

Perceptions of Caregivers about Preschool Children's Nutritional Care and Physical Activity through Tai Lue Traditions: A Qualitative Descriptive Study

Natnaree Anukunwathaka,* Nakan Anukunwathaka, Supalak Yooyod, Kesinee Imman

Abstract: The problem of malnutrition among preschool children in northern Thailand is on the upsurge, while engagement in physical activities among these children has decreased. The Tai Lue community has long been recognized for its traditional wisdom and unique culture, which has an effect on the dietary intake and exercise behavior of these children. This study focused on the perceptions among caregivers of preschool children's nutritional care and the physical activity through Tai Lue traditions. This study employed a qualitative descriptive approach. Data were collected through semi-structured interviews during four focus group discussions and five in-depth interviews. Participants were 30 people, including family caregivers of children aged 2-6 years and Tai Lue community leaders. Sample groups were selected by purposive sampling and data were analyzed using a content analysis method.

Findings were classified into four themes: 1) accessing healthcare services; 2) caring under Tai Lue traditions; 3) thinking of problems and obstacles; and 4) providing community support. Our findings provide a better understanding of how nutritional care is administered to preschool children living in the Tai Lue community along with the promotion of their physical activities, and provide valuable insights for healthcare providers. Nurses can apply these insights when giving advice about nutrition screening and when designing guidelines for how they care for patients and promote nutrition care and physical activity in preschool children through the culture of the Tai Lue community.

Pacific Rim Int J Nurs Res 2023; 27(1) 138-153

Keywords: Health care, Malnutrition, Nutritional care, Physical activities, Preschool children, Qualitative descriptive study, Tai Lue

Received 3 October 2022; Revised 29 October 2022;
Accepted 6 November 2022

Introduction

Nutrition is important for the well-being of children, improving their physical activity, and is high on the agenda of the WHO Sustainable Development Goals.¹ Changes in diet and behavior created early by

Correspondence to: Natnaree Anukunwathaka,* RN, MNS, School of Nursing, University of Phayao, Phayao, Thailand.

E-mail: natnareeup@gmail.com

Nakan Anukunwathaka, PhD (Education), Faculty of Humanities and Social Sciences, Chiang Mai Rajabhat University, Thailand.

E-mail: nakan_anu@hotmail.co.th

Supalak Yooyod, RN, MNS, School of Nursing, University of Phayao, Phayao, Thailand. E-mail: supalak.yo@gmail.com

Kesinee Imman, RN, MNS, School of Nursing, University of Phayao, Phayao, Thailand. E-mail: lookgad.kesinee@gmail.com

children and caregivers will influence those children in the future.² Currently, there is a global problem of malnutrition, both undernutrition and overweight, especially in low- and middle-income countries.³ In 2020, 149.2 million children under the age of five years old around the world were stunted in their growth, while 45.4 million children were wasting, and 38.9 million were overweight.⁴ The number of children with a stunting problem is increasing in all the regions. In South Asia and Asia, more than two-thirds of all children are affected by wasting (70%), stunting (53%) and being overweight (48%).⁵ Clearly, nutritional status relates to physical behavior, because exercise activities have decreased among children leading to being overweight.

Physical activities and active play are vital for healthy growth and development in preschool children, which will prevent them from catching noncommunicable diseases in the future. Moreover, exercise can improve mental health, cognitive function, and educational attainment through their learning. However, restrictive lockdown measures due to the COVID-19 pandemic forced people to stay home. Thus, physical activity was limited.⁶ As for children, poor nutrition care according to age and lack of physical activities can affect their physical, mental, emotional, and social development. Moreover, there is an increase in the long-term risk for several severe diseases such as heart disease, low-grade chronic inflammation, multiple sclerosis, Crohn's disease, arthritis, and type 1 diabetes⁷ when they become adults.

From a review of the literature, children are still experiencing stunted growth problems, and there was a decrease in physical activities, due in part to cultural similarities among the Tai Lue community. As a result, some of the cultural traditions of the Tai Lue people were merged with the Lanna culture.⁸ The traditions and local cultures from the ancestors began to disappear when Western culture was encroaching on their lifestyle, part of the reason traditional traditions and cultures are valued less in today's education of

preschool children. Therefore, it is wise to persuade the preschool Tai Lue to restore their appreciation for the culture of the Tai Lue. This study explored perceptions among caregivers in nutrition care and physical activity of preschool children through Tai Lue traditions in northern Thailand since this group of children have been found to be malnourished.

Review of Literature

The perception of family, healthcare providers, and community influence the nutrition care and physical activity of preschool children. A high level of education of the parents (bachelor's degree or higher) and a high score on Family Nutrition and Physical Activity (FNPA) are positively correlated with the child's diet of protein, milk, and vegetables.⁹ In addition, the role of the family in health assessments, measurement of the child's weight and height, or home-based activity records, positively correlated with the child's health and development, which can further identify the potential risks to the child's health.¹⁰⁻¹² Recent research explains that the experiences of parents with nutrition care are related to nutritional deficiency and obesity in their children. For example, parents who had these experiences could persuade their children to eat proper food by rewarding them, monitoring the food consumption of their children, and bringing their children to exercise.¹¹ Moreover, allowing children to participate in meal preparation of simple dishes can promote healthy eating.^{11,13} Additionally, previous studies stated that the family perception was important for the growth of the child by providing healthy food for their children, such as fruits and vegetables, drinking water regularly, and avoiding junk food, fat, and sugar consumption.¹¹

Receiving consultation from healthcare providers, the support of the community and the perception of the family's roles in nutrition care, physical activity, and self-monitoring can encourage parents in the weight management of their child to prevent diseases in adulthood, including convenient access to medical

services.^{14,15} An awareness of the importance and use of local foods or ingredients according to the local culture promotes healthy eating behavior.¹⁵⁻¹⁶ Parents realize the importance of outdoor physical activities.¹⁵ In addition, the implementation of local wisdom to promote the health of children from the Lanna people, who live in northern Thailand, has been studied. At present local resources or materials are used to make toys, such as walking practice sticks, hobby horses made from a banana tree trunk, guns made from a banana stalk, and coconut shell stilts to encourage children to play. Children in the past were encouraged to socialize and take care of each other, which promoted muscular development according to age.¹⁶ However, the participation of grandparents in child nurturing has problems, such as lacking knowledge of the growth assessment of their grandchildren and giving too many snacks or candy to their grandchildren.¹⁷⁻¹⁸

