Development Elderly Exercises to Improve The Quality of Elderly Life

Frizki Yulianti Nurnisya¹, Ratih Herningtyas²
¹Communication Studies, Universitas Muhammadiyah Yogyakarta
²International Relations, Universitas Muhammadiyah Yogyakarta

Abstract. The objective of this community service project is to devise exercises that can enhance the quality of life of senior citizens. A literature review was conducted and healthcare professionals were consulted to devise a comprehensive set of exercises targeting multiple aspects of physical health. Participants were provided with instructional videos and printed materials, and the group exercise sessions were organized. The initiative improved the physical and mental health of the participants, who reported feeling more confident, energized, and less fatigued. The development of these exercises can be replicated to improve the quality of life of the elderly in other communities.

Keyword: Elderly, Fit, Gymnastics Sports, Healthy, Integrated Healthcare Center

1. Introduction

Older adults are one of the population groups belonging to a ranged society whose quality of life must be considered [1], [2]. However, increasing age limits senior citizens' physical activity, so only some senior citizens still can do active sports [3]. Exercising regularly and moving actively are ways to keep the body healthy so that the quality of life improves and they can enjoy their old age comfortably [4]. Many older people choose to do daily activities such as sweeping, washing clothes, cleaning the house, or gardening as a substitute for exercises [5]. Even though these activities are daily activities, they cannot replace benefits such as those in sports activities [6].

The selection of sports activities for senior citizens certainly has specific criteria that have been adjusted to the fitness level of the elderly [7], [8]. Movements in elderly exercises are usually slower than in general exercises [7], [9]. However, they can still improve the quality of heart function to pump blood throughout the body more optimally. The exercises for senior citizens are also in a reasonably short duration, around 30 minutes. However, it must be done regularly, at least five times a week, to increase the energy of the elderly. When the elderly do exercises, it must also be accompanied by a good and professional Elderly Exercise Instructor because this particular instructor certainly pays attention to the needs of the elderly participants, who have different criteria compared to other exercise participants [10].

This Community Service Activity was conducted in Klotakan, Kranggan, Galur, Kulon Progo. The residents in this area are dominated by the elderly who do not do much physical activity apart from praying in congregation at the mosque and are busy in their respective homes. The community also independently has a program named Posyandu (Integrated Services Post) for the elderly, which is held every week. In Posyandu Klotakan, the senior

* Corresponding author: frizkinurnisya@umy.ac.id
citizens are allowed to have cholesterol, uric acid, blood sugar, and blood pressure checks. However, they do not yet have activities that provide opportunities to do exercises to maintain their health and stamina.

The purpose of this community service is to develop and provide assistance in developing exercises for elderly residents in Klotakan Hamlet, Kranggan, Galur, Kulon Progo. This activity involved Posyandu Lansia (Posyandu for The Elderly), which belonged by the hamlet so that it could provide more optimal services for residents and eventually the residents could have a higher quality of life.

Klotakan is one of the hamlets in Kranggan, Galur, Kulon Progo, an area bordering Brosot Village to the north, Banaran Village to the south, Nomporejo Village to the west, and the Progo River to the east. The condition of this area provides Klotakan hamlet with good potential in fisheries, marine products, agriculture, and plantations. This region also has fresh fish fisheries commodities such as catfish and carp [11].

The residents in this hamlet are also aware of the importance of education because there are formal education facilities in the surrounding area, such as several schools, and there are also a TPA (Al-Qur’an Education Park) in the mosque and a prayer room. This area also has health infrastructure, such as Posyandu for Toddlers and the Elderly, which holds an event once a month.

The service team also has done an analysis for the partners of the community service using a SWOT analysis, namely Strengths, Weaknesses, Opportunities, and Threats [12]. The results of the analysis can be described as follows:

<table>
<thead>
<tr>
<th>Elements</th>
<th>Result Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strength</strong></td>
<td></td>
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<tr>
<td>1.</td>
<td>Residents of Klotakan have an awareness of the importance of education.</td>
</tr>
<tr>
<td>2.</td>
<td>Residents of Klotakan have an awareness of maintaining good environmental hygiene.</td>
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<tr>
<td>3.</td>
<td>Residents of Klotakan often carry out routine activities together.</td>
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<tr>
<td>4.</td>
<td>Residents of Klotakan are relatively well-equipped.</td>
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<tr>
<td></td>
<td>Klotakan area is still beautiful, it has healthy air for the elderly.</td>
</tr>
<tr>
<td><strong>Weakness</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Residents' knowledge of technology operations is still limited.</td>
</tr>
<tr>
<td>2.</td>
<td>Not much health education has been given, so there is a lack of awareness among residents to maintain their health.</td>
</tr>
<tr>
<td></td>
<td>Teenagers in Klotakan are still passive in managing TPA.</td>
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<tr>
<td><strong>Opportunity</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Development of user generated content.</td>
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<tr>
<td>2.</td>
<td>The residents have started digital literacy.</td>
</tr>
<tr>
<td></td>
<td>There are many community service activities from several campuses for village development.</td>
</tr>
<tr>
<td><strong>Threats</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Technological threats are also not matched by expertise in their use. Regeneration of activities for youth is minimum and it can slowly eliminate the regular gatherings of residents.</td>
</tr>
</tbody>
</table>

Klotakan area has health infrastructures such as Posyandu for Toddlers, which facilitates the residents to get the toddlers’ growth and development calculation services by weighing toddler's weight and height. Apart from that, Klotakan also has Posyandu for the elderly, which provides blood check and health check services. This service is provided every month and is carried out independently and with coordination assistance with the public health center in the area.

