

Original Article

Time use in elderly people at the low active aging level: a qualitative study¹

Uso do tempo em idosos em baixo nível de envelhecimento ativo: estudo qualitativo

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Abstract

Introduction: Thailand's population is aging rapidly. Thus, it is necessary to enable elderly people to be independent and actively participate in daily occupations.

Objective: To describe the time used by elderly people at the low active aging level in a suburban village, in Chiang Mai, northern Thailand. **Method:** The study was qualitative research, using the narrative interview method. Three case studies on the low level of active aging were collected by following an interview-based guideline. The data were analyzed using qualitative content analysis. **Results:** The results showed that elderly people at the low active aging level spent their time in varied activities, depending on personal factors and their contexts. Elderly people participate in different occupations of everyday life, which consist of activities of daily living and self-care, the instrumental activities of daily living, leisure, and work. **Conclusion:** It was found that elderly people spent their time in four main categories: Activities of daily living, Instrumental ADL, leisure, and work. Enabling elderly people to increase active aging by continuing engagement in social participation and education is still challenging.

Keywords: Time Factors, Aged, Aging.

Resumo

Introdução: A população da Tailândia está envelhecendo rapidamente. Assim, é necessário que os idosos sejam independentes e participem ativamente das suas ocupações diárias. **Objetivo:** Descrever o tempo utilizado por idosos com baixo nível de envelhecimento ativo. **Método:** Utilizando o método de entrevista narrativa, três estudos de caso foram coletados seguindo uma diretriz baseada em

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entrevista. **Resultados:** O resultado mostrou que os idosos com baixo nível de envelhecimento ativo despendiam seu tempo em atividades variadas, dependendo de fatores pessoais e de seus contextos. Os idosos participam de diferentes ocupações da vida cotidiana, que consistem em atividade de vida diária e autocuidado, atividade instrumental de vida diária, lazer e trabalho. **Conclusão:** Um equilíbrio das ocupações diárias pode ser destacado para possibilitar o envelhecimento ativo dos idosos.

Palavras-chave: Fatores de Tempo, Idoso, Envelhecimento.

Introduction

The increase in ageing populations is a global phenomenon that results from a shifting age structure with declining fertility and improving survival rates (United Nations, 2017), which means that the world is forming an aged society. The ageing society entered Thailand in 2005 and estimates state that the country will have a complete aged society officially by 2021 (Foundation of Thai Gerontology Research and Development Institute, 2017). A recent survey from the National Statistical Office Thailand showed that elderly people were at the moderate to high active ageing level for health, participation, security, and enabling environment for active ageing, while some of them were still at the low level (National Statistical Office of Thailand, 2019). Whatever, a higher proportion of aged citizens will contribute to a greater burden on the state, communities and families regarding healthcare, as well as the overall economy and society in general. Whilst maintaining the ability to perform various activities in daily life is a key factor affecting quality of life in the elderly (Katz, 2000), those with low active ageing should not be ignored, and appropriate suggestions must be created to enable this group to have an active and a healthy old age for as long as possible.

According to the World Health Organization (2002), active ageing depends on three key determinants in each person. It affects the process of ageing in elderly people, and involves engagement in everyday occupations and lifestyles. In addition, physical changes and deterioration in elderly people have been found to lead to less diverse participation that is located more in the home and involves fewer social relationships including less active recreation (Law, 2002). The decline in physical and mental health, loss of functional capabilities and weakening of family and social ties represent a significant barrier to active ageing in the context of institutionalization (Depp & Jeste, 2006). These factors should be considered when increasing the active ageing level for elderly people in the future. Evidence identifies a strong correlation between successful ageing and the absence of disability, and a moderate association among successful ageing, physical activity and social contacts (Fernández-Mayoralas et al., 2015). Nonetheless, activities in daily life affect the health and well-being of elderly people. The time spent by elderly people should show a lifestyle of varied activity in daily routine. Thus, creating a balance of occupations should be drawn for elderly people at the low active ageing level.