The Tai Lue are an ethnic group in northern Thailand, but were first established in Sipsongpanna, China in A.D. 1180. They left their own settlement in China and settled in Northern Thailand around A.D. 1804. There are many reasons why the Lue migrated to Thailand, such as marriage, trade, and wars.^{19,20} Since 1994, the Tai Lue community in Chiang Kham (a district in Northern Thailand) has experienced a renewed interest in their culture. This also inspired the process of the construction of local Tai Lue and Lue Chiang Kham identities as produced by themselves. The annual Tai Lue festivals, which are large-scale cultural performances, play a crucial role in the construction of the Tai Lue identity in Chiang Kham. Tai Lue people from all over Thailand participate in the festival, which is organized by the local people, the Tai Lue Association, local Thai governments, and the local university.^{19,21} In this sense, the Tai Lue identity is strongly expressed in public places in Northern Thailand.

Tai Lue people have a lineage, different genetic structure, and distribution found in many places of Northern Thailand.²² However, caregivers of preschoolers

in the Tai Lue community are important bearers of the culture in terms of speaking the Lue language and wearing Lue traditional clothes and dresses. Some older people can still prepare Lue traditional snacks such as *kâao-kâep*, *kâ-nôm bpàat*, and *kâ-nôm wong*.²¹ Moreover, they pass on to the next generation the traditional Tai Lue children's games, which are also played at festivals and continue to play daily, which increase their physical activities.^{8,21} Tai Lue identity produced cultural goods that were developed by the cultural tourism management for tourists with local wisdom Tai Lue resources.²³ Their local wisdom can be found through food, traditional dress, and traditional children's games that have been passed on to the current generation.²⁴

Tai Lue community no longer are a subsistence agricultural society but are integrated with the northern people of the Lanna culture.⁸ Development of the Tai Lue community in Northern Thailand receives promotion of cultural innovation for the quality of life and cultural tourism support. This has the effect of increasing income in their community that has developed management processes and conveys cultural value,²⁰ and presumably has alleviated poverty. Therefore, the perception of the Tai Lue image is not merely classified as marginalized citizens and poverty of Tai Lue.^{8,23} The present lifestyle of the preschool children in the Tai Lue community has become more modernized. However, a survey on the growth of preschool children in the Tai Lue community found that 23% of children were short-stature, 6.54% had wasting and underweight, and 6.09% were overweight,²⁵ which was more than the previous year. In addition, due to the COVID-19 pandemic, the behavior of children has become more sedentary.²⁶

Children in the Tai Lue community need better care from their families and communities to reach the standard of physical growth and development according to their age. Local resources and traditional wisdom can be implemented together with the participation of families and the community for the sustainability of

the Tai Lue community. Therefore, it was necessary to study the perceptions of caregivers' preschool children from Tai Lue communities in Northern Thailand. Results from the study can be developed for nutrition and physical activity promotion of preschool children, together with the implementation of Tai Lue traditions. The perspectives of caregivers, such as family, healthcare providers, and community were investigated.

Study Aim

This study aimed to explore the perceptions among caregivers in nutritional care and physical activity of preschool children through Tai Lue traditions.

Methods

Study Design: This study used a qualitative descriptive research approach to help the researchers discover the knowledge that describes the experiences, belief, or events from subjective data.²⁷ This approach helped the researchers gain insights into the perceptions among families, community, and healthcare providers in nutritional care and physical activity of preschool children through Tai Lue traditions that lead to promote their physical well-being. The researchers followed the Consolidated Criteria for Reporting Qualitative studies (COREQ), a 32-item checklist,²⁸ to report this study.

Setting and participants: This research was conducted in the Tai Lue community, Yuan Sub-district, Chiang Kham District, Phayao Province, northern Thailand. The population consisted of 16 family caregivers of children aged 2–6 years old and 14 community leaders. All participants were recruited using a purposive sampling method based on the following criteria: family caregivers for preschoolers, received services from child development centers and kindergartens, aged 18 years and over, could speak and understand the Thai language, and community leaders who were either village scholars, local leaders,

healthcare providers, or educational staff members in Yuan Sub-district. There were no dropouts or people who refused to participate.

Ethical Considerations: This study was approved by the Research Ethics Committee of University of Phayao (Study code: 1.2/024/64). Participants were informed of the objective, processes, possible risks and benefits procedures of data collection, and the rights of the participants to accept or reject participation in this research. When participants agreed to participate voluntarily in this study, they signed an informed consent form. They were able to stop the interview at any time, if desired, without any effect on the benefits and education of children in the child development centers or schools. During the interviews or FDGs, non-participants (preschool children) did not appear, and there was no complicated emotional sensitivity of participants. All data were presented without identifying participants.

Data Collection: The data collection period was from October to December 2021. The audio-recorded interviews were conducted using semi-structured interviews and in-depth interviews to collect the data. Field notes were made during the interviews and focus group discussions (FDGs). The interview questions were developed by researchers and validated by five experts: an advanced practice doctor with expertise in nutritional status, a nutritionist, a lecturer with expertise in ethnography, and two nurse lecturers with expertise in nutrition, physical activity, and advanced qualitative research. The semi-structured interviews were conducted in a meeting room of the community for approximately 60–90 minutes. Group discussions were divided into four groups: two family groups of 7–8 people each and two groups of community leaders. The first group of community leaders consisted of village scholars, local leaders, and kindergarten teachers from a child development center and local schools. The second group of community leaders consisted of healthcare providers (nurses and village health volunteers). Five separate in-depth interviews with either a family

caregiver or a community leader were scheduled to take place in a private environment to receive independent opinions. The interview mainly focused on the opinions of the participants in a friendly atmosphere.

