

**Physical Fitness of the Elderly Viewed from Physical Activity at the Telkomsel
Banjarbaru Retiree Association****Puteri Febrena Fauzy^{1✉}, Ramadhan Arifin², Mita Erliana³**Physical education study program, Faculty of Teacher Training and Education, Gastric Mangkurat
University, Banjarbaru, Indonesia¹²³**Article History**Received February 2025
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Published Vol.14 No.(1) 2025**Keywords:**Physical Fitness; Physical
Activity; Elderly.**Abstract**

The purpose of this study was to determine the physical fitness of the elderly seen from physical activity at the Telkomsel Banjarbaru Retiree Association. Researchers used a quantitative descriptive method with a physical fitness measurement test method the test was collected with 2 minutes step in place and questionnaires on participants of the Telkomsel Banjarbaru Retiree Association. The population in this study was the elderly P2Tel Banjarbaru which amounted to 30 people, sample selection based on purposive sampling technique with a total sample of 23 elderly who met the criteria. The results of the Banjarbaru city elderly physical fitness test showed that in the category below average (34.78%), average (56.52%), above average (8.70%). The results of the Banjarbaru city elderly physical activity survey were classified as good (8.70%), sufficient (86.96%), low (4.35%), very low (0.00%). The conclusion from the results of the study that the physical fitness of the elderly in the Telkomsel Banjarbaru Retiree Association is in the average category and the physical activity of the elderly in the Telkomsel Banjarbaru Retiree Association is in the sufficient category.

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✉ Correspondence address :
E-mail: puterifebrenafauzy@gmail.com

INTRODUCTION

Physical fitness is the ability in the body to be able to carry out activities every day efficiently for a relatively long period of time in which this activity does not cause undue fatigue. There are five basic foundations of fitness, namely heart and lung endurance, muscle strength, muscle endurance, flexibility, and body composition (Pranata, 2022).

Elderly (elderly) is a stage of a person's life characterized by a biological, psychological, and social aging process. According to WHO (Aisyah, 2024) a person is categorized as elderly when entering the age range of 60 years and over. Based on grouping, the elderly are categorized into four groups, including middle age (45-59 years), then elderly (60-74 years), old age (75-90 years), and very old age (over 90 years).

Physical activity is essential for maintaining optimal physical fitness (Arifin & Amirudin, 2024). This includes a variety of activities, both those that are carried out in a structured manner such as sports, as well as those that are daily activities. According to WHO 2018 (Steve et al., 2021) physical activity is a body movement whose factors are based on skeletal muscles and the energy that is certainly also needed in it.

Indonesia has entered the ageing population period, where there is an increase in the age of a person, which can be said to increase the number of elderly people. Based on data on the percentage of elderly and life expectancy over the past decade (2015-2024), the percentage of elderly Indonesians has increased by almost 4 percent to 12,00 percent (BPS, 2024).

The increasing number of elderly people can certainly have a positive impact when the elderly population is healthy, active and productive in it. However, the aging of the population also causes various problems, especially in the health sector. Problems in the health sector that predominantly occur in the elderly are in the form of decreased physical fitness, which results in reduced motor function so that often elderly activities do not run smoothly. This makes the government formulate a policy and program that is able to support the elderly so that their lives are prosperous.

There are several laws and regulations that contain the elderly, such as Regulation of the Minister of Health Number 25 of 2016 concerning the National Action Plan for Elderly Health for 2016-2019 which aims to achieve healthy, independent, active, productive and useful elderly for families and communities (BPK RI, 2019). In

addition, Government Regulation (PP) Number 43 of 2004 concerning the Implementation of Efforts to Improve the Social Welfare of the Elderly (BPK RI, 2004). The purpose of making this regulation is so that people who have reached an age that can be said to be elderly can live comfortably and prosperously and be able to carry out activities every day.

Strive to maintain the strength and health of each elderly population so that they are able to carry out all their activities effectively and efficiently. Therefore, the elderly still have to practice physical activity well, for example rhythmic gymnastics.

Rhythmic gymnastics is a sport that can be said to be a safe sport for the elderly, because it has a small risk of injury for the elderly (Putra & Suharjana, 2018). In addition, rhythmic gymnastics is also a recreational sport that is fun, and easy to do, as well as a tiered dose of exercise that rises slowly from warm-up exercises, core exercises, and cooling exercises. Gymnastics is currently one of the sports choices for the elderly when maintaining fitness. Elderly people also need fitness exercises to keep their body moving.

