ISRCTN18225729 https://doi.org/10.1186/ISRCTN18225729

Assessment of the functional status and quality of life of older people in the Polish population

Submission date	**Recruitment status**	[_] Prospectively registered
09/12/2020	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
11/01/2021	Completed	[X] Results
Last Edited	**Condition category**	[_] Individual participant data
18/05/2026	Other	

Plain English summary of protocol

Background and study aims
The percentage of older adults (aged 60 and over) is significantly increasing in industrialized countries. The percentage of older adults in Poland's population increased from 14.7 % in 1989 to 22.2 % in 2014, and is projected to further increase to over 40% by 2050. A more complete interpretation of life expectancy data is made possible by analyzing older adults in relation to their health. The average healthy life expectancy index for men and women aged 65 in Poland is about 46 % (7.2 remaining years of life) and about 39 % (7.8 remaining years of life), respectively. In the European Union countries this index is higher, with values of 10.3 remaining years of life for men, and 10.4 remaining years of life for women. Based on this previous research, the aim of this study is to analyze the aging process in terms of factors that can affect the maintenance and duration of functional independence and health in older adults.

Who can participate?
Older adults (aged 60+) who are able to move independently and take the fitness test, with good verbal contact

What does the study involve?
Seniors of all ages and from different environments are surveyed. They will have certain physical measurements taken to assess functional fitness, hand-grip strength, fine motor skills of the hands, spirometry, body composition, body posture, balance, bone density, and fall risk. They will also fill in questionnaires about their level of physical activity, quality of life, depression level, nutritional status, health and lifestyle.

What are the possible benefits and risks of participating?
Participants might benefit from learning about their physical fitness, balance, body composition, body posture, and ways to prevent problems. This is an observational study, which means the study is not assigning a treatment to the participants, so there is no risk associated with the study.

Where is the study run from?
University of Physical Education in Wrocław (Poland)

When is the study starting and how long is it expected to run for?
August 2009 to November 2019

Who is funding the study?
1. Ministry of Science and Higher Education (Poland)
2. University of Physical Education in Wrocław (Poland)

Who is the main contact?
1. Prof. dr hab. Zofia Ignasiak
zofia.ignasiak@awf.wroc.pl
2. Dr Anna Sebastjan
anna.sebastjan@awf.wroc.pl

Contact information

Type(s)
Scientific

Contact name
Prof Zofia Ignasiak

ORCID ID
https://orcid.org/0000-0001-8656-9107

Contact details
Akademia Wychowania Fizycznego we Wrocławiu (University School of Physical Education in Wrocław)
al. Ignacego Jana Paderewskiego 35
Wrocław
Poland
51-612
+48 (0)713473470
zofia.ignasiak@awf.wroc.pl

Type(s)
Scientific

Contact name
Dr Anna Sebastjan

ORCID ID
https://orcid.org/0000-0001-6395-6147

Contact details
Akademia Wychowania Fizycznego we Wrocławiu (University School of Physical Education in Wrocław)
al. Ignacego Jana Paderewskiego 35
Wrocław
Poland
51-612

+48 (0)713473367
anna.sebastjan@awf.wroc.pl

Additional identifiers

Study information

Scientific Title
Assessment of the involution changes in selected aspects of the biological condition of the elderly

Study objectives
1. The functional fitness of seniors and the level of physical activity decline with age
2. The living environment and physical activity have an influence on the health, level of functional fitness, physical activity and quality of life of seniors
3. Due to social, economic and cultural differences between Polish society and the societies of other countries, the level of health, functional fitness and quality of life of seniors from Poland and other countries may differ
4. There is a risk of frailty syndrome in Polish society
5. Physical activity undertaken by seniors reduces the risk of disability

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 07/12/2015, Commission of Research of the University School of Physical Education in Wrocław (al. Ignacego Jana Paderewskiego 35; 51-612 Wrocław, Poland; +48 (0)71 347 33 06; joanna.kleczek@awf.wroc.pl), ref: none provided

Primary study design
Observational

Study design
Cross-sectional study

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Functional status and quality of life of older people