The interview questions focused on the perceptions of family caregivers and community leaders in nutrition care and physical activity. Primary questions included: *How do you assess the nutritional status and physical activity of preschool children? How do you provide nutrition care? What are the problems/obstacles? What are some cultures and beliefs?; and How do you manage?* The family members shared their perceptions of the care needed for their relatives. In this study, the results from participants and experts were checked for accuracy. Group discussions were organized among all participants, family caregivers of preschool children and community leaders, including experts in nutrition, physical activity, and the Tai Lue ethnicity. Data collection was stopped when the researchers could provide thick and rich data, and more interviews would not make a difference in the data; in other words, saturation of data was achieved when no new concepts, patterns, or other findings emerged from analysis.

Data Analysis: Data were analyzed by a qualitative content analysis process²⁹: 1) interviews were recorded and listened to repeatedly; 2) interviews were transcribed verbatim in Thai soon after the FDGs and interview sessions; analysis was started on the first day of interviewing and continued until the end of the study; 3) transcripts were read several times; 4) data were described in codes; 5) codes were classified into sub-themes; 6) analogous sub-themes were identified within the themes; and 7) sub-themes and themes were reviewed and refined. The data from literature reviews and the interview transcripts were presented and verified with the family caregivers and community leaders and fact-checked the data face-to-face with them.

Trustworthiness: The trustworthiness of information from in-depth interviews and group discussions was checked using the four criteria of Lincoln and Guba's

conceptual framework³⁰: 1) credibility: the researchers had training in qualitative descriptive research and practiced interviewing process techniques; all interviews were audio-recorded, and the researchers examined the participants' feelings, emotions, manners, and behaviors due to the interview; a relationship was built between the researcher and participants before every interview; 2) transferability: the research outcome of this study provided thick and rich data, and contextualized understanding of caregivers' perceptions; therefore it could be replicated in further utilization of the studies with similar populations; 3) dependability: an audit trail was achieved by providing experts to examine the transcripts of the interview recordings and check the data during analysis; and 4) confirmability: two researchers separately read data and conducted the content analysis based on raw data from the interview transcript; then, the findings were summarized together; the researcher organized a group discussion among participants, family caregivers of preschool children, and community leaders to comment on and validate the interview transcripts from the research results.

Findings

The demographic characteristics of 14 community leaders and 16 family caregivers are displayed in **Table 1**. Participants were mostly female ($n = 21$). Ages of participants were between 34–68 years old (mean = 51.86). Sixteen participants had a bachelor's degree, and about 90% were of Tai Lue ethnicity ($n = 27$). Two-thirds worked as government officers ($n = 19$), and fifteen of the roles within the Tai Lue community were village residents.

Themes and subthemes

Four themes emerged from the interviews that reflected the perceptions of family caregivers and community leaders described below with subthemes and shown in **Table 2**.

Table 1. Demographic characteristics of community leaders and family caregivers

| Demographic characteristics | Community leaders (n = 14) | Family caregivers (n = 16) |
|---|-------------------------------|-------------------------------|
| Sex | | |
| Male | 6 | 3 |
| Female | 8 | 13 |
| Age (years, Mean = 51.86) | | |
| 30-40 | 2 | 6 |
| 40-50 | 3 | 4 |
| 50-60 | 5 | 4 |
| > 60 | 4 | 2 |
| Ethnicity | | |
| Tai Lue | 14 | 13 |
| Thai (who lived in Tai Lue community) | 0 | 3 |
| Educational level | | |
| Bachelor degree | 7 | 9 |
| High vocational certificate | 5 | 3 |
| High school certificate | 1 | 2 |
| Elementary school | 1 | 2 |
| Occupation | | |
| Merchant | 0 | 2 |
| Self-employed | 1 | 4 |
| Company employee | 1 | 3 |
| Government officer | 12 | 7 |
| Roles within the Tai Lue community | | |
| Village scholars | 2 | 0 |
| Local leaders | 4 | 0 |
| Nurses | 2 | 0 |
| Village health volunteer | 3 | 0 |
| Kindergarten teachers from child development center | 2 | 0 |
| Teachers from local schools | 1 | 1 |
| Village residents | 0 | 15 |

Table 2. Themes and subthemes of focus group discussions

| Themes | Subthemes |
|------------------------------------|---|
| Accessing healthcare services | Assessment by healthcare providers Promoting nutritional status and physical activities Transfer system within the hospital network |
| Caring under Tai Lue traditions | Care with traditional culture Care with mixed modern lifestyle |
| Thinking of problems and obstacles | Family's lack of awareness Change of dietary behavior and physical activity patterns Family's lack of knowledge in monitoring |
| Providing community support | Application of Tai Lue wisdom Participation of the Tai Lue community |

Theme 1: Accessing healthcare services

Participants referred to the services of nutrition care and physical activities of preschool children in the Tai Lue community provided by healthcare providers.

Sub-theme 1.1: Assessment by healthcare providers. The initial assessment of the nutritional status and physical activities in the Tai Lue community was performed at home by the village health volunteers (VHVs) once a month on the first week of every month. The assessment included the measurements of body weight and height. Most participants perceived that nutritional care and physical activities of children are the responsibilities of the local nurses, VHVs, and teachers:

"The sub-district health promoting hospitals collected data for records and statistical analysis. If there are obese or wasting child, doctors and nurses will take care of them." (Community leader (CL))

"VHV periodically came to measure body weight and height at home, but they did not give any suggestions or in-depth details when the child was underweight or overweight..." (Mother 2, 6-year-old son)

"At school, students were measured for body weight as well as height. Then, the school informed parents of their child's nutritional status, according to the Ministry of Public Health." (Mother 5, 3-year-old daughter)

Sub-theme 1.2: Promoting nutritional status and physical activities. Most participants were family caregivers. They discussed the method of support and care of dietary and physical activities of preschool children. Their statements were as follows:

"I used to take my child to play outside to do various activities such as walking practice sticks and coconut shell walking stilts. which were organized by the people in the Tai Lue

community during their free time, so children were able to interact with friends and exercise..." (Mother 1, 4-year-old son)

"I normally took care of the children's dietary needs and prepared food made from all five food groups. We consulted doctors and nurses about behavior adjustments such as cooking a variety of foods and rewarding children if they finish the whole dish." (Mother 5, 3-year-old daughter)

"I am concerned when children play outside. Therefore, I let them do exercises at home instead." (Mother 13, 2-year-old daughter)

Sub-theme 1.3: Transfer system within the hospital network. The participants discussed the importance of strengthening the hospital network with a transfer system and providing primary care consultations to hospitals in the network. As a result, children would have good and continuous nutrition care.