This physical exercise is carried out for approximately 30 minutes based on moderate intensity, 5 days a week or 20 minutes with high intensity, 3 days a week or a combination of 20 minutes of high intensity 2 days a week and 30 minutes with moderate intensity 2 days a week (Rachmah, 2020). Lack of physical activity will reduce the level of physical fitness which results in low physical quality until it is easily tired when doing activities and easily gets sick and then feels sore until it is less productive.

There are many benefits to physical activity for the elderly, namely to keep blood pressure at normal limits, increase endurance and increase body fitness in it. Physical activity in the form of every body movement certainly requires energy in order to do so, such as walking, sweeping, washing, and so on (Tripayana, 2020).

From the results of data analysis and discussion, it can be concluded that, Factors Related to the Level of Physical Fitness of the Elderly at the Dharma Bhakti Surakarta Nursing Home The results of the study showed that the percentage of residents of the Dharma Bhakti Surakarta nursing home who had a low level of fitness was 43.9%, while the percentage who had a good level of fitness was 65.1% (Nugraheni, 2013).

According to the findings of the study and the discussion of the Overview of Fitness, Health, and Nutrition of the Elderly, 77.5% of the population is very unfit, 10% is unfit, 7.5%

is sufficiently fit, and 5% is well-fit (Wahid et al., 2024).

This study differs from previous research in that it examines physical fitness in the elderly. The Telkomsel Banjarbaru Retiree Association's results indicate that physical activity among those aged 60 and over falls into the sufficient category, while overall physical fitness falls into the average category.

According to the justification given above, studies on senior fitness are crucial, particularly in light of the growing number of senior citizens worldwide. The purpose of this study is to better understand how to preserve the health and well-being of the elderly and to investigate their level of physical fitness. With the correct knowledge, we can design a space that encourages senior citizens to maintain their health and level of activity.

The relevant research is research from Dwi Purwantini in an article entitled "Overview of Physical Fitness in the Elderly" His research aims to find out the description of physical fitness for the elderly, with survey data collection and 2 minutes step test. The results of this study indicate that 58.3% have good physical fitness and 41.7 have poor fitness (Purwantini, 2021). The relevant research by Ni Komang Kresniari in her thesis entitled "Overview of Elderly Physical Activity in the West Denpasar 1 Health Center Work Area during the Covid-19 Pandemic" The aim based on the research is to find out the description of the physical activity of the elderly in the West Denpasar I Health Center Work Area during the Covid-19 pandemic. The results of the study illustrate that most of the physical activity of the elderly in the West Denpasar Health Center Working Area I during the Covid 19 Pandemic is in the moderate category, namely as many as (53.2%) The relevant research by Ni Komang Kresniari in her thesis entitled "Overview of Elderly Physical Activity in the West Denpasar 1 Health Center Work Area during the Covid-19 Pandemic" The aim based on the research is to find out the description of the physical activity of the elderly in the West Denpasar I Health Center Work Area during the Covid-19 pandemic. The results of the study illustrate that most of the physical activity of the elderly in the West Denpasar Health Center Working Area I during the Covid 19 Pandemic is in the moderate category, namely as many as (53.2%) (Kresniari, 2021).

Based on data obtained (Badan Pusat Statistik Banjarbaru, 2024) the number of elderly people in Banjarbaru is estimated to reach 14,1812 people in 2023. In Banjarbaru there is a

P2Tel community (unity of telkomsel retirees), most of the participants who join the community are 60 years old and above. There are several routine agendas carried out by the P2Tel community, one of which is holding healthy heart exercises once a week. In this case, there is no data collection regarding the physical fitness of the elderly seen from physical activity in the P2Tel community, especially in Banjarbaru city.

The purpose of this study was to determine the physical fitness of the elderly seen from physical activity in the Telkomsel Banjarbaru retiree association. This research needs to be studied further in order to find out how the description of physical fitness and physical activity in the elderly P2Tel Banjarbaru.

METHODS

Researchers use a type of research in the form of descriptive quantitative. Based on (Sugiyono, 2019) quantitative descriptive research method is an approach that uses a description and analysis of numerical data with the aim of knowing the value of certain variables, in the form of one or more variables without comparison or association with other variables. The population in this study were elderly P2Tel Banjarbaru as many as 30 elderly people, sampling researchers also used purposive sampling technique. Based on Sugiyono (2012: 68) purposive sampling is a technique of taking data sources based on determining the sample with certain considerations (Kuswanti & Yandari, 2017). The consideration taken in determining this sample is the elderly who have criteria aged 60 years and over, namely 23 elderly people.

