PRO HEALTH 65+

Health Promotion and Prevention of Risk – Action for Seniors

PROJECT POLICY BRIEF 6

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Jelena Arsenijevic
Department of Health Service Research, CAPHRI,
Maastricht University,
The Netherlands

Wim Groot
Department of Health Service Research, CAPHRI,
Maastricht University,
The Netherlands

PHYSICAL ACTIVITY ON PRESCRIPTION - MOVING SLOWLY TOWARDS HEALTHY AGEING

ABSTRACT

Physical activity on prescription (PARS) is a health promotion intervention that has been applied in a number of European countries. It aims to provide an adequate exercise program for older adults usually at reduced or no costs. This policy brief provides evidence on the obstacles related to this intervention in European countries. It also provides insight how to overcome those obstacles. For this purpose we use data related to the effectiveness of physical activity on prescription programs in EU countries collected through a systematic literature review. The evidence shows that PARS has greater effects for older adults if the duration of the program is longer, and if the program is prescribed and monitored by a GP. Also, PARS has a greater effect if it includes type of activities suitable for older adults such as walking or gardening. The setting within a leisure center can also influence the effectiveness of PARS. Also, PARS programs may contribute to social inclusion of older adults. Policy makers should encourage the development of cost-effective tailor made PARS programs. The development of guidelines for the evaluation of the PARS should also be encouraged.

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INTRODUCTION

Regular physical activity- 20 minutes three times per week is considered to be a protective factor for older adults wellbeing. Regular physical activity can increase life expectancy up to two years among adults older than 65. It can also reduce the risk of coronary heart diseases, cerebrovascular diseases, diabetes, hypertension, colon cancer and hip fracture among older adults. Physical activity can also improve older adults' quality of life and their mental health. Although these health benefits are well-known, the majority of older adults in European countries are not regularly engaged in physical activity. For example, in the UK more than 40% of adults above 65 do not exercise regularly. One of the reasons is lack of motivation, limited access to leisure facilities and fear of injury in case of inadequate exercise.

The health promotion intervention known as physical activity on prescription aims to provide (free) access to and an adequate exercise program for older adults. In a nutshell, the intervention mostly focuses on adults with the following health problems: metabolic disorders such as obesity, overweight, high cholesterol, a diagnosis of cardiovascular diseases, mental health problems, orthopedic problems, sometimes also respiratory diseases and some types of cancer. With physical activity on prescription, a health professional (general practitioner or nurse) gives a prescription to the adult. With this prescription, the person is referred to an exercise professional (physiotherapist) who organizes a physical activity program. This intervention has been implemented in the UK, the Netherlands, Sweden, Finland, Denmark, Spain, Germany and Portugal. The evidence shows that the effectiveness of this intervention for older adults is not forthright. The obstacles include design characteristics (duration of the program, type of prescribed activities and eligibility criteria) and implementation characteristics (users' payments, place of implementation, instructor characteristics). This policy brief provides evidence on those obstacles in different European countries. It also provides insight how to overcome those obstacles.

POLICY CONTEXT

ACCESS TO PHYSICAL ACTIVITIES- PHYSICAL, PSYCHOLOGICAL AND FINANCIAL OBSTACLES

A major concern regarding regular physical activity among older adults is their access to a leisure center. The obstacles to access are geographical issues, psychological comfortability to exercise in a leisure center and financial accessibility. Older adults tend to spend their leisure time on home based activities. Leisure centers with a competitive approach towards physical activity are suited for young people. Older adults who join such groups may feel uncomfortable and may underperform. Equipment such as cycling tools use electronical devices and their use can be complicated for older adults. Older adults do not feel motivated to exercise in such environment. Also, entrance fees and memberships of leisure centers can be an obstacle. Physical activity on prescription programs are designed to provide free access to leisure centers and work in a group of people with similar preferences. Evidence shows that for older people in small cities or rural areas access to leisure centers is still difficult. Also, groups that are formed through physical activity on prescription program (PARS), include older adults with different health problems, and different social and ethnical background.

QUALITY DRAWBACKS-WHICH TYPE OF ACTIVITY AND GIVEN BY WHOM

Evidence shows that physical activity for older adults should be in accordance with their preferences but also with their health status. Inappropriate physical activity among older adults can provoke injuries such as hip fractures. In that case, physical activity has more harmful than protective effects. Although PARS programs are designed to deliver tailor made exercise programs, very often those programs are simply transferred from one leisure center to another. In such a situation they do not take in account individual preferences and the health status of older adults. For older adults with a history of chronic diseases, PARS programs are more suitable if they are delivered by health professionals who can take their health status in account.