"The VHV assessed the nutritional status by measuring body weight and height once a month. Data were recorded in a table format for each village. Then, the data was forwarded to the sub-district health-promoting hospital which has nurses in the community..." (CL 2)

"...we worked as a team. The local leaders announced via the community broadcast system of the VHV home visit date for household health check-up, including children if anyone had a health problem. The sub-district health-promoting hospital also provided a consulting system using phone or video call, and prepared a transfer system to community hospitals." (CL 3)

Theme 2: Caring under Tai Lue traditions

Participants raised children by applying the Tai Lue lifestyle as the foundation. They mentioned the importance of traditional practices. It was divided into the following two sub-themes:

Sub-theme 2.1: Care with traditional culture. Some family caregivers and community leaders believed that the wisdom of child-raising from ancestors was practical and passed on to their generation:

“At that time, my son was underweight and had been discharged from the hospital. The rice swing ritual was performed by the village historian, a community leader. The ritual used the ceremonial thread and asked the ancestor spirits what they wanted so their sick children can be healed.” (Mother 3, 3-year-old son)

“My grandchildren often eat a lot of snacks and refuse to eat a proper meal. So, I used the aeng-thae, which is the local food of Tai Lue people, as an ingredient to make cold jelly dessert instead. My grandchildren liked it a lot and frequently asked me to make the jelly for them...” (CL 7)

“If I want my child to be healthy and eat well, I often use stalks from banana trees to make toys and use rags to make a fabric ball. We do not need to buy toys. I used to play like this in the past...” (Grandmother 4, 5-year-old granddaughter)

Sub-theme 2.2: Care with mixed modern lifestyle. Many family caregivers said that they were born into the modern world and have learned about foreign cultures. Therefore, they applied a modern lifestyle in child care but still retain the traditional culture of the Tai Lue community:

“Grandma regularly cooked Tai Lue food for her grandchildren along with other common dishes, such as stuffed bamboo shoots, fried chicken mixed with vegetables and fried eggs...” (Mother 2, 6-year-old son)

“The school had an activity that showed children how to make crispy crackers from

rice. Children enjoyed making and eating snacks with their friends.” (Mother 11, 2-year-old daughter)

“I often make folk toys that are similar to what I played with when I was a child for my children, such as wooden slides, bamboo walking sticks, banana stalk horses.” (Father 10, 4-year-old son)

Theme 3: Thinking of problems and obstacles

Participants had identified the problems and obstacles in nutrition and physical activity. Households include multiple generations of the extended family, such as the grandparents. This led to different family members being responsible for child care, dietary, and physical activities, depending on who was available. Access to information on nutrition and physical activity assessment was also inconsistent. Problems and obstacles can be classified into the following three sub-themes:

Sub-theme 3.1: Family’s lack of awareness.

Some family caregivers indicated that their extended family lived together with grandparents. Therefore, childcare was inconsistent and there was a lack of awareness about healthy eating.

“At home, grandchildren who are mainly raised by their grandmother, eat Tai Lue food made by their grandmother. But if grandchildren want to eat something else, grandmother will buy fried pork or chicken, and snacks.” (Grandmother 6, 3-year-old grandson)

“...family caregivers raised a child in different directions. Grandparents also didn’t want to force their children to eat vegetables. While parents tended to be more concerned about nutritional status and provided homemade food for their children.” (Mother 7, 2-year-old son)

Sub-theme 3.2: Change of dietary behavior and physical activity patterns. Many community leaders and family caregivers mentioned that Western culture

was introduced to the community. Children had access to social media. Therefore, most children preferred to eat instant food, fast food, snacks, and probiotic-fermented milk, which actually contains a lot of sugar.

"Our children had to do activities at home such as dancing and watching YouTube, playing with the soil and sand around the house. Most of them watched TV after finishing their homework." (CL 1)

"Parents often bought crunchy snacks, ice cream, and probiotic-fermented milk for their children. Therefore, for some meals, children preferred only snacks and refused to eat a proper meal." (Grandmother 4, 5-year-old granddaughter)

"My child often requested fast food such as KFC or pizza. If I refuse, she will be bad-tempered and refuse to eat the food that I make for her." (Mother 8, 4-year-old daughter)

Sub-theme 3.3: Family's lack of knowledge in monitoring. Some family caregivers said they have never monitored their child's nutritional status and did not know how to compare the child's standard growth. The chart in the Mother and Child Health Handbook which a booklet given to all families on the birth of a child, is a tool for child growth and development monitoring. Parents also lack accessible knowledge on nutrition and physical activity monitoring.

"At home, we did not measure the body weight or height. Our child's body weight and height were usually measured when they received vaccinations or during the VHV home visit." (Grandmother 9, 3-year-old granddaughter)

"I had never recorded any data in the Mother and Child Health Handbook. I don't know how to use it and the nurse didn't tell me how to use it." (Grandmother 12, 6-year-old grandson)

"As for exercising, I searched for information on the internet and social media. I didn't know how children should exercise so I often took my children for walks and let them run around the house..." (Mother 3, 3-year-old son)

Theme 4: Providing community support

Participants provided opinions about factors that support child care in preschool children. They believed people in the Tai Lue community worked together and supported childcare according to the context and culture of the Tai Lue family. This theme was divided into two sub-themes:

Sub-theme 4.1: Application of Tai Lue wisdom. Participants who were family caregivers said most of caregivers prepared Tai Lue food to apply with general diet for sustaining of the Tai Lue cultures, that was provided the following:

"When we had grandchildren, we wanted to cook local Tai Lue food for them but they preferred to eat fried chicken or pork from the market." (CL 4)

"...we added some modern ingredients. For example, in the past we ate aeng-thae as a side dish, but now we mix aeng-thae in a jelly dessert. So children could eat the local vegetables of the Tai Lue people." (Father 10, 4-year-old son)

"At home, grandmother kneaded the sticky rice like a pizza dough. Then she pasted the fish powder and vegetables on the kneaded rice and did not add spicy seasoning. It was like the bai nam bpoo rice that older people ate..." (CL 6)

Sub-theme 4.2: Participation of the Tai Lue community. Participants recognized the importance of self-care for children and families, as well as community participation of childcare. The readiness and cooperation of people in the community was an important factor in building a network of nutrition care and physical activities for preschool children.