This study uses two instruments by conducting physical fitness measurement tests and questionnaires. Physical fitness data was collected by means of a 2-minute-step in place test. The equipment needed to perform the test is a chair and stopwatch. The implementation procedure before the start of a light warm-up activity is approximately 5 minutes. The subject stood upright in front of the chair at a height midway between the patella (kneecap) and the iliac crest (top of the hip bone). Subjects then walked in place for two minutes, raising their knees to the height of the bench. Resting is allowed, and holding on to a stable wall or chair is allowed.

According to Jones & Rikli 2002, below is a table showing the recommended ranges for this test based on age groups (Robert J Wood, n.d.).

Tabel 1. Men's results 2 minute step in place test

Age	Below average	Average	Above average
60-64	<87	87 to 115	>115
65-69	<87	86 to 116	>116
70-74	<80	80 to 110	>110
75-79	<73	73 to 109	>109
80-84	<71	71 to 103	>103
85-89	<59	59 to 91	>91
90-94	<52	52 to 86	>86

Tabel 2. Women's results 2 minute step in place test

Age	Below average	Average	Above average
60-64	<75	75 to 107	>107
65-69	<73	73 to 107	>107
70-74	<68	68 to 101	>101
75-79	<68	68 to 100	>100
80-84	<60	60 to 91	>91
85-89	<55	55 to 85	>85
90-94	<44	44 to 72	>72

Stop after two minutes of stepping. While the questionnaire to collect data regarding physical activity uses the PASE (Physical Activities for Elderly) questionnaire. This questionnaire is designed to evaluate the frequency of respondents' involvement in various types of physical activity, which are divided into 3 categories: light, moderate, and heavy physical activity. How often you walk outside the house or yard is an example of light physical activity; how often you play sports with your grandchildren or take part in senior gymnastics is an example of moderate physical activity; and how frequently you perform exercises to build muscle strength and endurance, like lifting heavy weights or carrying small children, is an example of heavy physical activity.

The results of the study on the physical activity of the elderly are grouped into four categories as follows (Kresniari, 2021) :

Tabel 3. Physical activity categories

Category	Total score
Good	1053 - 1404
Enough	702 - 1052
Low	351 - 701
Very low	≤ 350

Researchers used percentage descriptive statistical data analysis, to determine the physical fitness status and physical activity of the elderly using the formula:

$$P = \frac{f}{n} \times 100\%$$

P : Percentage

f : Frequency sought

n : Total frequency

RESULTS AND DISCUSSION

The results of the study of physical fitness of the elderly seen from physical activity at the Telkomsel Banjarbaru Retiree Association respectively presented, namely: 1) distribution of characteristics 2) physical fitness status of the elderly 2) physical activity status of the elderly. The results of data analysis are presented as **Table 4**.

Table 4. Distribution of classification characteristics

Classification	Frequency	Percentage
Male	6	26,09%
Female	17	73,91%
Total	23	100%

These results **Table 4** show information on the distribution characteristics of respondents, namely having two classifications of men and women, the male classification has a frequency of 6 respondents with a percentage of 26,09%, and the female classification has a frequency of 17 respondents based on a percentage of 73,91%, while the total frequency is 23 people.

Table 5. Physical fitness status of the elderly

Category	Frequency	Percentage
Below average	8	34,78%
Average	13	56,52%
Above average	2	8,70%
Total	23	100%

The results **Table 5**. of the physical fitness of Telkomsel Banjarbaru retirees, which consists of a category below the average frequency of 8 elderly people with a percentage of 34,78%, an average category of 13 elderly people with a percentage of 56,52%, a category above the average frequency of 2 elderly people with a percentage of 8,70%, with a total of 23 elderly people.

Table 6. Physical activity status of the elderly

Category	Frequency	Percentage
Good	2	8,70%
Enough	20	86,96%
Low	1	4,35%
Very low	0	0,00%
Total	23	100%

The results **Table 6** of physical activity status there is data information on the physical activity status of elderly P2Tel Banjarbaru, which consists of a good category of frequency 2 people 8,70% percentage, enough category frequency 20 people 86,96% percentage, low category frequency 1 person 4,35% percentage, very low category frequency 0 people 0,00% percentage, with a total of 23 people.

