

*Original article*

## The Effect of Sports Classes on the Quality of Life of Older Adults in Sidakarya Village

Ni Wayan Mariani<sup>1\*</sup>, Ni Luh Putu Dian Yunita Sari<sup>2</sup>, Si Putu Agung Ayu Pertiwi Dewi<sup>2</sup>

1. Bachelor of Nursing Program, STIKES Bina Usada Bali, Badung, Indonesia
2. Nursing Program, STIKES Bina Usada Bali, Badung, Indonesia

\*Correspondence: Ni Wayan Mariani | Stikes Bina Usada Bali | [marmut.wm@gmail.com](mailto:marmut.wm@gmail.com)

### Abstract

**Introduction:** Quality of life is a person's assessment of their position in life including physical, psychological, and social aspects and the overall level of life satisfaction. Physical, mental, social, and environmental health are four elements that affect a person's quality of life including older adults. Naturally, the aging process causes various problems both physically, biologically, mentally, and socially. Efforts to improve the quality of life of older adults through physical activity by providing sports classes such as senior gymnastics or yoga in groups in a place that is done with simple movements according to the intended target. The purpose of this study was to determine the effect of sports classes on the quality of life of older adults in Sidakarya Village.

**Method:** The research method used is Pre Experimental One-Group Pretest-Posttest Design. The research sample was 76 senior people in the Sidakarya Village area who were selected using purposive sampling techniques that met the sample criteria. Data were collected using a quality-of-life questionnaire sheet, namely the World Health Organization Quality of Life (WHOQOL) with 20 question items that had previously been tested for validity and reliability. Data were analyzed using the Wilcoxon Signed Rank Test statistical test.

**Results:** The results of the study showed an increase in the quality of life in older adults towards the better after being given treatment in the form of sports classes. Statistically, it showed that there was an effect of sports classes on the quality of life in older adults in Sidakarya Village ( $p < 0.001$ ;  $\alpha = 0.05$ ).

**Conclusion:** The quality of life of older adults before being given treatment in Sidakarya Village, most respondents were in the bad category (59.2%). The quality of life of older adults after being given treatment in Sidakarya Village, most respondents were in the good category (72.4%). It is hoped that the elderly will remain routine and more active in participating in sports classes held by *posyandu* cadres assisted by health workers.

**Protocol registration:** This research has previously passed ethical review with the number: 023/EA/KEPK-BUB-2025

**Keywords:** Exercise class, Quality of life, Older adults

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### INTRODUCTION

Healthy lifestyles that have recently been campaigned by a number of groups have increased public awareness of the importance of maintaining health. People are busy with work that has become their routine in this era of globalization. People need time to refresh themselves in various ways, one of which is by exercising. Since young, a person needs to implement a healthy lifestyle by consuming nutritious and balanced foods, doing physical activities or sports properly and regularly and not smoking in order to stay active until old age (Fatmawati et al., 2019).

According to the World Health Organization, older adults is someone who has reached the age of 60 years and over. Older adults population always experiences an increase in their development. The increase in the number of older adults is at risk of causing several health problems, both physical, mental, and social, as well as the emergence of various degenerative diseases. However, some older adults who experience changes in aging more slowly can be caused by efforts to improve nutrition and physical activity (Ashari, 2021).

The health problem faced by most older adults is the difficulty in coping with the aging process. The aging process is a natural process that cannot be prevented and is something that is natural for people who are blessed with a long life, where everyone hopes to be able to live a calm, peaceful life and enjoy retirement with their beloved children and grandchildren.

According to the World Health Organization Quality of Life (WHOQOL), quality of life is a functional condition of older adults which includes physical health, namely daily activities, dependence on medical assistance, need for rest, sleep anxiety, illness, energy, fatigue, mobility, daily activities, and work capacity. Naturally, the aging process causes various problems both physically, biologically, mentally, and socially. According to data from the Central Statistics Agency in 2023, the number of older adults in Indonesia is estimated at 30.9 million people or 11.1% of the total population of 278.7 million. This number is estimated to more than double to 65.8 million people in 2045 and Bali is the province with the third largest number of older adults in Indonesia at around 14.1%. Some research data on older adults, there is a prevalence of the quality of life of older adults in Gianyar Regency, research by Wardani & Dewi (2020), namely older adults who have a high quality of life (26.7%), moderate quality (53.3%) and low quality (20%), while in Sekardani's research (2018) data on the quality of life of older adults in Badung Regency generally shows a moderate category (86.7%). For the prevalence of the quality of life of older adults in Denpasar City, research by Supraba et al., (2016) shows that 35.42% have a good quality of life and 64.58% of older adults have a poor quality of life.