From literature reviews, it was found that the active ageing concept has been applied in a variety of research studies (Punyakaew et al., 2019; Thanakwang &

Soonthorndhada, 2002). Most of them focused on studying a broader aspect of active ageing in order to contribute to national policy development as well as promote public awareness and preparation for the aged society. However, study on a specific group of elderly people has been scarce. Occupational therapists, with their knowledge can support the elderly at the low active ageing level to achieve active ageing through occupation. Hence, this study aimed to describe a deeper comprehension of the elderly at the low active ageing level regarding time use in daily occupations, which would raise awareness and improve the quality of life for such people.

Methods

This study was a qualitative research, as it aimed was to present case-studies using the narrative interview method to describe time use in elderly people at the low active ageing level. The study design was chosen because of little pre-existing knowledge or understanding of individual low active ageing and time use. This study was approved by the Ethics Committee of the Faculty of Associated Medical Sciences, Chiang Mai University (number: AMSEC-63EX-040).

Participants were recruited from Sannameng village, which is a suburban community located in Sansai district, Chiang Mai, northern Thailand. They derived from a previous research (Punyakaew et al., 2019), which examined the active ageing index (AAI) by using the active ageing scale of Thanakwang & Soonthorndhada (2002). The scale comprised 3 domains: health care, social participation, and security ranging from 0 to 1 by using equal weights for the 3 domains. Calculation of the AAI was identified in a range of higher active ageing level (score ≥ 0.8), moderate level (score $\geq 0.5-0.79$), and low level (score ≤ 0.49) (United Nations Development Programme, 2005). The results showed that only three from a total of 140 elderly people were at the low active ageing level, which was interesting for a study on low active ageing. Therefore, the participants in this study were those three-elderly people at the low level of active ageing who reflected their relationship between active ageing and time use in a Thai suburban community. How these subjects spent their time in daily living in a suburban community needed to be understood in order to provide opportunities and challenges for enhancing a higher level of active ageing.

Following approval from the Ethics Committee of the Faculty of Associated Medical Sciences, Chiang Mai University, the purpose and details of this study were explained to the participants. Upon their response, the researchers made appointments for an interview with them at their home. The first author collected all data from July to August 2020. Data were collected from each participant by using the recall time diary method (Harvey & Singleton, 1989). The researcher visited the participants twice. A semi-structured interview was used for recalling the sequence of activities and time use of each occupation in everyday life, from the beginning to end of a 24-hour period. All of the participants agreed to have their conversations recorded. The interview was audio-recorded, and notes were taken for transcripts of each conversation. The interviews were initiated by asking the participants to share the things that they do continuously and the events and actions in their everyday life throughout a 24-hour period. Open-end questions were used such as, "What time do you usually wake up?", "What is your first activity after waking up?" "How much time do you spend....?" "Where and with whom

do you do this activity?” Then, the first author asked specific follow-up questions to prompt the participants to reflect on the meaning of the activity, such as “Could you tell me why this activity is important for your life?”, “Please give me some details of this reason....” The length of the intervention varied, between 45 minutes and an hour and a half, depending on the participants’ response.

The data were analyzed using qualitative content analysis (Kohlbacher, 2006). Each recorded interview was then transcribed and read several times in order to gain a comprehensive view of the whole. The first author confirmed all of the transcriptions. Member checking was used for validation by returning a copy of the transcript to the participants. The meaning units were identified into short statements and then labeled with a code. The coded activities and categories were derived from definitions of the terms of occupations according to the aspects of the domain (The American Occupational Therapy Association, 2014).

Results

All three participants were unemployed and had a low income of less than 1,000 baht/month. Two of them were female and two married and one widowed. Their age ranged from 65 to 70 years (Table 1).

Table 1. Characteristics of the participants in this study.

Case studies	Age	Sex	Marital status	Education level	Previous working status	Current working status	Salary (USD/month)	Family composition	AAI
1	65	Male	Married	More than high school	Merchant	Not working	Below 147.71	Live with spouse	0.384
2	66	Female	Married	Less than high school	Farmer	Not working	Below 147.71	Live with extended family	0.472
3	70	Female	Widowed	Less than high school	Gardener	Not working	Below 147.71	Live with extended family	0.491

USD = United States dollar. AAI = Active Ageing Index.