Interventions
The research is observational and cross-sectional.
Adults aged 60+ years from different life environments (independent housing, nursing homes, day homes) from various regions of Poland are surveyed.
The following will be measured: functional fitness assessed using Senior Fitness Test, hand-grip strength assessed using a dynamometer, fine motor skills of the hands assessed using the Viennese test system, spirometry assessed using a spirometer, body composition assessed using a Tanita device, body posture assessed using the MORA system and the Zebris system, balance assessed by the balance measurement platform, bone density measured with a densitometry

device, fall risk assessed using the Australian system, physical activity assessed using the International Physical Activity Questionnaire (IPAQ) questionnaire and Paffenbarger Physical Activity Questionnaire PPAQ, quality of life assessed using the WHOQOL-BREF scale, frailty syndrome assessed using somatic features. In addition, the following will be measured: body weight and body height, BMI index, waist circumference, hip circumference, WHR index and depression level assessed using the Geriatric Depression Scale, lifestyle assessed using a self-reported questionnaire, nutritional status assessed using a self-reported questionnaire, health self-assessment using a self-reported questionnaire.

Intervention Type
Other

Primary outcome(s)
Measured at a single time point:
1. Functional fitness assessed using Senior Fitness Test
2. Hand-grip strength assessed using a dynamometer
3. Fine motor skills of the hands assessed using the Viennese test system
4. Spirometry assessed using a spirometer
5. Body composition assessed using a Tanita device
6. Body posture assessed using the MORA system and the Zebris system
7. Balance assessed by the balance measurement platform
8. Bone density measured with a densitometry device
9. Fall risk assessed using the Australian system
10. Physical activity assessed using the International Physical Activity Questionnaire (IPAQ) questionnaire and Paffenbarger Physical Activity Questionnaire PPAQ
11. Quality of life assessed using the WHOQOL-BREF scale
13. Frailty syndrome assessed using somatic features
14. Basic anthropometric measurements - body weight and body height, BMI index, waist circumference, hip circumference, WHR index

Key secondary outcome(s)
Measured at a single time point:
1. Depression level assessed using the Geriatric Depression Scale
2. Lifestyle assessed using a self-reported questionnaire
3. Nutritional status assessed using a self-reported questionnaire
4. Health self-assessment using a self-reported questionnaire

Completion date
05/11/2019

Eligibility

Key inclusion criteria
1. Women and men aged 60+ years
3. Being able to move independently and take the fitness test
2. The lack of medical impediments
3. Good verbal contact
4. Voluntary, written agreement to participate in the study

Participant type(s)
Mixed

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
60 Years

Upper age limit
100 Years

Sex
All

Total final enrolment
1616

Key exclusion criteria
1. Acute injuries and infections
2. Cancer
3. Medical impediments to research
4. The lack of verbal contact

Date of first enrolment
01/09/2009

Date of final enrolment
05/11/2019

Locations

Countries of recruitment
Poland

Study participating centre
University of Physical Education in Wrocław
al. Ignacego Jana Paderewskiego 35
Wrocław
Poland
51-612

Sponsor information

Organisation
University School of Physical Education in Wroclaw

ROR
https://ror.org/03gn3ta84

Funder(s)

Funder type
University/education

Funder Name
University School of Physical Education in Wrocław

Funder Name
Ministerstwo Nauki i Szkolnictwa Wyższego

Alternative Name(s)
Ministerstwo Nauki i Szkolnictwa Wyższego, Ministry of Science and Higher Education, Ministry of Science and Higher Education, Republic of Poland, MNiSW

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
Poland

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated and/or analysed during this study will be included in the subsequent results publication.

IPD sharing plan summary
Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		10/06/2020	11/12/2020	Yes	No
Results article		01/12/2017	11/12/2020	Yes	No

Results article	01/11/2020	11/12/2020	Yes	No
Results article	01/09/2017	11/12/2020	Yes	No
Results article	06/10/2020	11/12/2020	Yes	No
Results article	01/06/2018	11/12/2020	Yes	No
Results article	30/05/2017	11/12/2020	Yes	No
Results article	01/03/2017	11/12/2020	Yes	No
Results article	01/12/2018	11/12/2020	Yes	No
Results article	01/10/2020	11/12/2020	Yes	No
Results article	01/08/2015	11/12/2020	Yes	No
Results article	13/04/2022	28/02/2023	Yes	No
Results article	12/12/2023	13/12/2023	Yes	No
Results article	22/10/2025	24/10/2025	Yes	No
Results article	15/05/2026	18/05/2026	Yes	No
Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	11/11/2025	11/11/2025	No	Yes