However, only a few health service activities are carried out, so they are not very attractive to the people in the area. If there are exciting activities, there is great potential to re-promote Posyandu's benefits for toddlers and the elderly. This community service activity...
is more focused on Posyandu for the Elderly, which has more participants but does not have many exciting activities for the participants:

To avoid potential problems, the team planned the following solutions:

<table>
<thead>
<tr>
<th>No.</th>
<th>Solution</th>
<th>Outcome</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Developing the expertise of Posyandu cadres in providing elderly exercise training for Posyandu participants.</td>
<td>There is a Healthy Exercise CD that can be used by cadres to provide healthy exercises when needed.</td>
</tr>
<tr>
<td>2</td>
<td>Creating healthy exercises for the elderly to practice at home.</td>
<td>Participants practice healthy elderly exercise together.</td>
</tr>
</tbody>
</table>

2. Methodology

This program was implemented through four stages as explained below.

1. Observation and Planning

The planning began by observing the problems, in this case – Posyandu for the Elderly of Dukuh Klotakan, Kranggan, Klotakan, Galur, Kulon Progo. Then, communication and a persuasive approach were conducted by the proposing team and Posyandu for the Elderly of Dukuh Klotakan, Kranggan, Klotakan, Galur, Kulon Progo to follow up on these problems and find solutions that were applicable and right on target.

2. Workshops

The proposing team gave 1 (one) time explanation and conducted 1 (one) time training on Developing Assistance of Elderly Exercise to Improve the Quality of Life of the Elderly in Klotakan Village, Galur, Kulon Progo. This activity was scheduled intensively so that the cadres and members of Posyandu for the elderly of Dukuh Klotakan, Kranggan, Klotakan, Galur, Kulon Progo were used to implementing these activities.

3. Evaluation and Sustainability

The proposer evaluated the model developed later, whether it was following the need or not.

3. Result and Discussion

The implementation of community service activities entitled Developing Exercises for the Elderly to Improve the Quality of Life was conducted in synergy with students who ran KKN (community service) programs. The student team who joined this community service was Group 150 consisting of 19 students. Together with these students, the community service team designed sports programs based on the local community's needs.

Before designing exercise activities for the elderly, the student team tried to mingle with the community, especially with the hamlet head, to find out the population's demographics. Based on the results of interviews with the Hamlet Head, Sidiq Santosa, information was obtained that in the village, there were community groups that routinely conducted Posyandu activities for the elderly. The Posyandu activity for the elderly is an activity that is routinely held once a month on the 5th. In the Posyandu, health checks for the
elderly such as measuring blood pressure and simple blood tests to determine blood sugar, cholesterol, and uric acid levels were provided.

However, based on the results of the interviews, information was also obtained that the activities of the Posyandu were not very attractive to the residents. It could be measured by the number of enthusiasts who came; it turned out that the number was less than 50% of the total number of older people in the area. Older people preferred to stay at home and spend their time gardening and raising livestock in their respective homes. These gardening and animal husbandry activities were sufficient to maintain their health, so they did not need to visit Posyandu for a check-up.

Because the elderly preferred gardening and animal husbandry activities, the community service team and the student team changed the community service system to follow the community's wishes. Consideration of this change needed to be done because community service activities sought to overcome societal problems. In the end, we improved the results of this change by not only providing healthy exercises for the elderly but also for all residents. We also held trainings on plant and fish cultivation in buckets, abbreviated as Budikdamber. This cultivation is a new technique of aquaponic technology. This technique is considered adequate because it can utilize narrow land and only uses buckets to plant and raise fish. The Budikdamber technique, which uses small media, is portable, saves water, and does not even need electricity. It has certain advantages for areas that lack water so that it can be a food security solution for people with limited land.

To make sure that this activity was successful, the team provided education and handed over five large buckets for the Budikdamber program, which were placed in the hamlet and several RT in the hamlet area. The KKN students also put 30-40 catfish seeds and Kale seeds in each bucket. In addition to socializing Budikdamber, the team also carried out healthy and happy exercise.

In holding the healthy exercise activities, the community service team also coordinated with related parties, for example, with the local sub-district as the venue, the police to secure activities because they gather crowds, and invited cooperation with the health center to provide free medical examination for participants, the team even provided snacks and door prizes so that many people attended these events. Hence, the team also distributed health sports training CDs that could be used by Posyandu cadres when needed.

This activity was designed not only for the elderly but also all family members. This consideration was made because the elderly preferred to spend time with their family, both with their partners, children, and grandchildren, so they were happy if they could invite the whole family to come to this event.

4 Conclusion

After implementing the activities, the team also evaluated the activities by interviewing the participants. Nearly all of the 120 participants who attended said that after participating in this activity, even though they were tired, they felt more confident, energetic. However, their joy while participating in this activity will make their quality of life better in the future.
4. References