The results were described in two parts: personal data and time use among three case studies, and time use in daily occupations of elderly people at the low active ageing level as follows:

Personal data and time use among three case studies

Case study I: An elderly female aged 70 years old lives with her extended family, including herself, a daughter, son-in-law, and grandchild. Her husband left the family recently. The elderly woman did not complete high school due to her low socioeconomic status. Therefore, she worked full time as a gardener to help her family

until stopping, due to her age and having heart disease. She is unable to work as before, and therefore most of her income comes from the welfare subsidy, which is paid monthly according to the lawful rights of elderly people. Her daughter occasionally gives her money for food, which is not enough. The elderly woman perceives herself as in moderate physical health. Her hearing is good, but her eyesight has declined without glasses. She does not have negative feelings about herself and possesses a sense of humor.

She usually gets up at 6 am and performs various personal activities such as bathing and dressing, and she can perform daily activities by herself. She drinks Ovaltine every morning and eats boiled eggs. After that, she waters the plants and does housework. She usually cooks breakfast by herself at about 9 am and eats it alone. After breakfast, she does nothing but rest until lunch time, in which she often eats the same thing as she had for breakfast. In the afternoon, she always stays at home and takes care of her grandchild because her daughter has to go to work. Therefore, she has no chance of going anywhere to participate in community activities. In the evening, she usually cooks dinner for her family, but they do not eat it together. She waters the plants again every evening before taking a shower and preparing to go to bed at 8 pm. She always prays and meditates, and makes merit regularly in temples on Buddhist holy days.

Case study II: An elderly female aged 66 years old currently lives with her extended family. She does not live in the same house, but in one located in the same area. She has one daughter. In the past, her family had low socioeconomic status, and so she did not complete high school and worked as a farmer instead to help her family. Now, she does not work on the farm due to her old age and having many chronic diseases such as high blood pressure, hyperlipidemia, diabetes, and heart disease. She usually receives services such as medication at the community hospital. Although she has many chronic diseases, she still eats everything that she likes, and does not avoid unhealthy food. She now makes earrings at home for a living, but her monthly income is not high. Her husband still works as a farmer. Nevertheless, both of them receive additional income each month from the welfare subsidy. The elderly woman perceives herself as in moderate physical health with clear hearing and eyesight. She does not have negative feelings about herself and does not worry about anything.

She usually gets up at 6 am and performs various personal activities, such as bathing and dressing, by herself. She goes to the market near her house every morning to buy ingredients for cooking. After cooking, she does not eat immediately, but often does housework first, such as sweeping and mopping the floor, and washing clothes. Then, she has breakfast alone in late morning because her husband has eaten earlier before going to work. After completing the housework, the elderly woman makes earrings. Whether she has lunch normally depends on whether she feels hungry at that time. During the day, she has no activities other than work until 5 pm, when she cooks dinner and waits to eat it with her husband. After the evening meal, she carries out her personal daily activities before she and her husband often watch television together. However, she often makes earrings while watching television. The elderly woman works until bedtime and if she feels tired before then, she takes a rest. She usually sleeps quite late at around 10.30 to 11 pm.

Case study III: An elderly male aged 65 years old currently lives with his wife. They have one son, but he does not live with his parents, as he is married and moved out to live with his own family. He occasionally comes to visit his parents. The elderly man

graduated from high school, but his career did not match the field of his study. He was a shop owner, but now he does not have a job. He has chronic diabetes and osteoarthritis that affect his functional movement and limit his activity performance, and he is unable to work as before. Most of his income derives from the welfare subsidy. Sometimes, his son gives him money, but the son's economic status is at a medium level. Therefore, the elderly man has an insufficient monthly income. The elderly man perceives himself as having physical health problems due to his chronic health condition. His hearing and eyesight are good. However, he has constant negative feelings about himself and suffers from anxiety.