IMPROVEMENTS IN HEALTH-THE EFFECTIVENESS OF PARS PROGRAMS AMONG OLDER ADULTS

PARS programs are designed for broad groups of adults. Their effectiveness is measured through the attendance rate and self-reported levels of physical activity. Some studies also include health outcomes (BMI index, blood pressure or sugar level) or outcomes related to quality of life and mental health. However, in most cases older adults are compared with other population groups-differing in age, health and social status. Also, standard measures and eligibility of health outcomes differ between older and younger population groups. For example, the BMI index is not expected to change in older adults as among younger adults. Other outcome measures such as blood pressure, reduced number of GPs visits or better quality of life are more appropriate for older adults. The effectiveness of the PARS programs is usually assessed over a short period of time (up to 6 months). However, to evaluate a change in behavior, it is necessary to have a longer follow up period.

EVIDENCE AND ANALYSIS

DATA POOL

Data related to the effectiveness of physical activity on prescription programs in different EU countries are collected through a systematic literature review. Data from 38 publications for seven countries are compared using meta-analyses. Meta-analyses is a quantitative statistic tool that combines data from different studies that have addressed the same research topic. It is commonly used to provide more insight in the underlying population effects.

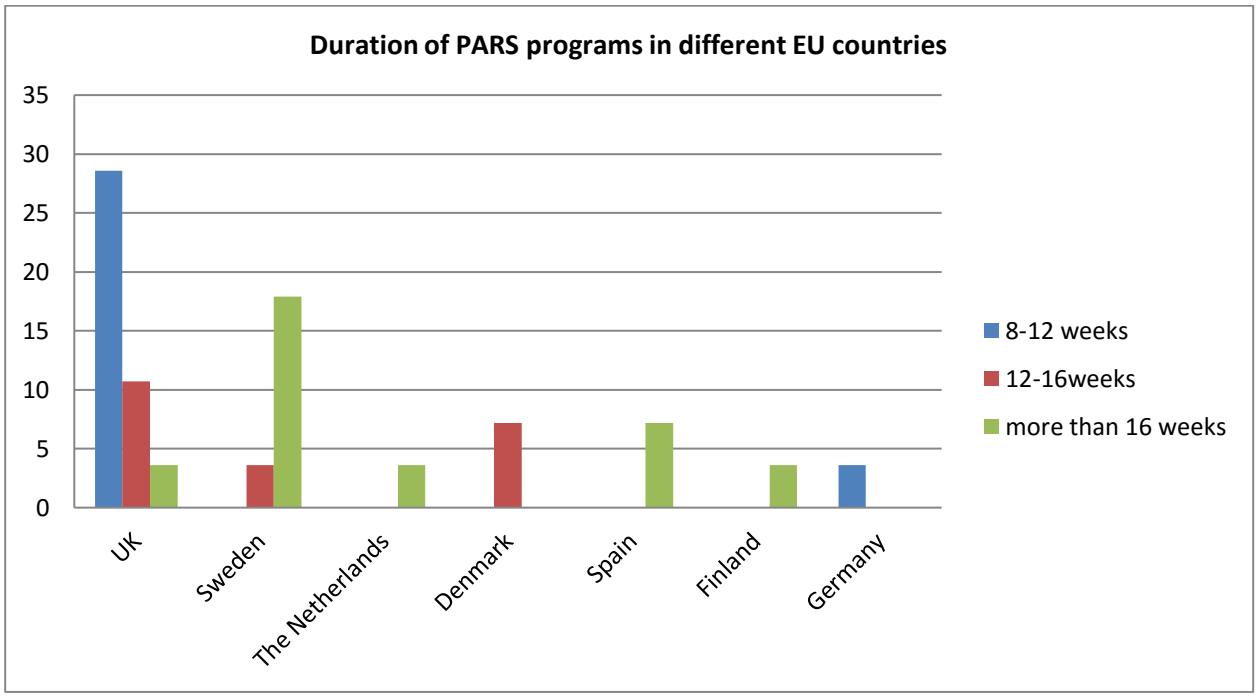
FINDINGS

ELIGIBLE OLDER ADULTS, TYPE OF ACTIVITIES AND DURATION OF THE PROGRAM:
TAILOR-MADE GROUP FOR TAILOR MADE INTERVENTION

Although not particularly designed for older adults, PARS programs in 7 European countries target older adults. Eligible older adults that participate in PARS programs include healthy adults but also people with chronic diseases such as cardio-vascular, pulmonary or rheumatic diseases. Evidence shows that these groups receive programs with different intensity. For example, healthy older adults can receive a more intensive program, than older adults with cardiovascular diseases. However in many programs these groups are mixed and receive the same exercise program. Also, the literature shows that older adults with the same ethnical background (minorities with Asian or

