DOI https://doi.org/10.30525/978-9934-26-513-6-7

# PROMOTING HEALTHY AGING: ASSESSING PHYSICAL ACTIVITY LEVELS AMONG OLDER ADULTS

## СПРИЯННЯ ЗДОРОВОМУ СТАРІННЮ: ОЦІНКА РІВНЯ ФІЗИЧНОЇ АКТИВНОСТІ СЕРЕД ЛЮДЕЙ ПОХИЛОГО ВІКУ

#### Chukhlantseva N. V.

Candidate of Sciences in Physical Education and Sports, Associate Professor, Associate Professor at the Department of Physical Culture and Sport Management National University "Zaporizhzhia Polytechnic" Zaporizhzhia, Ukraine

#### Cherednychenko I. A.

Candidate of Sciences in Physical Education and Sports, Associate Professor, Associate Professor at the Department of Physical Culture and Sports Management National University «Zaporizhzhia Polytechnic» Zaporizhzhia, Ukraine

#### Napalkova T. V.

Senior Lecturer at the Department of Physical Culture and Sports Management National University "Zaporizhzhia Polytechnic" Zaporizhzhia, Ukraine

#### Чухланцева Н. В.

кандидат наук з фізичного виховання і спорту, доцент, доцент кафедри управління фізичною культурою та спортом Національний університет «Запорізька політехніка» м. Запоріжжя, Україна

### Чередниченко І. А.

кандидат наук з фізичного виховання і спорту, доцент, доцент кафедри управління фізичною культурою та спортом Національний університет «Запорізька політехніка» м. Запоріжжя, Україна

### Напалкова Т. В.

старший викладач кафедри фізичної культури, олімпійських та неолімпійських видів спорту Національний університет «Запорізька політехніка» м. Запоріжжя, Україна

**Introduction.** According to the WHO (2022), the ageing process is global, and by 2050 a significant increase in the proportion of older people is projected in low- and middle-income countries, highlighting the urgency of this global problem [3, 4]. In Ukraine, the war, frequent stress, economic difficulties, and limited access to medical services contribute to accelerated depopulation and population ageing. Insufficient awareness of the benefits of physical activity and the lack of systematic measures to promote it among older Ukrainians also lead to a deterioration of their health and quality

of life. Meanwhile, healthy ageing is a complex process that depends on many factors [2]. These include genetic predisposition, lifestyle, including physical activity and nutrition, as well as social factors such as education level, social support, and access to medical care. Research confirms that key aspects of healthy ageing are strengthening health, maintaining social connections, and adapting to age-related changes. Regular physical activity reduces the risk of chronic diseases and improves cognitive function and emotional state [1].

To address the problem of insufficient physical activity among the elderly, a comprehensive approach is needed, including conducting largescale studies of physical activity levels, developing and implementing effective programs to promote a healthy lifestyle, and taking into account the characteristics of different age groups and comorbidities [2]. An important element of this approach is the use of reliable tools for assessing physical activity, such as the RAPA questionnaire (Rapid Assessment of Physical Activity), a validated tool for quantifying physical activity [5]. Its simplicity, clarity, and accessibility allow it to be effectively used for a wide range of older people, regardless of their education level or health status, to quickly and accurately assess key aspects of physical activity, including the regularity of exercises aimed at strengthening muscle strength and increasing flexibility. These data are crucial for the prevention of age-related diseases, maintaining functional independence, and improving the quality of life of older people.

The **aim** of the study was to determine the level of physical activity among older people living in the community, with a focus on identifying various aspects of their motor activity and comparing it with the recommendations of the World Health Organization.

**Methodology and organization of the study.** The study population included men and women over 60 years of age living in the community, in the city of Zaporizhzhia, Ukraine in 2024. Socio-demographic variables included in the analysis covered age, gender, marital status, education level, and employment status. The study used the RAPA questionnaire, consisting of two components: RAPA 1 and RAPA 2. Each component includes several questions with a binary answer ("yes/no"). RAPA 1 is designed to assess overall physical activity and contains seven statements, while RAPA 2 assesses participation in strength and flexibility exercises and consists of two statements [5]. Data was collected anonymously and analyzed descriptively.