The elderly man usually gets up at 8 am and performs various personal daily activities such as bathing and dressing, which he can perform by himself. He always eats breakfast alone because his wife goes to work in the early morning. After breakfast, he regularly surfs the Internet, reads the news, uses Facebook, listens to music, watches YouTube, etc. on the computer. He has lunch at noon. After that, he does not have other activities besides using the computer. He does not participate in community activities. The elderly man spends most of his time at home and performs his activities alone. He regularly exercises during the evenings by walking in the village, swinging his arms and doing light exercises. He believes that doing exercise makes him feel relaxed and not stressed. In the evening, he usually cooks by himself and buys ingredients from a grocery store near his home. After cooking, he waits to have dinner with his wife, and after dinner, he takes a shower before usually using the computer and going to bed at 10 o'clock.

Time use in daily occupations of elderly people at the low active ageing level

In this study, the data analysis, showed that elderly people at the low active ageing level spent their time engaging in purposeful activities that can be classified in four main categories: 1) Activities of daily living (ADLs), 2) Instrumental ADL (IADLs), 3) Leisure and 4) Work (The American Occupational Therapy Association, 2014).

Activities of daily living (ADLs) and self-care: Time spent on ADLs and self-care was related to activities performed by elderly people in taking care of themselves. These activities must be carried out regularly as routine such as personal hygiene or self-care, which includes washing, brushing, showering, dressing and toileting, as well as eating, resting and sleeping. Elderly people spent their time on ADLs and self-care alone in response to the needs of the body. ADLs and self-care are important and necessary in personal life.

Instrumental ADL (IADLs): IADLs was related to domestic work and interaction with the environment, and it involved care for members of the household or family. Elderly people engaged in activities in their own households such as household chores, cooking, shopping and going to market, and they took care of their household members, for example, caring for children without receiving compensation. These types of occupations were engaged in while being alone or with others.

Leisure: Leisure included activities that go beyond the regular work or activities of elderly people during their free time at home. Sometimes they enjoyed hobbies that made them relaxed, relieved stressed and also helped in promoting mental health by, for

example, planting trees and watering plants, walking, exercising, watching television and using the computer.

Work: Work involved actions that brought about productivity or compensation in relation to income or wages. The work characteristic of the elderly was repetitive or followed the same pattern, which applied to general employment and working at home, for instance, making handmade earrings. Elderly people were engaged in work because they wanted an income and ability to support their family.

Discussion

Regarding time use in elderly people at the low active ageing level, this study showed that three cases spent their time in different activities. When considering the personal data of each case study, it was found that personal factors such as gender, age, marital status, education level, occupation, income, family characteristics, and chronic health conditions were different and could affect their time use. The study of Sabbath et al. (2016) revealed that personal and socioeconomic factors such as age, gender, education, marital status, health status and income were the causes of spending time differently. In addition, it showed that elderly people with high education and good economic status performed in a variety of activities, and they tended to participate in social and volunteer work more than those with low incomes. In addition, the environment, habitat and location of where they lived as well as the good social support received from families, neighbors, communities and society, affected the choice of activities for the elderly (Baltes et al., 1990). Hence, the amount of time spent in activities depends on personal factors and their context such as economic, social and demographic issues that can enhance good health and well-being.

Time use in elderly people at the low active ageing level was classified into four categories, which consisted of ADLs and self-care, IADLs, leisure, and work. However, if considering the time spent, each case study found that ADLs and self-care such as dressing, bathing and eating were the most importance activities for elderly people, and they must be performed every day as a basic routine. Self-care and health care are basic daily activities that are important and essential to a person's life throughout the day in order to meet basic bodily needs. If people can maintain their own health independently and keep a healthy lifestyle and well-being, it will lead to empowerment in self-reliance in health matters (Christiansen & Baum, 2005). Moreover, elderly people at the low active ageing level spend most of their time resting and sleeping. Previous studies found that the average time spent by the elderly in resting and sleeping is around eight hours per day (Wongtree, 1992). Therefore, spending so much time of the day resting and sleeping problems could create sleeping problem at night and a lack of varied activities during the day. Although chronic health conditions may interfere with the ability of elderly people at the low active ageing level to perform ADLs, they still have potential to take care of household members. Most activities were housework such as sweeping, cooking, shopping and caring for grandchildren. Maintaining the ability to take care of family members can promote elderly people in having a positive view of themselves and gaining life satisfaction (Law, 2002). The elderly spend their time on similar leisure activities, which are mostly performed alone such as planting trees, watering plants, walking, exercising, watching television and using the computer. Furthermore, leisure

