies, services and sanitation. And these cause a number of challenges such as rising demand for health services, growing requirements for long-term care, declining family support, and increasing needs of income and social security. To solve this problem is the question for policymakers and social security administrators for its ageing society. In addition, recent social and economic developments in Thailand have resulted in increasing migration from rural villages to urban centers. This has led to varying living arrangements for older people such as skipped generation household, three generation household and older people living alone This instigated [27] to conduct a study in Kanchanaburi Province, Thailand with aims to identify the associations between the living arrangements of elderlies and their psychological well-being and indicated that older couple households experience higher psychological well-being in skipped generation households where grandparents raise children and parents are absent from the household, than those in three generation households. The study also brings the importance of social and cultural factors related to elderlies' psychological well-being. Recent study made by

Figure 1: Indicators of active ageing in Thailand (grounded theory)

[28] examined the relationship between social isolation, loneliness, health, social care and longevity of the ageing elderly in order to find out the factors, impact and the different kinds of approaches, care or interventions to reduce the negative impact of ageing. [29] have also reviewed previous studies on the indicators of active ageing studies in Thailand. These studies focused mainly to estimate and identify active ageing attributes among ageing population in Thailand using three dimensions: health, community participation and security in relation to socio demographic characteristics. The review highlighted importance of inclusion of ageing elders as their participation are important for achieving societal development goals so as to bring a thoroughly inclusive, transformative and sustainable development outcomes.

3. Method

3.1. Grounded theory

The study used grounded theory research design developed from in - depth qualitative case study research method to facilitate the generation of research objectives and process. Grounded theory is a general research methodology leading to the development of theory inductively from the analysis of the collected data [30]. The grounded theory that emerges from the analysis of the collected data in this study is given in Figure 1.

3.2. Universe and sampling

The study was conducted in Chiang Mai and Nakhon Pathom Provinces of Thailand. The city or province of the sample study was Ban Pang Bong and Ban Pok Villages in Chiang Mai and Salaya Village and Salaya Hospital in Nakhon Pathom, selected according to convenience of the researchers. There were 12 participants (6 men and 6 women), 80 years and above, consisting of 6 participants from Chiang Mai and 6 from Nakhon Pathom as given in Table 1 and Table 2. Gender consideration was taken into account in the selection comprising of 3 men and 3 women from each province. Purposive sampling was used for selecting the sample of convenience, with due consideration as the most productive sample to obtain the research objectives [31].

3.3. Data collection

Data collection took place in Chiang Mai Province from Ban Pang Bong and Ban Pok Villages in the beginning of 2019 and Nakhon Pathom Province from Salaya Village and Salaya Hospital in 2018 through semi-structured interviews because they allowed the participants to elaborate the responses with more flexibility and this help to elicit more information from the participants [32]. The participants to interview was selected through snow ball technique recommended by key knowledgeable personnel from local Municipality or ageing care centers in the selected provinces, on the basis of being able to provide informative answer relating to the theme of the research. In - depth interviewing processes were conducted in a private room of local ageing care centers, hospital, at the residence of the respondents and at a place according to their convenience on a particular appointment date, time and place. Even though, the interviews were semi-structured, they were conducted with a focus on a previously circulated list of key interview topics and questions drawn from the review of existing literature. This methodology was based on that described by [33] having some topics of discussion in mind rather than a fixed list of interview questions. Each participant was asked to provide a written informed consent for the study (including audio-taping, video recording and transcription of the interviews) prior to participation. The interviews conducted lasted between forty-five minutes and sixty minutes each. Data were recorded using a mobile phone device and transcripts were made. Additional information and informal discussions were also noted in a diary.

3.4. Data analysis

The collected data from the voice recording along with field notes was transcribed. When it was fully transcribed, the data was then coded, themes and sub-theme identified. The codes are keywords, phrases or sentences that represents data which are used to categorize or organize text and are considered as an essential part of qualitative research [34]. Codes found to be conceptually similar or related in meaning were grouped into sub-themes. Sub-themes were then grouped together into broad themes. The data were analyzed in this way and then interpreted accordingly. Constant comparison between one participant to another as well as between the two groups from Chiang Mai and Nakhon Pathom was done.