The main challenge today is related to how to maintain the quality of life of older adults, considering that increasing age is generally accompanied by a decrease in physical capabilities and a decrease in health status which results in a decrease in work capabilities. Changes that occur in older adults due to a decrease in quality of life include fatigue, dizziness, sweating, difficulty sleeping so that they lack sleep, irritability and inferiority in socializing with the environment. In addition, degenerative diseases are one of the factors that cause a decrease in quality of life in older adults. Some of the most common types of degenerative diseases are hypertension, diabetes, Parkinson's, Alzheimer's, rheumatoid arthritis, and osteoporosis. The prevalence of health problems that are often suffered by older adults include hypertension 69.5%, stroke 50.2%, diabetes mellitus 6%, chronic kidney disease 8.23%, heart disease 4.6%, and cancer as much as 3.84%. Senior *posyandu* of Sidakarya Village provides health services in the form of simple laboratory examinations such as blood sugar, uric acid and cholesterol levels, provides health education and holds sports classes such as senior gymnastics. The sports class program with older adults is routinely held once a month according to the *posyandu* schedule. The number of older adults who are members of senior *posyandu* activities is 318 people. However, not all older adults can attend the *posyandu* regularly, on average only 15-20 people attend each *posyandu* and only some take part in sports classes.

Based on the results of observations of 10 older adults on November 11, 2024, not all older adults can attend sports classes. Of the 10 older adults, only 4 older adults routinely attend sports classes at senior *posyandu* in Sidakarya Village. When interviewed, some older adults thought that exercising could make their bodies weak and could cause muscle pain which would interfere with their quality of life such as difficulty sleeping due to pain. Checking the quality of life in older adults needs to be done to ensure that older adults are healthy and prosperous. Several things that can be done to improve the quality of life of older adults include conducting routine health checks, maintaining a healthy lifestyle and exercising. Of the 10 older adults who were interviewed regarding their quality of life, some older adults felt that they did not have enough energy to carry out daily activities and had negative feelings such as loneliness, anxiety about themselves and their surroundings. These results indicate that the quality of life in older adults is not optimal, so the author wants to know the effect of sports classes on the quality of life in older adults. The general objective of this study was to determine the effect of sports classes on the quality of life in older adults in Sidakarya Village.

## METHOD

The research method used is Pre Experimental One-Group Pretest-Posttest Design research. The research sample consisted of 76 older adults in the Sidakarya Village area who were selected using a purposive sampling technique that met the sample criteria. Data were collected using a quality of life questionnaire sheet, namely the World Health Organization Quality of Life (WHOQOL) with 20 question items that had previously been tested for validity and reliability. Data were analyzed using the Wilcoxon Signed Rank Test statistical test. This research has passed an ethical review with the number 023/EA/KEPK-BUB-2025 conducted by the STIKES Bina Usada Bali Ethics Commission with seven standards of research ethical feasibility.

## RESULTS

Analysis of the Influence of Sports Classes on the Quality of Life of older adults in Sidakarya Village using the Wilcoxon Signed Rank Test statistical test with an  $\alpha$  of 0.05, calculations using computer assistance (calculations attached) can be described as follows:

**Table 1.** The Effect of Sports Classes on Quality of Life in older adults in Sidakarya Village in 2025 (n=76)

| Variable   | Median (Min-Max) | p-value |
|--|------------------|---------|
| Quality of life of older adults before treatment | 75,50 (61-81)    |         |
| Quality of life of older adults after treatment  | 79,00 (73-86)    | < 0.001 |

\*Wilcoxon test, 69 respondents increased, 7 respondents remained the same and 0 respondents decreased.

Based on the data in table 1, the quality of life of older adults before treatment was obtained a median value of 75.50, while after treatment the median value was obtained 79.00. The results of this study indicate that the median value after treatment is greater when compared to before treatment, meaning that the quality of life of older adults after treatment is better when compared to before treatment. The results of the Wilcoxon Signed Rank Test statistical test showed that out of 76 respondents, 69 respondents experienced an increase in hand washing compliance scores after the intervention, 7 respondents did not experience a change in compliance scores after the intervention and no respondents experienced a decrease in compliance scores after the intervention. The results of the statistical test showed a p value = 0.000 which means that the p value  $< \alpha$  0.05, so statistically there is an effect of sports classes on the quality of life of older adults in Sidakarya Village.

## DISCUSSION

The results of the study showed that out of 76 respondents, 69 respondents experienced an increase in their quality-of-life scores after the intervention, 7 respondents did not experience a change in their quality-of-life scores after the intervention, and no respondents experienced a decrease in their compliance scores after the intervention. Statistically, there is an effect of sports classes on the quality of life of older adults in Sidakarya Village. Improving the quality of life can be done through holistic care such as encouraging a healthy lifestyle, routine health checks, and regular activity or exercise. Through sports that are appropriate to the physical condition of each individual, older adults can gain great benefits in maintaining bone and muscle health, improving balance and coordination, maintaining flexibility and range of motion, and improving cardiovascular and stamina. Sports can be done in groups in the form of sports classes that are generally recommended, namely gymnastics and yoga, with the aim of increasing the functional ability of the body to achieve better health and quality of life goals.

## CONCLUSION

Based on the results of the research and discussion above from 76 respondents, it can be concluded that there is an influence of sports classes on the quality of life of older adults in Sidakarya Village. Based on the results of the research and discussion above, the following suggestions can be submitted: It is hoped that health workers both in health centers and integrated health posts will be more active in promoting health programs such as sports classes that are useful for improving the quality of life of older adults. For older adults, it is hoped that older adults will continue to routinely and more actively participate in sports classes held by older adults integrated health post cadres. For further researchers, further researchers should develop further research by considering the limitations found in this study.

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