activity is considered as an important key indicator of old age, which reflects active ageing of elderly people. Leisure can help to fulfill both physical health and daily life. It also creates fun and enjoyment, and promotes mental health (Ana et al., 2013). Although elderly people at the low active ageing level have few varied leisure activities, they can still engage in those that contribute to good health, independent living and participation in social activities. The elderly at the low active ageing level had a current work status, but it usually meant working at home with low and inadequate income. Some studies revealed that elderly people with poor socioeconomic status or in poverty tended to work more than those better off. Moreover, their job did not require higher skills and knowledge (Reddy, 2016).

In addition, the study of time use often considers the characteristics of performing activities, such as those carried out at home and alone, and the association with duration, frequency and variety of the activities undertaken. Most of the elderly spend their time alone. In terms of geographic context, they spend their time at home and rarely interacted with others or participate in social activities. Therefore, elderly people at the low active ageing level should be encouraged to participate more in social activities. Although social participation is considered as an important factor of healthy ageing and a positive impact on quality of life, elderly people do not spend their time in social activities. Lack of interaction with others or participation in social activities may lead to low satisfaction in life, including isolation from society and a low self-esteem (Anupat et al., 2020; Chansarn, 2002). This study clarified time use in daily occupation for elderly people at the low active ageing level. However, appropriate time use should be considered for elderly people in each active ageing level to reach a state of good health and well-being. Balance of occupation in daily life contributes to active ageing in the process of being actively engaged, feeling secure in life and participating in family and society with health and independence. Knowledge from this study could help in understanding elderly people at the low active ageing level, enhancing their independence and improving their level, as well as decreasing potential rate of burden in the future. In addition, patterns of time use could be used for preparing elderly people before retirement. Health professions and policy makers could develop a practical guideline and implement it in general public for maintaining physical and mental functioning, social activities, and life satisfaction for ageing well.

Limitation

The participants in the study were only a small group at the low active ageing level, therefore, the result of time use in daily occupation was obtained in a specific group of active ageing. Thus, it may also limit generalization of the results. This research may lack information of other elderly groups (high and moderate active ageing levels). In addition, it was conducted in a suburban community, in Chiang Mai, which may not be representative of all elderly people in northern and other areas of Thailand.

Conclusion

Elderly people at the low active ageing level spend their time in different occupations, which consist of four main categories: ADLs and self-care, IADLs, leisure and work.

They do not use their time in two categories: education and social participation. Participating in education, both academic and informal benefits elderly people by creating a better life. However social participation includes engagement in the community and family activities as well as involving peers and friends which is important for life in society. These activities are important factors that facilitate participation, health and security as a component of AAI. Occupations occur in the context of interaction between personal factors, and social and geographical environments that occupy time and bring meaning and purpose to life. Thus, these factors are realized not only with occupations but a with variety of issues that empower and enhance elderly people at with low active ageing level to engage in positive active ageing. Community capacities at the individual level are related closely to health as factors that affect active aging. Further study should focus on daily occupations among other active ageing levels in order to have a deeper understanding of deeper time use for adjusting the daily lifestyle of elderly people in Thailand.

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Author's Contributions

Autchariya Punyakaew worked on the entire study, coordinated the data analysis and contributed to publication of the manuscript. Hsiu-Yun Hsu and Suchitporn Lersilp worked on data analysis. Supawadee Putthinoi designed the research plan and data analysis and contributed to manuscript publication. All authors approved the final version of the text.

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