**Results.** The average age of the 75 respondents who participated in the study was  $70.73 \pm 8.15$ , including 56 women (74.7%, 69.75  $\pm$  7.65 years) and 19 men (25.3%, 73.63  $\pm$  9.06 years). The demographic profile of the study participants reflected the typical socio-demographic characteristics. Women accounted for 74.7% of the sample, indicating their greater tendency

to participate in such studies. 50.7% of respondents were married, indicating a high degree of social integration and family support. 58.7% of participants had higher education, which characterizes the group as relatively informed and educated. Living with a spouse was noted in 48% of respondents, and most participants (82.7%) were pensioners, which is typical for this age group and significant for analyzing their physical activity.

According to WHO recommendations, the optimal physical activity regimen for older adults includes at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity aerobic exercise per week, strength training twice a week, and regular balance and coordination exercises.

Self-reported physical activity data revealed that 38.7% of respondents led a sedentary lifestyle or did not exercise at all. This indicates a significant problem of sedentary behaviour among the elderly. Reasons for this may include a low level of awareness of the benefits of physical activity, chronic diseases, lack of motivation, and social support. Moreover, the irregularity of physical activity, reported by 36% of respondents, does not allow for significant positive health effects. Light physical activity, which is performed weekly by slightly more than half of the respondents (63.3%), although beneficial, cannot replace a comprehensive approach that includes the development of strength, flexibility, and coordination.

More than 29% of respondents engage in moderate physical activity, but even they do not reach the recommended intensity or duration (at least 150 minutes per week). This suggests the need to encourage an increase in the duration or frequency of exercise, as even a moderate increase in activity level can significantly improve their health. In particular, only 13.3% of respondents engage in vigorous physical activity but do not reach the recommended WHO minimum. This may be due to physical limitations, difficulty performing intense exercises, or fear of injury.

A positive aspect is that 34.7% of respondents meet the WHO recommendations for moderate physical activity (at least 150 minutes per week). This indicates that some respondents understand the importance of regular exercise for maintaining health. In addition, more than 21% of respondents meet the WHO recommendations for vigorous physical activity. This is an important indicator, as such exercises contribute to improving the cardiovascular system, increasing muscle strength, and reducing the risk of developing chronic diseases. However, this group needs qualified support to avoid overtraining or injuries.

Only 20% of respondents practice strength training, which is below the recommended level. Strength training plays an important role in maintaining muscle tone, preventing osteoporosis, and preserving functional independence. This indicates the need to popularize such exercises among the

elderly. 34.7% of respondents perform exercises to improve flexibility, such as yoga or stretching. This is a positive result, as such exercises help improve mobility, reduce the risk of injury, and contribute to reducing stress levels. However, this indicator can also be improved through the popularization of specialized programs for the elderly focused on developing flexibility.

**Conclusions.** The results obtained demonstrate that a significant proportion of the elderly do not adhere to the minimum WHO recommendations for physical activity. The results of the study confirm the need to develop and implement comprehensive physical activity programs for the elderly. Such programs should be accessible, safe, and diverse, and take into account the individual characteristics and capabilities of each person. It is also important to conduct information campaigns aimed at raising awareness of the benefits of physical activity and debunking myths about the impossibility of exercising in old age.

## **Bibliography:**

1. Chukhlantseva N. V. SECTION 13. Developing effective physical activity programs: using Kenyon's attitude toward physical activity inventory to understand intrinsic motivations in obese adults. *European Integration Processes In Physical Education And Sports*. 2024. P. 249–264. URL: https://doi.org/10.30525/978-9934-26-458-0-13 (date of access: 13.12.2024).

2. Concepts and definitions of healthy ageing: a systematic review and synthesis of theoretical models / M. Menassa et al. *E Clinical Medicine*. 2023. Vol. 56. P. 101821. URL: https://doi.org/10.1016/j.eclinm.2022.101821 (date of access: 11.12.2024).

3. Global recommendations on physical activity for health. Genève : WHO, 2010. 58 p.

4. Pratt M. What's new in the 2020 World Health Organization Guidelines on Physical Activity and Sedentary Behavior?. *Journal of Sport and Health Science*. 2021. Vol. 10, no. 3. P. 288–289. URL: https://doi.org/10.1016/j.jshs.2021.02.004 (date of access: 11.12.2024).

5. The Rapid Assessment of Physical Activity (RAPA) among older adults / T. T.D et al. Prev Chronic Dis. 2006. Vol. 3, no. 4. A118. URL: https://pubmed.ncbi.nlm.nih.gov/16978493/