“The community would hold an annual Tai Lue festival to reaffirm their Tai Lue identity. People in the community joined the event to sell and share food of both traditional Tai Lue dishes, such as khao koap, khao khap, ka-nom bpat, jin sam prik, khao raem feun, and modern Tai Lue dishes, such as khao bai pla bpon, ka-nom ang thae. Children enjoyed eating various food.” (Mother 14, 3-year-old daughter)

“Our cultural show reminded me of the past Tai Lue lifestyle, including folk toys such as throwing balls, banana stalk horses, bamboo walking sticks, coconut shell walking stilts. Presently, the village scholars still make toys for children which encourage pride in our Tai Lue ethnicity.” (CL 9)

“...Tai Lue community represents the cooperation of Tai Lue people in each district and province. It shows support from different areas. The annual Tai Lue festival reflects the passing on of traditions and culture to the next generation.” (CL 5)

Discussion

This study uncovered the perceptions of caregivers about nutritional care and physical activity of preschool children through Tai Lue traditions. The information was also provided by the community leaders and family caregivers of preschool children and used to construct themes about the promotion of

nutrition and physical activities of preschool children. The four themes are discussed below.

The findings revealed that the nutritional status and physical activities of preschool children are proactively assessed at home by the VHV. Children are measured for body weight and height. For preschool children, the preliminary assessment of nutritional status at home by healthcare providers promotes good quality and fast management for child healthcare. This is consistent with prior research showing that Australian children are able to access a variety of healthcare services that are suitable for changing situations.¹⁰ However, a previous study in the State of Qatar argued that approximately 50% of caregivers had not received counseling from health care providers.³¹ Hence, health care providers should have a family-centered viewpoint and develop suitable methods for prevention. Nutritional status assessment in the Tai Lue community plays an important role in promoting and facilitating healthcare services with adequate medical facilities for people in the community. Therefore, people in the community are able to efficiently access healthcare services.¹⁴ The promotion of nutrition is mainly done by caregivers and parents. They care about children's dietary and food ingredients. This was consistent with the notion that they encourage children to eat good food and give out rewards.^{9,31} As for physical activities, parents take their children to do activities or outdoor exercises, whenever they have free time.¹⁷ However, there are some parents who are concerned about dangers outside the house. This is consistent with previous studies¹⁵ in which parents hesitated to let their children play outdoors as they worried about any accidents that may occur.

In our findings, healthcare teams of both VHVs and community nurses in the Tai Lue community, acknowledged the importance of building a network. The VHV team has a role in the preliminary assessment of nutritional status, data records and results transferred to the network hospitals. This is consistent with World Health Organization guidelines that focus on monitoring and recording home visits using the

international format to promote the healthcare of mothers, babies and children. The VHV provides advice and preliminary health checkups to people in the community and records the data, which are useful for health analysis and long-term healthcare services.¹² In addition, community nurses provide counseling on primary care for malnourished cases in person, via telephone or video call. This results in the thorough and continuous care of the Tai Lue community, a matter noted in other studies that addresses the importance of nutrition care services in communities and presented that the digital system is used for basic services, including health monitoring, a monthly consultation system, as well as the promotion of nutrition, such as vitamin supplementation according to age, immunization services for both mother and child, and epidemiological surveillance that is related to nutrition.³²

Some caregivers maintained the wisdom of the Tai Lue ancestors by living a traditional lifestyle. The Tai Lue community mostly uses local vegetables as food ingredients and snacks. This is similar to previous studies that recognize local food wisdom to be healthy food or other foods.¹⁵ The popular and sustainable foods, such as mushrooms, bamboo shoots, or freshwater seaweed, are easily available in the Tai Lue community, which are a part of their identity and community tradition.²¹ As for the physical activities of Tai Lue children, they prefer to play with toys made from local materials, such as a walking training set or coconut shell walkers. This study supported a previous study on those toys that were invented based on the mechanics principle to promote the development of muscles through walking training¹⁶ and increase physical activities for children to move more. Also, the family of some caregivers followed a modern lifestyle. Under the influence of the digital era, they incorporate some Western practices to raise their children but still maintain the traditional culture of the Tai Lue community. The cultural influences show social correlation and also indicate interactions and exchanges of the culture between northern people and Tai Lue ethnicity, even forming a hybrid culture.^{8,23}

Moreover, schools have adapted by promoting the use of traditional toys made from the natural resources of the Tai Lue community, as well as using them to tell folk tales, which is consistent with a past study¹⁸ of child-raising in the digital era and modern lifestyle.

The Tai Lue community is made up of extended families with children mostly raised by grandparents. Grandmothers, in particular, play an important role in childcare since both parents work outside the home. Therefore, there could be a conflict between parents and grandparents regarding the children's diet. This finding is aligned with previous studies³³ that grandmothers provided guidance and participated in child-rearing activities, including preparing meals and feeding young children, as well as supporting child development. However, today grandparents indulge their grandchildren. They allow their grandchildren to eat anything. This causes changes in the dietary behavior of children in the Tai Lue community. Furthermore, vegetables are usually used as a main ingredient, but children do not like to eat vegetables. They prefer to eat more junk food and snacks.¹⁷ Also, preschool children in the Tai Lue community have decreased their physical activities due to the COVID-19 pandemic. Because of social distancing, they had to reduce their outdoor activities; thus, there was a reduction in their physical activities. The result was in line with previous studies showing that due to the COVID-19 pandemic, toddlers and preschoolers had decreased physical activity, declining sleep quality, and higher access to electronic devices, which meant they spent more time on screens.^{26,34,35}