Table 1. Distribution of participants from Chiang Mai by gender, age, marital status, family size and past occupation

Participants	Gender	Age in years	Marital status	Family size	Past occupation
1	man	90	Remarried widower	5	Farmer
2	man	87	widower	2	Farmer
3	man	80	married	4	Farmer
4	woman	81	widowed	5	Farmer
5	woman	90	widowed	2	Farmer
6	woman	87	married	3	Wage laborer

Table 2. Distribution of participants from Nakhon Pathom by gender, age, marital status, family size and past occupation

Participants	Gender	Age in years	Marital status	Family size	Past occupation
1	man	86	widower	5	Farmer
2	man	81	Remarried	5	Manual worker
3	man	85	married	6	gardener
4	woman	84	Separated	7	Selling business
5	woman	90	widowed	4	Farmer
6	woman	81	widowed	2	Selling business

4. Results

Participant 1

Mr. L. R. is 86 years old man, widower and disabled, living in Salaya, Nakhon Pathom, Thailand. His past occupation was farmer and gardener. But, currently, he is retired and unable to work or walk as he is crippled after an accident. He comes from a joint family with two brothers and sisters under the care of his parents. His parents too were farmers by occupation. After he got married, he separated from his parents and lived with his wife in a nuclear household in Salaya, Nakhon Pathom. He has a son and a daughter. After the death of his wife, he went to live in the house of his daughter, who is a working woman, to take care of her family. She leaves her father alone during day time as she has to go to work but at night time after she comes back from work, she takes care of him. One day, when he was staying alone, he goes to the bathroom and accidentally he fell down on the slippery bathroom. He was taken to the hospital by his daughter. But it was found that his hip was fractured and since then could not recover or able to walk. His grandson, too lives in the same village of Salaya. Since then, he is living in the house owned by his grandson, who does business of selling groceries at home.

Participant 2

Mr. P. M. is 81 years old man living in Salaya, Thailand. His occupation was collecting firewood from nearby village and selling it. He was gardener and farmer too. He has one son and one daughter from his old wife. He and his old wife were divorced about 20 years back. His hometown was in Singburi Province. He remarried another woman after separating from his old wife and currently living in a joint family with his new wife in the house owned by his sister-in-law (elder sister of his new wife) in Salaya. His new wife has a daughter from her former husband and so there are five persons living together in the family as: he, his new wife, sister-in law, step-daughter and grand - daughter. His children were already married and established nuclear household with their families. As he is an intra- city immigrant, he is new to Salaya and does not have many friends there.

Participant 3

Mr. S. P. is 85 years old man from Salaya, Thailand. His home town is Salaya itself and worked as a farmer planting bananas, vegetables, seasonal fruits and reared fish in household pond. Their only source of income was from selling the harvested products from their farms. His wife was housewife but she helped him in economic expenses by selling local snacks made from sticky rice and banana. He comes from a joint family, consisting of 6 persons. He is happy and contented since all the family are living together in the joint household in Salaya. As he was very active when he was young, he does not have many health problems even though old, but gets tired fast, as he has hypertension. He has no fears as he has a dog, which always barks whenever any stranger enters the house. In addition, he has a daughter who runs a business of selling cooked food at home and also have good and friendly relationship with his neighbors. He owns a mobile phone too, for communication with friends and relatives.

Participant 4

Ms. C. T. is 84 years old woman from Salaya Village. She has a daughter from her marriage and ran a grocery shop attached to her house. She was separated from her husband when her daughter was only 8 years old because she could not get along with her husband due to many differences. The income from her selling business was the only source of income for running

her household. She brought up her daughter single-handedly after she lived a separate life away from her husband. Her husband remarried another woman and established a new family. Her husband did not send any allowance for the upbringing of his daughter and since then lost contact of each other. So, all the responsibility for the education and upbringing of her daughter fell on her shoulder. She was a strong single mother and by dint of her grocery business, she provided education to her daughter till the Bachelor Level. The house where she is living currently is her own house. She inherited from her parents because she is the youngest daughter of her parents. She lives with her daughter, her son-in-law, grand – sons, and sons of her grand-son. Currently, her occupation is babysitter of her great grand-son. The parents of the children gave her some salary for taking care of the young babies and children while they go for work. So, her current income for her living is the income from her grocery shop and baby -sitting.

Participant 5

Ms. B. C. is 90 years old woman, farmer and divorced, living at Salaya Village, Thailand. There are 7 family members in her family. She and her husband were separated many years ago when her children were young. Her husband has another wife and family and never comes back to look after her or her children. She brought up her children as a single mother and at the same time provided them education. Her children establish themselves in the course of time, having jobs, income and family.