African origin) or with same social status have a higher attendance rate than mixed groups. The duration of PARS programs vary within and between countries. In the UK the PARS program is delivered during a period of 8 to 22 weeks. The duration of the program depends on the geographical area. In Spain, the PARS program is delivered for a period of 12 months. PARS programs are more effective in increasing physical activity if the duration of the programs is longer than 16 weeks. This is observed in Sweden, Spain and in the Netherlands. Older adults emphasize that they need time to get familiar with the group and with the exercise plan. Furthermore, when programs last longer they develop group cohesion and increase social acceptance. This helps them to continue with physical activity with the same group of people when the program is over. Evidence from the literature review shows that older adults prefer physical activity outside leisure centers. Those activities include walking, gardening, cycling and walking on skies. Those activities are delivered through the PARS program in Sweden and they are done under supervision of health professionals. Also, PARS for older adults has greater effects if it includes other advices such as dietary advice or additional health advice. When the program is finished, older adults prefer to stay in touch with health professionals who delivered the program. In all 7 European countries, our evidence shows that PARS is not only perceived as a tool to increase physical activity. Older adults perceive PARS as a possibility to increase their social network. In this way, PARS programs contribute to social inclusion of older adults.

Figure 1: The duration of PARS programs in different European countries



WHO SHOULD PROVIDE INTERVENTION AND WHO SHOULD PAY FOR IT?

Evidences shows that PARS that are prescribed and evaluated through public health systems have greater effects. Older adults are more willing to participate in PARS if they are prescribed by GPs than by other health professionals. This is observed in the UK and in the Netherlands. GPs are perceived as trustworthy persons with a great deal of authority by older adults. However, in some countries like Finland, GPs consider prescription of PARS as an additional task. They do not show great commitment towards the program. Also, older adults report

better health outcomes in longer follow up periods (more than 12 months). They are also motivated to continue with physical activity after the program is over, if they know that health professionals follow up their health status. For older adults from ethnical minorities, it is important to provide settings that fit their cultural preferences. For example female minorities are more willing to participate in gender matched groups.

PARS programs aim to promote free access to leisure centers. Evidence shows that in some countries like Denmark, the Netherlands and Sweden older adults pay a small fee. In the Netherlands older adults pay 21 euros for 10 meetings. If they participate in more than 80% of the meetings, they get 10 euros back. The small fees are used to increase intrinsic motivation. Furthermore, evidence from the Netherlands and Sweden shows that older population groups do not perceive those payments as an obstacle.

ASSESSING THE EFFECTIVENESS

Table 1: Characteristics of PARS programs in different European countries

	Finland	Denmark	The Netherlands	Sweden	UK
Who is eligible?	Diabetes mellitus Sedentary life style	Sedentary life style Chronic diseases	Diabetes mellitus II Back pain Overweight Cardio-diseases Low social economic groups	Sedentary life style Hypertension Diabetes mellitus II MSDs Overweight	Overweight Sedentary life style Chronic diseases
Who pays?	Covered by insurance	Users	Mostly covered by basic insurance packages	Entrance fee is paid by users Possibility for home based activities that are free of charge	NHS
Users cost	Time and traveling	‘ deposits’ up to 100 euros	Small attendance fees that are returned to users after attendance of 80% of meetings No travel costs-community based intervention	Entrance fee Travel costs	Partial payments by users
Obstacles	Physicians commitment	-	Transition from physical activities on prescription to regular sport centers	Sickness and too intensive activities	Low recruitment Adherence Sustanaibilty-12 weeks

IMPLICATIONS AND RECOMMENDATIONS

EUROPEAN LEVEL

- Encourage EU countries to invest in tailor made PARS programs. The programs should be accompanied with a detailed design of the program and its evaluation. The design of PARS programs for older adults should include specification of eligible criteria, description of exercise programs and duration of the programs. PARS programs for older adults should focus on outdoor activities such as walking or gardening. Cultural specific characteristics of older adults should also be taken in account.

- Encourage South and Eastern European countries to develop PARS programs for older adults. Implementation of PARS programs for older adults does not require high cost investment-physical activities such as walking or gardening can be implemented within local communities at low costs.

- Encourage countries where PARS programs already exist such as Belgium, Finland, Germany, Denmark the Netherlands, Spain, Sweden and UK to develop programs with a longer duration and with activities suitable to older adults

- Encourage the development of guidelines for the evaluation of PARS programs. Guidelines should promote a longer follow up period, more than 12 months, so that the long-term effects of PARS programs can be observed.

- Stimulate comparative research in Europe about the effectiveness of PARS programs. Comparing the effectiveness of PARS programs in different countries can give better insight in obstacles related to PARS programs. Also, comparative research should include both qualitative and quantitative data. Research that is based on a prospective design should be used to assess the effectiveness of PARS program rather than research based on a one time measurement design.