Our findings presented that some parents did not use the growth assessment chart provided in the mother and child health record book. The chart monitors the nutritional status of children. Despite being given instructions, parents did not know how to use the chart, so they were unable to assess their child's nutritional status. Parents normally used the health record book when their child was sick or for recording vaccinations. The result was in line with a previous study demonstrating that most grandparents

could not use the assessment chart for a child's growth. They were advised to record the body weight and height on the chart to assess the nutritional status.¹⁷ Furthermore, this research found that parents had learnt knowledge from the internet and social media since more than 50% of them have a bachelor's degree. Therefore, they were able to search for and access knowledge. However, previous studies argue that they transferred knowledge to children and grandchildren. The pedagogical nature will be the insertion of knowledge. Culture of living knowledge is in the individual and transmitted through experience, preaching, practice, and self-learning. So, the teaching of food, beliefs, language, and games by the caregivers is incorporated into everyday life and not explicitly taught.³⁶

In this study, the application of Tai Lue traditions in a family is mostly found in Tai Lue food, so that the food was suitable with the current lifestyle and the needs of children. By the use of local resources, children ate with proper nutrition and in accordance with medical science.¹⁶ On the other hand, a study conducted on Lanna elders revealed that they were eating local food and low-fat foods, which can affect their diet and the generations to come.³⁷ Previous research has been carried out; the Local Tai Lue wisdom instructors kept their own cultural identity as a strong community; therefore they cooperatively work together in retaining their wisdom and culture.²¹ In addition, Tai Lue people let their children play in groups in order to strengthen the ties within the community. Toys were made from local resources that are available in the Tai Lue community, such as banana stalks and coconut shells. This was similar to a prior study indicating that Lanna people whose children play using existing local resources.¹⁶

Furthermore, the community recognized the importance of participation in the self-care of children, families and community. With the cooperation of the community, the ceremony of ancestor worship was held.¹⁶ The current study revealed that the annual Tai Lue

celebration event reflects the cooperation of Tai Lue people in maintaining their culture to pass on to their descendants.^{8,19} The event consisted of many traditional and modern Tai Lue food booths. There were traditional Tai Lue games that they wanted to pass on to the next generation. Moreover, this finding is consistent with previous studies in which the Tai Lue community members are active participants in their community and place a high value on their culture. This is important for the idea of cultural inheritance.²⁰

Study Limitations

A limitation of this study was the focus on one ethnic group, the Tai Lue, and information was obtained in Tai Lue verbal language, which needed to be verified and validated by experts in the Tai Lue language. Moreover, sample groups were selected to provide specific information according to the specific criteria. Therefore, results from this research were the perception of specific groups. In the future, an ethnographic approach might have given better insightful information since the qualitative descriptive approach might not have uncovered deeper aspects of the Tai Lue tradition that had an effect on the children's nutrition. Moreover, future study needs to focus on the eating and physical activities of healthy children, the effect of Tai Lue traditions on children of different ages, and collect more in-depth data on the different types of caregivers (whether it be a parent or other family member) who provide nutrition care as well as the different types of healthcare providers (nurses or VHVs).

Conclusions and Implications for

Nursing Practice

This study presented the perceptions among caregivers in nutritional care and physical activity of preschool children in the Tai Lue community. Parents and communities need to be educated about the nutritional status and physical activity of children.

The themes raised in this study can be used for the development of nursing activities to address the specific needs and improve the quality of childcare. Furthermore, this study provides information that helps nurses and healthcare providers in the community to be able to cooperate with the Tai Lue community and perform the initial assessment and care. The use of local resources in the Tai Lue community is promoted for application in the activities. The procedure of home care and community participation through the healthcare service system leads to the community becoming sustainable and reducing the inequality of healthcare service access for Tai Lue people.

Nurses can take the results of this research to design guidelines for healthcare providers in order to provide nutrition care and physical activities for families of preschool children. Nurses and VHV's should educate families and the community about nutrition screening, including support and care in case of malnutrition. For future research, these findings also can be used to develop a Tai Lue community support program that responds to families and community members. There is also a need to improve healthcare facilities, healthcare coordination, and patient transfer from a community health volunteer to the subdistrict health promotion hospital. A community network is established to facilitate access to healthcare services, which increases access for children. In addition, according to the culture of the Tai Lue community, local resources or materials can be used for activities that promote nutrition care and physical activity in preschool children. The cooperation of the community is encouraged to support the sustainability of children's health promotion.

Acknowledgments

Special thanks to the University of Phayao and Unit of Excellence 2023 on Biodiversity and Natural Resources Management, University of Phayao (FF66-UoE003) for support of the field research. The authors

are deeply grateful to the participants and staff for their cooperation.

References

1. World Health Organization. Malnutrition. [Internet]. 2022. [cited 2022 Oct 18]. Available from: <https://www.who.int/data/gho/data/themes/sustainable-development-goals>
2. Okolo CV, Okolo BO, Anika NN. Nutrition for pre-school children in Africa and Asia: a review analysis on the economic impact of children's malnutrition. *Economy*. 2021; 8(1):10-5. doi:10.20448/journal.502.2021.81.10.15.
3. World Health Organization. Malnutrition. [Internet]. 2021. [cited 2021 Aug 24]. Available from: https://www.who.int/health-topics/malnutrition#tab=tab_1
4. World Health Organization. The UNICEF/WHO/WB Joint Child Malnutrition Estimates (JME) group released new data for 2021. [Internet]. 2021. [cited 2021 Aug 21]. Available from: <https://www.who.int/news/item/06-05-2021-the-unicef-who-wb-joint-childmalnutrition-estimates-group-released-new-data-for-2021>
5. World Health Organization. Levels and trends in child malnutrition: key findings of the 2021 edition of the Joint Child Malnutrition Estimates. [Internet]. 2021. [cited 2022 Apr 17]. Available from: <https://www.who.int/publications/i/item/9789240025257>
6. Stavridou A, Kapsali E, Panagouli E, Thirios A, Polychronis K, Bacopoulou F, Psaltopoulou T, Tsolia M, Sergeantanis TN, Tsitsika A. Obesity in children and adolescents during COVID-19 pandemic. *Children*. 2021;8(2):135. doi:10.3390/children8020135.
7. Marcus C, Danielsson P, Hagman E. Pediatric obesity-long-term consequences and effect of weight loss. *J Intern Med*. 2022;292(6):870-91. doi:10.1111/joim.13547.
8. Pasuna C. The Tai Lue people: identity, migration, and the modern Thai government policies after the period of World War II and the living as a Thai citizen, 1945-2015. *Int. J Humanit Soc Sci*. 2021;9(2):1-28. doi:10.14456/husoaru.2021.1 (in Thai).
9. Al Yazeedi B, Berry DC, Crandell J, Waly M. Family influence on children's nutrition and physical activity patterns in Oman. *J Pediatr Nurs*. 2021;56:42-8. doi:10.1016/j.pedn.2020.07.012.