Participant 6

Ms. T. K. is 81 years old widow from Salaya Village. She and her husband have five children. Their past occupation was banana and other seasonal vegetable plantation in their household farm. She comes from a big joint family. Currently, she sells roasted bananas with sticky rice (khao-tom-mud), which is a sweet dish of the Thai people. Till the time of interview, she is economically independent even though she is 80 years old. She lives with her youngest son at his house in Salaya Village. The other children are married and lives in separate households at a distance from Salaya.

Participant 7

Mr. J. K. is 90 years old man farmer, widower but remarried from Ban Pang Bong village in Chiang Mai Province, Thailand. His old wife died due to heart failure some years back. He has 8 children from his old wife. Now, all his sons and daughters are grown up and married. After remarriage with his new wife, who is a farmer in Chiang Mai, he lives in her wife's house. Currently, he stays at home and is occupied in home-based job with specification and labelling of coffee bean, which he gets 5 Baht per kilo. It provides him some income and at the same time kills time and does not feel lonely. He gets an income of about 5000-10,000 Baht/month from doing this job. He also has his own plot of land too and looks after his tea farm business.

Participant 8

Mr. S. K. is 87 years old man from Chiang Mai. He is Buddhist by religion and remarried thrice by marital status. His first wife died due to arthritis while the second due to heart failure while sleeping. He has 4 children, 3 are from his first wife while 1 is from his youngest wife. He, currently, stays together with his youngest son after his new wife, too, died 2 years ago. His occupation is a farmer in his own farm. He takes care of himself if his goes out somewhere. Sometimes his neighbor helps him if he needs anything. His other sons and daughters are working in other provinces of Chiang Mai. They usually send him about 2000 Baht/year.

Participant 9

Mr. K. P. is 80 years old man whose occupation is coffee farming in Chiang Mai village. He has only one son whose occupation is a coffee farmer. His wife, too, is a farmer but retired due to poor health as she suffers from asthma, diabetes and arthritis. His family is composed of 5 persons, but currently 4 persons are staying together because his daughter is studying at Rajabhat University in Chiang Mai city. His son and daughter-in-law live together with him and his wife and they take care of both of them. He discovered that he has lungs problem about a year ago and since then he has been taking medication and remains at home. Due to their health problem, they could not do any housework and their son and daughter-in–law look after them. He has appointment with doctor for health check- up once in a month or once in 3 months. His son takes care of him for going to hospital, which is located at a distant place far from the village.

Participant 10

Mrs. K. K. is 81 years old woman, widowed from Chiang Mai. Her husband died about 6 years ago due to brain hemorrhage while sleeping. He got acute headache for a prolonged period but he never goes to check up in the hospital, assuming it to be a minor issue. Both she and her late husband were farmers, working in their family business of coffee farming. She has a clever pet dog, who is very faithful company to her. After the expiry of her husband, she stays all alone in the house even though she has 4 children, 2 sons and 2 daughters. She has no car or other conveyance but no problem as she is very close with her neighbor. There is no partition wall between her house and neighbor's house. All her children are married and settled with their families in Chiang Mai city while one is working in Bangkok. Her children come to meet her occasionally on festivals as New Year, Thai Songkran Day, Mother's Day etc. However, the one who is working in Bangkok comes only once a year. At times she feels lonely as all her children work in other provinces.

Participant 11

Mrs. T. I. is 90 years old widowed, woman, farmer from Ban Pok village of Chiang Mai. She is widowed living currently along with her younger unmarried son. She has 5 sons but three of them expired long time back. Occupation of her son, too, is a farmer. Her husband died about 26 years ago. The other son lives in Chiang Mai city along with his wife and family. Her daily routine consists of cutting firewood, kitchen gardening, washing clothes and watching TV. Her son provides her money and all her requirements. She hardly participates in social functions except going to temple in her locality during the Thai New year. She does not own any modern gadget as mobile phone for communication with friends, relatives or neighbor. She has two pets, a cat and a dog and she takes care of them such as giving meal to them. She is always worried when her son goes out and have a fear of accident, that he will not come back home, as he usually cooks food for her.

