

Implementation of Non-Pharmacological Therapy (ROM, Relaxation and Mindfulness) in Elderly People with Stroke and Post-Stroke at Kon Kaen Nursing Home, Thailand

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ABSTRACT

Background: Kon Kaen Nursing Home is a nursing home located in Kon Kaen, Thailand. This nursing home focuses on health services and daily life for the elderly, especially elderly patients with inpatient stroke and post-stroke. The main target of this international community service activity is to provide empowerment to caregivers related to the empowerment process and management of the Application of Non-Pharmacological Therapy (ROM, Relaxation and Mindfulness) in the Elderly with Stroke. This program includes Empowerment of caregivers in Khon Kaen Nursing Homes; Formation of modules; Caregiver training on ROM & Mindfulness in the elderly with Stroke and post-stroke; Creating a controlling system (Monitoring and evaluation); Sustainability of programs and activity outputs. **Objectives:** 1.) Increase awareness of the elderly in Thailand, 2.) Increase knowledge of the elderly about preventing recurrent stroke attacks, and 3.) Provide motivation for the elderly to always be active in maintaining a healthy lifestyle and overcoming degenerative diseases. **Method:** the approach method used in this service was a participatory method with the target being Thai citizens over 50 years old in Malaysia, as many as 17 people. **Conclusion:** The application of non-pharmacological therapy (ROM, relaxation and mindfulness) in elderly people with stroke and post-stroke at Kon Kaen Nursing Home, Thailand was effective in helping caregivers in the management of stroke and post-stroke patient care.

Keywords: Elderly, Non Pharmacological, Relaxation, Stroke

INTRODUCTION

Situation analysis is an important first step in understanding and planning the right strategy for any institution or organization. In this case, we will discuss Kon Kaen Nursing Home. Kon Kaen Nursing Home is a nursing home located in Kon Kaen, Thailand. This nursing home focuses on health and daily living services for the elderly. First, we must consider the demographics of the population served by Kon Kaen Nursing Home. Most of them are elderly who need assistance with daily activities or have certain medical conditions that require special care. Second, we need to understand the conditions and challenges faced by Kon Kaen Nursing Home.

One of the main challenges is to ensure the quality of service is in line with the health standards that are enforced. In addition, another challenge is to maintain sufficient staff and have the right skills to provide the necessary services. Third, we need to look at the potential and opportunities that can be developed by Kon Kaen Nursing Home. One of the opportunities that can

be built is to utilize digital technology to improve the efficiency and quality of service. In addition, with the increasing number of elderly population, nursing homes such as Kon Kaen Nursing Home have the potential to grow and develop. Finally, this situation analysis can help Kon Kaen Nursing Home in planning and implementing the right strategy to improve services and meet the needs of the elderly population they serve.

Seniors living in nursing homes like Kon Kaen Nursing Home often face a variety of health challenges, one of which is stroke. A stroke occurs when blood flow to part of the brain is interrupted, causing brain damage and symptoms such as weakness or numbness on one side of the body, speech problems, and loss of balance. At Kon Kaen Nursing Home, seniors with stroke receive the care and support they need. The primary focus is rehabilitation and recovery, with the goal of helping them regain as much function and quality of life as possible.



Figure 1. D.Care Khon Kaen Nursing Home

This involves physical therapy to help restore strength and coordination, speech therapy to help them learn to speak again, and emotional support to help them cope with the stress and frustration they may be experiencing. However, the challenges faced by stroke seniors at Kon Kaen Nursing Home are not just physical. They also have to deal with psychological and social challenges. For example, they may feel frustrated or depressed because they have lost the independence and abilities they once had. They may also feel lonely or isolated, especially if they are unable to communicate well or have difficulty interacting with others.

To address these challenges, Kon Kaen Nursing Home provides a variety of services and resources, including counseling and therapy, social and recreational activities, and group support. In addition, the staff and volunteers at Kon Kaen Nursing Home are committed to providing compassionate and empathetic care, and to helping stroke survivors feel valued and respected. Overall, the condition of stroke survivors at Kon Kaen Nursing Home is a significant challenge, but with proper care and strong support, they can achieve recovery and a better quality of life (Zhang, SK, et al, 2023).

Therefore, the Community Service Program (PKM) that focuses on lower back pain treatment strategies with ROM therapy for the elderly in Thailand is very much needed to address this health problem effectively. With the objectives: 1.) Increasing awareness of the elderly in Thailand, 2.) Increasing the knowledge of the elderly to prevent recurrent strokes, and 3.) Providing motivation for the elderly to always be active in maintaining a healthy lifestyle and overcoming degenerative diseases. ROM therapy not only offers a safe non-pharmacological solution, but also helps improve the overall quality of life of the elderly. Through good collaboration between universities, governments, and non-governmental organizations, this program can run successfully and provide long-term benefits to the community.

IMPLEMENTATION METHOD

The approach method used in this service is a participatory method. The participatory method is a method that actively involves the community in the course of an activity. This approach is used to obtain permission and support in carrying out service programs in related places.

This community service activity took place in Kon Kaen, Thailand. The implementation period for the activity was 4 months, starting from June to February 2024, targeting 17 elderly people over 50 years old.

The implementation of this service goes through several stages, namely:

1. Preparation

Preparations are made so that the activities run smoothly. This preparation includes an initial team meeting, a coordination meeting between the service team and partners to determine the time and place of the activity, and preparation of materials and media for assistance.