10. Chutiyami M, Wyver S, Amin J. Predictors of parent use of a child health home-based record and associations with long-term child health/developmental outcomes: findings from the longitudinal study of australian children from 2004 to 2016. *J Pediatr Nurs*. 2021;59:70–6. doi:10.1016/j.pedn.2021.02.002.
11. Sano Y, Routh B, Lanigan J. Food parenting practices in rural poverty context. *Appetite*. 2019;135:115–22. doi:10.1016/j.appet.2018.11.024.
12. World Health Organization. WHO Recommendations on home-based records for maternal, newborn and child health. [Internet]. 2018. [cited 2022 Mar 11]. Available from: <https://www.who.int/publications/i/item/9789241550352>
13. Ishikawa M, Eto K, Miyoshi M, Yokoyama T, Haraikawa M, Yoshiike N. Parent-child cooking meal together may relate to parental concerns about the diets of their toddlers and preschoolers: a cross-sectional analysis in Japan. *Nutr J*. 2019;18(1):1–2. doi:10.1186/s12937-019-0480-0.
14. King SE, Sawadogo-Lewis T, Black RE, Robertson T. Making the health system work for the delivery of nutrition interventions. *Matern Child Nutr*. 2021;17(1):13056. doi:10.1111/mcn.13056.
15. Cason-Wilkerson R, Scott SG, Albright K, Haemer M. Exploration of changes in low-income Latino families' beliefs about obesity, nutrition, and physical activity: a qualitative post-intervention study. *Behav Sci*. 2022;12:73. doi:10.3390/bs12030073.
16. Chanprasit C, Lirtmunlikaporn S, Sethabouppha H. Lanna local wisdom in promoting the elderly well-being: a pilot study. *Nursing J*. 2020;47(1):185–97 (in Thai).
17. Thongchim R, Patcharanuchat P. Situation and necessary of child rearing by grandparents in Thai-Esan lifestyle: a case study of Sichompu District, Khon Kaen Province. *JHEALTH*. 2021;44(1):35–46 (in Thai).
18. Atthanuphan ML. Thai ways of young children rearing in the Thailand 4.0 Era. *J Educ Stud*. 2018;46(4):283–99 (in Thai).
19. Yu W. From Sipsongpanna to Chiang Kham: the reconstruction of Lue identity in contemporary Thailand. *ASR*. 2021;8(1):1–14. doi:10.12982/CMUJASR.2021.005.
20. Ketsuwan P, Bejrananda J, Pramoon P. The development of Tai Lue community in north of Thailand with cultural innovation for quality of life and cultural tourism supports. *JPSP*. 2022;6(3):9595–601.
21. Boonrueng L, Saeng-Xuto V, Tongthaworn R, Sriwichailamphan T. Tai Lue community identity and its extension to cultural tourism at Ban Luang Nuea, Chiang Mai. *ABAC Journal*. 2022; 42(1):179–201. doi:10.14456/abacj.2022.42.
22. Puthon P, Pimchanok N, Wongkomolched R, Pheera W, Seetaraso T, Dansawan M, Sathupak S, Kampuansai J. Maternal genetic history of Tai Lue people in Ban Van, Chiang Kham District, Phayao Province. *Rajabhat Chiang Mai Res J*. 2022; 23(2):85–102 (in Thai).
23. Homnan S, Phraratpariyat, Phrakhruworawanvitoon, Sutta C. Model of promoting the buddhist traditions of Tai Lue people. *J SaengKhomKham Buddhist Stud*. 2022;7(2):366–82 (in Thai).
24. Anukunwathaka N, Mangkhang C, Phuwanatwicht T, Wannapaisan C. Area-based action curriculum: innovation in education for sustainable development of Tai Lue cultural community, Thailand. *JMSS*. 2020;16(2):19–30 (in Thai).
25. Health Data Center. Bureau of policy and strategy Ministry of Public Health, Ministry of Public Health. [Internet]. 2020. [cited 2020 Oct 17]. Available from: <https://hdcservice.moph.go.th/>
26. Bates LC, Zieff G, Stanford K, Moore JB, Kerr ZY, Hanson ED, Barone Gibbs B, Kline CE, Stoner L. COVID-19 impact on behaviors across the 24-hour day in children and adolescents: physical activity, sedentary behavior, and sleep. *Children*. 2020;7(9):138. doi:10.3390/children7090138.
27. Turale S. A brief introduction to qualitative descriptive: a research design worth using. *Pacific Rim Int J Nurs Res*. 2020;24(3):289–91.
28. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–57. doi:10.1093/intqhc/mzm042.
29. Sandelowski M. Focus on research methods: whatever happened to qualitative description? *Res Nurs Health*. 2000;23(4):334–40. doi: 10.1002/1098-240x (200008)23:4<334::aidnur9>3.0.co;2-g.
30. Lincoln YS, Guba EG. *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications; 1985.
31. Hendaus MA, El Ansari W, Magboul S, AlHalabi O, Sati M, Kamal H, Alhammadi AH. Parental perceptions of child's healthy diet: evidence from a rapidly developing country. *J Family Med Prim Care*. 2020;9(9):4949–55. doi:10.4103/jfmpe.jfmpe_1252_19.