Participant 12

Mrs. K. Y. is 87 years old woman living with her husband and son in Chiang Mai. Her husband's occupation is coffee farmer. He grows coffee in their farm and at the same time earns money as a wage laborer in coffee processing business. She, too, was a coffee farmer but now retired due to poor health. Her son too, is a farmer but is mentally retarded since birth. She has a son and daughter. Daughter works in Chiang Mai city. She, now, is married and stays with her family but she comes to meet her occasionally. However, she communicates with her quite often in mobile phone. Currently, she remains at home most of the time and refrains from socio – religious participation due to her poor health condition. As a result, most of the time, she feels lonely when her son and husband go to work. Sometimes the health care staff comes to see her and take care of her but sometimes she has to go to hospital with her husband. Whenever they go out, they have to hire a driver to drive their car as her husband, too, has difficulties to drive car due to ageing and her son cannot drive. She gets three social securities from government as: Ageing Pension = 800 Baht per month; Disability Pension for her son = 800 Baht/month and, Poor People= 500 Baht/month.

5. Conclusion

Comparing the interview data of the two provinces, it is found that all the participants of both provinces are beneficiaries of old age pensions but the amount varies depending on the family's socio – economic status. Some of them get only 600 baht per month while some get 800 baht per month. In addition, some household get additional allowance, 500 baht for poor people and 800 baht for disability. Even though all the participants get social security, they are not satisfied with the amount and want it to be increased to at least 1000 baht per month. With regard to the availabilities of health care services for ageing elderlies, Nakhon Pathom Province has better facilities than the villages in Chiang Mai Province. There is only a small health center, no hospital in the village and the hospital is located only in the city and the participants find hard to go there with no public conveyance for travelling. Most of the ageing elderlies living in the village of Chiang Mai Province want availability of facilities as: Free Transport, Meditation Center, Exercise Center and Ageing Health Care Center in their village. Another striking difference between Nakhon Pathom and Chiang Mai Provinces, is that most elderlies in Chiang Mai do not feel lonely or isolated as most of their children work in the family farm or in the neighborhood. In addition, they have very close relationship with the neighbors too. So, most of them seem to be happier as they are living in the traditional family system with family members' protection and at the same time in close relation with neighbor. However, in Nakhon Pathom Province, some of them who live alone feel lonely and isolated and they try to cope the monotony of ageing life through meditation or social engagements.

From the analysis of the interview data, it is found that making the elders engaged in some daily activities, hobbies, social, religious or economic activities make them active and at the same time prevent them from loneliness, depression, sadness or isolation. It is risky to leave ageing elderlies alone at home as they may have accident when they are alone and are prone to be depressed, lonely and isolated. Most ageing elderlies like to participate in socio – religious activities as they are social being, but refrain due to their health weakness, lack of companionship, family escort and conveyances for travelling. This causes many elderlies when affected by chronic disease or disability to have depression due to their inability to participate in social activities. Therefore, abilities for attending socio – religious function depend on socio-demographic characteristics. Healthy family or neighbor's support are essential due to the fragile health condition of most ageing elders. For healthy ageing, it is important to have healthy family environment, to enable the elders to eat, rest and sleep well, to have recreation and to provide friendship. It is also necessary to make the ageing elderlies to have someone to talk to, to be with family, friends, neighbors, having a mobile phone to communicate with families or friends, having a pet to make them busy are some variables in order to make them active. The overall results and discussion led to the research objectives of developing the important indicators of active ageing for sustainable development in Thailand. It can be concluded at the end that good health, family support, engagement in hobbies, adequate social security, health care, and participation in social activities are important indicators for active ageing. As populations become increasingly aged, it is more important than ever that governments design in-

novative policies and public services specifically targeted to elderlies' active ageing indicators, including those addressing, health care, employment, strengthening the family relationship, activities, infrastructure and social protection for bringing sustainable development.

The study recommended that elderlies suffering from chronic illness, social isolation and disability need special attention and may benefit from interventions which promote health and social interactions. There should also be intervening measure to strengthen traditional family ties or relationships. Increase in life longevity is not only a victory for medical science but also a huge challenge for society. It is therefore important to be prepared to address the needs of the ageing elderlies at the familial, social, environment, province and community level. Even though health care, social and economic policies for ageing persons vary substantially from country to country, province to province, or from region to region, more research analysis of these variations as well as formulation of effective social care and policies may assist in improving the over-all well-being of the ageing elderlies.

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