2. Implementation

The community service activity was carried out for 1 month (February 2024) with 4 meetings. The meeting began with an initial evaluation before the mentoring was given and a final evaluation after the mentoring. It also included a joint discussion and Q&A section regarding material that had not been understood by the respondents.

3. Evaluation

Evaluation is done at the end to see if the initial objectives are achieved as an indication of the success of the program. Evaluation is done by comparing the level of pain before and after the assistance is carried out.

RESULTS

1. Respondent characteristics based on gender and age.

Table 1. Respondent characteristics based on gender and age.

Characteristics	n	%
Gender		
Man	12	65%
Woman	5	35%
Total	17	100.0%

Age		
50-59 years	8	45%
60-69 years	9	55%
>70 years	0	0%
Total	17	100.0%

Based on the table above, it is known that the distribution of respondents based on gender characteristics is mostly female, as many as 12 people (65%), while based on age, the majority are aged 60-69 years, as many as 9 people (55%).

2. Description of the distribution of knowledge from pre-test and post-test results after being given education regarding the benefits of exercise therapy as a strategy to overcome lower back pain in the elderly.

Table 2. Overview of the distribution of respondents' knowledge levels

Variables	Pre-test		Post-test	
	n	%	n	%
Level of Knowledge				
High	1	5	16	95
Low	16	95	1	5
Total	17	100.0	17	100.0

Based on the table above, the distribution of knowledge levels from the pre-test results showed that most of the respondents' knowledge levels are low, amounting to 16 people (95%). After being given education, the post-test results show that most of the respondents' knowledge levels are at a high level, amounting to 16 people (95%).

3. Description of the distribution of attitudes of the pre-test and post-test results after being given education related to the benefits of exercise therapy as a strategy to overcome lower back pain in the elderly.

Table 2. Overview of distribution of attitude levels

Variables	Pre-test		Post-test	
	n	%	n	%
Attitude Level				
Good	1	5	17	100
Not good	16	95	0	0
Total	17	100.0	20	100.0

Based on the table above, the distribution of emotional support levels showed that the pre-test results are mostly at a less than good level of 16 people (95%). From the post-test after being given education, the results showed that most of the respondents' emotional support levels were at a good level of 17 people (100%).

DISCUSSION

Health education plays an important role in increasing public awareness, especially in the elderly who experience lower back pain. One of the key components in health education is increasing knowledge, which according to Notoatmodjo (2018), is the result of learning

experiences that can help individuals understand health risks and the importance of preventive measures. In the context of lower back pain in the elderly, exercise therapy is one of the main aspects to control pain and improve quality of life, so education related to this topic is very necessary.

The results of this community service show that the level of knowledge of respondents increased significantly after being given counseling on the benefits of exercise therapy as a strategy to overcome lower back pain in the elderly. Before the intervention, most respondents (90%) had a low level of knowledge, indicating an information gap in the community regarding the benefits of exercise therapy. However, after the counseling, 95% of respondents achieved a high level of knowledge, indicating the success of the educational intervention in providing better understanding. This is consistent with the community service by Choi et al. (2014), who found that well-designed educational programs can improve public understanding of the role of physical exercise in managing chronic pain. In addition, the educational program implemented in this community service not only provides theoretical information but is also equipped with practical guidance, such as how to do safe and effective exercises for the elderly.

In addition to increasing knowledge, education also has a significant impact on changing respondents' attitudes. Before the intervention, 90% of respondents had a negative attitude towards the use of exercise therapy as a strategy to overcome lower back pain. This indicates resistance or indifference to changes in healthy behavior, which is most likely caused by old habits and a lack of understanding of the importance of physical exercise in pain management. However, after counseling, all respondents (100%) showed a positive attitude towards the use of exercise therapy. This change shows that education that focuses on long-term health benefits and is easily understood can significantly influence public opinion.

These findings support the Health Belief Model (HBM) theory, which states that increasing an individual's perception of the benefits of a preventive measure, such as physical exercise, can encourage motivation to change behavior (Glanz et al., 2015). The education provided in this service helped respondents realize that appropriate exercise therapy can be an effective strategy in overcoming lower back pain and improving quality of life. Regular and structured physical exercise has been shown to have a positive effect on reducing pain and improving physical function, as reported by Zhu et al. (2010), so it can help the elderly cope with lower back pain more effectively.

Significant increases in knowledge and changes in attitudes demonstrate the effectiveness of counseling in providing positive impacts on community health behavior. Sports therapy-based education like this also supports the concept of sustainability, where communities can utilize easily accessible resources to improve their quality of life. Furthermore, this program emphasizes the importance of collaboration between health workers, local communities, and the government in delivering health information widely and sustainably.

However, the long-term success of this education program requires a consistent approach. One of the recommendations from this service is to conduct a long-term evaluation of changes in community behavior, such as the frequency of physical exercise and its effect on pain levels. In addition, similar counseling can be expanded to other community groups to ensure that the benefits of this education can be felt widely. Education also needs to be

complemented with health campaigns that utilize social media and digital platforms to reach a wider audience.

CONCLUSION

Based on the results of this community service, it can be concluded that providing education related to the benefits of exercise therapy as a strategy to reduce stroke attack in Thailand has a significant impact on increasing knowledge and changing attitudes. Before being given education, most participants had a low level of knowledge related to understanding and treating lower back pain. However, after being given education, the results showed a significant increase, where most participants achieved a high level of knowledge. In addition, there was also an increase in changes in attitudes from before and after being given education and assistance. This showed that education can improve understanding related to the treatment of reduce stroke attack through exercise therapy.

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