32. Ntambara J, Chu M. The risk to child nutrition during and after COVID-19 pandemic: what to expect and how to respond. *Public Health Nutr.* 2021;24(11):3530-6. doi:10.1017/S1368980021001610.
33. MacDonald CA, Aubel J, Aidam BA, Girard AW. Grandmothers as change agents: developing a culturally appropriate program to improve maternal and child nutrition in Sierra Leone. *Curr Dev Nutr.* 2019;4(1):141. doi:10.1093/cdn/nzz141.
34. Aguilar-Farias N, Toledo-Vargas M, Miranda-Marquez S, Cortinez-O'Ryan A, Cristi-Montero C, Rodriguez-Rodriguez F, Martino-Fuentealba P, Okely AD, del Pozo Cruz B. Sociodemographic predictors of changes in physical activity, screen time, and sleep among toddlers and preschoolers in Chile during the COVID-19 pandemic. *Int J Environ Res Public Health* 2021;18(1):176. doi:10.3390/ijerph18010176.
35. Jáuregui A, Argumedo G, Medina C, Bonvecchio-Arenas A, Romero-Martínez M, Okely AD. Factors associated with changes in movement behaviors in toddlers and preschoolers during the COVID-19 pandemic: a national cross-sectional study in Mexico. *Prev Med Rep.* 2021;24: 101552. doi:10.1016/j.pmedr.2021. 101552.
36. Sanso T, Nantasri C. Knowledge management and development knowledge base system of Lampang Tai Lue culture. *Information.* 2020;27(2):87-105 (in Thai).
37. Thongsrikate I. Food consumption culture of Lanna people. *J Local Manag Dev. Pibulsongkram Rajabhat University.* 2021;1(2):65-76 (in Thai).

การรับรู้ของผู้ดูแลเกี่ยวกับการดูแลด้านโภชนาการและกิจกรรมทางกายของเด็กวัยก่อนเรียนผ่านวัฒนธรรมไทลื้อ: การวิจัยเชิงคุณภาพแบบพรรณนา

ณัฐนรี อนุกุลวรรธกะ* ณกานต์ อนุกุลวรรธกะ ศุภลักษณ์ อยู่ยอด เกศินี อิ่มแมน

บทคัดย่อ: ปัญหาด้านภาวะทุพโภชนาการของเด็กก่อนวัยเรียนในภาคเหนือของประเทศไทยกำลังเพิ่มขึ้นมากขึ้นอย่างต่อเนื่อง ในขณะที่การเข้าถึงกิจกรรมทางกายของเด็กเหล่านี้กำลังลดลง โดยชุมชนไทลื้อได้มีการตระหนักมาอย่างยาวนานในเรื่องภูมิปัญญาดั้งเดิมและวัฒนธรรมเอกลักษณ์เฉพาะ ซึ่งมีผลกระทบต่อการบริโภคอาหารและพฤติกรรมการออกกำลังกายของเด็ก การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาการรับรู้ของผู้ดูแลเกี่ยวกับการดูแลด้านภาวะโภชนาการ และกิจกรรมทางกายในเด็กวัยก่อนเรียนผ่านวัฒนธรรมไทลื้อ การศึกษานี้ใช้รูปแบบการวิจัยเชิงคุณภาพแบบพรรณนา เก็บรวบรวมข้อมูลโดยใช้วิธีการสัมภาษณ์กึ่งโครงสร้างระหว่างการสนทนากลุ่มทั้งหมด 4 กลุ่ม และสัมภาษณ์เชิงลึกจำนวน 5 ราย โดยผู้ให้ข้อมูลมีจำนวน 30 ราย ประกอบด้วยผู้ดูแลหลักของครอบครัวในเด็กอายุ 2-6 ปี และแกนนำชุมชนไทลื้อ คัดเลือกกลุ่มตัวอย่างอย่างจำเพาะเจาะจง และวิเคราะห์ข้อมูลโดยใช้วิธีวิเคราะห์เชิงเนื้อหา

ผลการศึกษาก่อให้เกิดกลุ่มประเด็นหลักได้ 4 ประเด็น: 1) การเข้าถึงการบริการสุขภาพ 2) การเลี้ยงดูภายใต้วัฒนธรรมไทลื้อ 3) การรับรู้ถึงปัญหาและอุปสรรค 4) การสนับสนุนของชุมชน จากข้อค้นพบครั้งนี้จะช่วยยกระดับความเข้าใจเกี่ยวกับการดูแลด้านภาวะโภชนาการแก่เด็กก่อนวัยเรียนที่อาศัยอยู่ในชุมชนไทลื้อ พร้อมกับการส่งเสริมกิจกรรมทางกาย และเข้าถึงข้อมูลเชิงลึกที่สำคัญสำหรับบุคลากรทางการแพทย์ ซึ่งพยาบาลสามารถใช้ข้อมูลเชิงลึกนี้ในการให้คำแนะนำเกี่ยวกับการคัดกรองด้านโภชนาการ และออกแบบแนวทางปฏิบัติในการดูแลผู้ป่วยและส่งเสริมการดูแลด้านโภชนาการและกิจกรรมทางกายในเด็กก่อนวัยเรียนผ่านวัฒนธรรมของชุมชนไทลื้อได้

Pacific Rim Int J Nurs Res 2023; 27(1) 138-153

คำสำคัญ: การดูแลสุขภาพ ทุพโภชนาการ การดูแลด้านโภชนาการ กิจกรรมทางกาย เด็กวัยก่อนเรียน การวิจัยเชิงคุณภาพแบบพรรณนา ไทลื้อ

ติดต่อที่: ณัฐนรี อนุกุลวรรธกะ* RN, อาจารย์ประจำ คณะพยาบาลศาสตร์ มหาวิทยาลัยพะเยา ประเทศไทย E-mail: natnareeup@gmail.com
ณกานต์ อนุกุลวรรธกะ PhD (การศึกษา) อาจารย์ประจำ คณะมนุษยศาสตร์ และสังคมศาสตร์ มหาวิทยาลัยราชภัฏเชียงใหม่ ประเทศไทย E-mail: nakan_anu@hotmail.co.th
ศุภลักษณ์ อยู่ยอด RN, อาจารย์ประจำ คณะพยาบาลศาสตร์ มหาวิทยาลัยพะเยา ประเทศไทย E-mail: supalak.yo@gmail.com
เกศินี อิ่มแมน RN, อาจารย์ประจำ คณะพยาบาลศาสตร์ มหาวิทยาลัยพะเยา ประเทศไทย E-mail: lookgad.kesinee@gmail.com