NATIONAL LEVEL

- Cost-effective PARS programs should be embedded in the public health system within the country. This allows for the development of tailor made activities for older adults that cater to their preferences and health status.

- Physicians should be educated about PARS programs. Their commitment to the program and involvement is important for older adults. Older adults perceive the PARS intervention as being more safe if a physician is involved.

- Encourage the use of PARS programs together with other health promotion activities such as dietary advices. PARS programs can also be used as tools to promote social inclusion and cohesion among older individuals from the same local community

- Encourage the charge of a small fee for older participants. Those fees can be returned to participants if they attend more than 80% of all meetings. Such financial incentives can be used to increase participation.

RESEARCH PARAMETERS

PROJECT FOCUS

ProHealth 65+ is focused on health promotion and prevention of health risks among seniors. The project seeks to determine effective methods of promoting a healthy lifestyle among older population groups by bringing together knowledge and experience of main partners and health promoters from Poland, Germany, Italy and the Netherlands and exchange it with collaborating partners from Portugal, Greece, Bulgaria, Czech Republic and Hungary. The effective implementation of training for health promoters working with this age group is the ultimate project goal.

PROJECT OVERVIEW

Pro-Health 65+ project corresponds with directions of the EU strategic Health Program (the Second and Third Health Program). The project is focused on 'Investing in Health' as part of the Social Investment Package for Growth and Cohesion through professionally designed health promotion programs implemented by well-informed and efficiently operating health promoters. It is targeted at the elderly with the intention of providing them with good health and good quality of life, and enabling them to be active and socially integrated (Healthy Aging). It will be implemented as a collaborative project in close cooperation with partner countries using a variety of research and institutional experience. It will be important to add the project activities to other European and national activities so that they are complementary and compatible.

METHODOLOGY

This project is about research and implementation. It will use two sets of tools. For research, we will accumulate and develop knowledge: analyze previous studies related to the subject of health status of older people and the health determinants (social, economic and cultural) in different stages of life; identify and evaluate health promotion methods; analyze institutions of health promoters and also funding, distribution, and modelling of financial circuit and incentives; critically review cost-effectiveness analysis. Quality will be guaranteed by supervision of the Advisory Board and will be assessed in accordance with the rules of the project. For the implementation of project results, we plan to prepare a manual for health promotion that will help to fill the most common knowledge gaps among street-level health promoters and training materials for key institutions providing health promotion for the elderly. We will also conduct training in cooperation with the newly created Board of Health Promoters for selected street-level health promoters.

EXPECTED OUTCOMES

Widespread knowledge and use of evidence based and economically effective methods of health promotion within different groups of street-level health promoters (health care practitioners, policy-makers, local and NGOs activists, social workers, trade unionists, journalists etc.) is one direct result of the project. Analyzing different institutions of public health, legal basis, sources and methods of financing and cost-effective ways of conducting the work in this area, will enrich the knowledge on possibilities and barriers related to promoting health. The project will contribute to the application of relevant health promotion methods in joint actions in the field of public health.

PROJECT IDENTITY

PROJECT NAME

PRO HEALTH 65+
Health Promotion and Prevention of Risk – Action for Seniors

COORDINATORS

JAGIELLONIAN UNIVERSITY MEDICAL COLLEGE

Project leader: Prof. dr. hab. Stanisława Golinowska
Project manager: Andrzej Kropiwnicki

ASSOCIATED PARTNERS

JAGIELLONIAN UNIVERSITY MEDICAL COLLEGE
www.uj.edu.pl
Principle investigator: Prof. dr. hab. Stanisława Golinowska

MAASTRICHT UNIVERSITY
www.maastrichtuniversity.nl
Principle investigator: Prof. dr. Wim Groot

UNIVERSITÀ CATTOLICA DEL SACRO CUORE
www.unicatt.it
Principle investigator: Prof. dr. Nicola Magnavita

UNIVERSITÄT BREMEN
www.uni-bremen.de
Principle investigator: Prof. dr. Heinz Rothgang

FUNDING SCHEME

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DURATION

August 2015 – July 2017 (36 months)

BUDGET

EU contribution: 960 165 Euro

WEBSITE

http://pro-health65plus.eu

LINKEDIN FORUM

https://www.linkedin.com/groups/ProHealth-65-Health-Promotion-Prevention-8354412/about

FOR MORE INFORMATION

PROJECT OFFICE
Anna Najduchowska, leader's assistant
Jagiellonian University Medical College
ul. Grzegórzecka 20, 31-531 Kraków, Poland
Tel: +48 12 433 28 09 / +48 603 663 822

E-MAIL
andrzej.kropiwnicki@uj.edu.pl
anna.najduchowska@uj.edu.pl