The results of physical fitness of elderly Banjarbaru city 8 people with a category below the average (less), there is a need for more increase in sports activities to improve the physical fitness of elderly Banjarbaru city. The results of the physical fitness of the elderly of Banjarbaru city 13 with the average category (sufficient), there is a need to increase sports activities to improve the physical fitness of the elderly of Banjarbaru city. The results of the physical fitness of the elderly of Banjarbaru city 2 with the average category (good), it is expected that the elderly can maintain exercise activities well so that their physical fitness can survive.

This study provides an in-depth description of the physical fitness and physical activity of the elderly who are members of the Telkomsel Banjarbaru Retiree Association (P2Tel). The results showed variations in the level of physical fitness and physical activity among the respondents, which consisted of 23 elderly people with a predominance of women (73,91%) compared to men (26,09%). This distribution reflects the general characteristics of the elderly population, where women tend to outnumber men due to higher life expectancy (Masliati et al., 2022).

The physical fitness status of the elderly based on the data shows that the majority of respondents are in the average category, as many as 13 people (56,52%). However, there are 8 people (34,78%) who are below average, indicating a group that has a less-than-optimal level of physical fitness. Only 2 people (8,70%) were above average, reflecting that the number of elderly people with very good physical fitness levels is still very small. These results indicate the need for special attention to the elderly group with below average physical fitness. This could be due to a lack of physical activity, chronic illness or age factors that affect the body's ability to adapt to physical activity. Elderly people with average fitness also need interventions to improve or at least maintain their condition. Regular exercise programs such as elderly gymnastics, leisurely walks, or active recreational activities can be a solution to improve their physical fitness.

According to the findings of a study on physical fitness in the elderly, gymnastics is one of the workout routines that are frequently suggested for senior citizens in order to improve their physical health. This was confirmed by research conducted by Dewi et al. (2023) which stated that the elderly gymnastics activity program in improving health and counseling about the importance of elderly gymnastics for health went very well (Sitepu et al., 2023).

Most respondents have physical activity status in the adequate category, with 20 people (86,96%). As many as 2 people (8,70%) fall into the good category, while only 1 person (4,35%) falls into the low category. No respondents fell into the very low category. This data shows that although most elderly individuals engage in physical activities with sufficient intensity, only a few reaches optimal levels of physical activity. While different studies on physical activity, a person's level of physical fitness is largely influenced by the obstacles he or she faces when performing physical activity (Sultoni et al., 2018).

According to research, organized physical activity can improve the physical fitness of the elderly. A study found that the physical fitness level of male elderly reached 34.14% and female elderly 21.95%, which shows differences based on gender and age (Nurhidayat et al., 2025).

Physical activity is one of the main factors in maintaining and improving the physical fitness of the elderly. Seniors with sufficient physical activity have the potential to improve their fitness through increased intensity and frequency of exercise (Purnama & Suhada, 2019). Conversely, elderly individuals with low physical activity require a special approach to encourage them to be more physically active. Activities such as group sports, light strength training, or recreational activities can help increase their motivation and engagement.

The results of this study emphasize the importance of community-based intervention programs to improve the physical fitness and physical activity of the elderly at P2Tel Banjarbaru. Elderly individuals with below-average physical fitness require special attention through structured exercise programs tailored to their abilities. In addition, seniors with average fitness levels need to be encouraged to be more active in order to achieve optimal fitness levels. Programs such as senior exercise classes, community walking groups, or light strength training can be designed to meet the needs of various levels of physical ability. In addition, education about the benefits of physical activity for long-term health needs to

be provided regularly to the elderly. Local governments and related organizations also need to provide safe and comfortable sports facilities for the elderly.

Overall, this study shows that although most elderly people have fairly good physical activity, there is still room for improvement, especially for those who are below average in terms of physical fitness. With the right interventions, it is hoped that the quality of life for the elderly in Banjarbaru can significantly improve through the enhancement of their physical fitness and activities.

CONCLUSION

From the research results, it shows that the overall physical fitness of the elderly in Banjarbaru city is in the average category, and the physical activity of the elderly in the Telkomsel Banjarbaru Retiree Association is in the sufficient category. In addition to participating in rhythmic gymnastics classes held once a week, some seniors actively engage in other physical activities such as walking, gardening, etc.

The advice from this study is that all seniors out there should start physical activity gradually and according to their body capacity. To ensure the safety of the activity, it is highly recommended to consult a doctor or other health professional before starting an exercise program. Exercise recommendations for seniors include three to five times a week, one day off between exercises, moderate intensity (60 to 70% of maximum heart rate), and aerobic, strength, balance, and flexibility exercises for 30 to 60 minutes. Seniors can improve their quality of life and maintain their physical condition by implementing these recommendations.

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