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Update

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EuropeActive Launches New Website

www.europeactive.eu

We are delighted to announce the launch of the new EuropeActive website. The new site will replace the old EHFA site as we make the final steps in the transition to EuropeActive.

The launch of the new website, which offers quick and easy access to essential information on EuropeActive's EU Affairs, Events, projects and latest news, is part of the our on-going effort to enhance the quality and availability of information to both members and the health, fitness and activity sector in Europe and throughout the world.

The website boasts a modern, colourful design and is created with the user experience firmly in mind with more efficient access to our resources. The site is also designed using the latest technology and is compatible with today's browsers and mobile devices.

In addition, the new site includes a members area where current EuropeActive members may access to the new "Knowledge Centre' – an online portal where our latest research and publications are available. Full details to be released shortly.

We encourage you to explore the new website at **www.europeactive.eu**

Otago strength and balance exercise programme to prevent falls

Falls and Frailty

Falls and consequent injuries are a huge problem for older people, their carers' and the health professions (1). Three quarters of people living in residential care fall repeatedly every year. Hip fractures and consequent loss of independence are the worst consequence, but fear of falling following a fall, and avoidance of activity, mean that older people often start a vicious circle of lack of physical activity which further reduces their ability to stay upright if they trip (2). Low muscle strength and poor balance are two of the most commonly found risk factors in older people who fall (1,2) and these components of fitness are specifically targeted in the OEP.

By improving strength and balance and reducing fear of falling, the OEP can not only reduce falls (3-5), but make people more steady on their feet, therefore broadening their social activities and reduce isolation and loneliness. Recent work suggests group OEP exercise also improved cognitive function and quality of life among older participants (6).

Over a third of over 65 year olds and a staggering half of all over 85 year olds fall every year

The Origins

Prof. John Campbell and dr. Clare robertson, based in New Zealand at the University of Otago, are the authors of the Otago Exercise Programme (OEP). The efficacy of the programme was tested in a series of four randomised controlled trials from 1997 to 2005 (3-5) and more recently a number of trials by independent researchers in Australia and the UK (6,7). The programme of exercises is cost effective for those aged 80+ and cost neutral for those aged 65+ (8).

Over 3,000 older participants have performed the Otago strength and balance exercises three times a week for a year in their own homes (or 6 months in a group) with guidance on exercise technique, support, motivation and progression from a trained professional (physiotherapist; nurse trained by a physiotherapist; exercise instructor). The studies showed an overall decrease in falls by about 35%. Although a limited number of other research studies have shown a higher percentage decrease in falls following strength and balance exercise, these have not involved such high numbers of participants nor have the exercises been "put to the test" in such a high number of trials with such evidence of cost effectiveness, therefore the OEP is considered to be the jewel in the crown of falls exercise research.

It was this evidence that led to Later Life Training (LLT) to contact the authors and collaborate with them to provide training courses for health and exercise professionals resulting in The Otago Exercise Programme Leader's Course in the UK in 2006. Since 2012 LLT have been providing Cascade Training across Europe within the ProFouND (Prevention of Falls Network for Dissemination) project (9), in order to spread evidence based practice and support the European Innovation Partnership on Active and Healthy Ageing (10). The overarching target of this partnership will be to increase the average healthy lifespan by two years by 2020.

Who can Benefit?

The OEP provides a natural intermediary exercise opportunity for older people who are functionally more able than those who attend chair- based exercise sessions but who are probably too frail and/or unsteady to participate in a general older person's exercise session (usually provided by leisure services and independent exercises instructors). Most importantly, the OEP includes balance exercises in combination with strength exercises that target the leg muscles. This combination is known to have the best effect on an older person's balance, and therefore falls risk, so this programme is highly

suitable for older people who are already falling or are fearful of falling. Fear is present in more than 50% of fallers and, interestingly, up to 40% non-fallers (2). It is a risk factor for falls in its own right. The OEP is also very flexible in where the older person can perform their exercises. The original OEP was performed in the person's home on days and at a time that was convenient for the individual but the OEP is now also offered as group exercise sessions for those who prefer the social and motivational aspects of exercising with others. There is also evidence to support a quicker improvement in strength and balance in those who exercise in groups (11).

Standardised delivery

Although the OEP is available to download from the internet, LLT wanted to achieve higher standards of delivery of these exercises in terms of exercise technique, and therefore safety and effectiveness of the programme across falls and exercise services via effective training of health and exercise professionals. The partnership between LLT and the OEP authors was therefore developed, with LLT designing the training package and writing and producing the training course materials. The only equipment required is a set of ankle cuff weights for each participant. Much expertise was gleaned from the OEP authors not only with regard to the implementation of the intervention itself but more pertinently in terms of training OEP leaders, as they had originally trained nurses for the 2001 studies.

OEP Training in the UK

The first Otago Exercise Programme Leader's Course pilot was taught in the UK in 2006 Since then Later Life Training (LLT) has successfully trained over 4000 instructors in the UK and achieved exemplary reach to older people with a history of falls through their evidence based, nationally standardised and accredited training. During this time the course content continues to be updated as a result of evidence and guidance. Professionals accessing the training include physiotherapist and rehabilitation assistants, occupational therapy assistants and technical instructors, specialist nurses, exercise instructors, sports coaches, social care workers, and sheltered housing wardens. Ideally all OEP trained leaders have access to advice/supervision by a physiotherapist but some models in the UK have linked into occupational therapists and postural stability instructors (NVQ Level 4 specialist exercise instructors) for advice on progression, tailoring exercises or other issues that the OEP leaders may have with their clients. The UK's Department of Health have recommended the OEP in their 'Prevention Package' (12) and the UK's Royal College of Physicians audit of exercise provision in falls services showed that 41% of services employed trained OEP leaders (13).

OEP Training in Across Europe – ProFouND

The Prevention of Falls Network for Dissemination (ProFouND) (9) is an EC funded initiative dedicated to the dissemination and implementation of best practice in falls prevention across Europe. ProFouND aims to influence policy and to increase awareness of falls and innovative prevention programmes, amongst health and social care authorities, the commercial sector, NGOs and the general public. Through this

work ProFouND aims to facilitate communities of interest and disseminate the work of the network to target groups across the EU.

Later Life Training are leading on a work package of ProFouND to deliver tutor training to health and leisure professionals across Europe and linking with REPS Europe and other organisations (such as physiotherapy councils) to ensure that the training

OEP reduces falls risk and improves cognitive function and quality of life among older participants

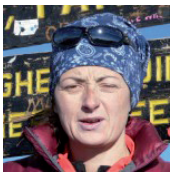
courses delivered by these tutors in their own regions is accredited and quality assured. The aim, once initial tutor training is complete, is to have a network of at least 60 CTs across 15 regions cascade training at least 2 new instructor courses a year (to 10-15 new instructors) each year – so that the network of trained instructors grows each year across Europe. Depending on how many older people each instructor works with over a year, based on the UK experience, this will have the potential reach of 43,000 to 140,000 older people a year receiving effective falls prevention exercises.

So far, LLT have provided training to 44 Cascade Trainers in Germany, Austria, Switzerland, Sweden, Norway, Greece and Cyprus. Training has been booked for Spain, Italy, Hungary and the Netherlands for 2015. In Germany, many Insurance Providers now reimburse older people for part of the expense of receiving OEP training as they have realized the benefits of such evidence based exercise.

Find out more

If you are interested in finding a Cascade Trainer near you, so you can become an OEP Leader in your area and improve the lives of older people who fall, visit the ProFouND training portal website (14). To read more about the OEP Training in the UK and LLT, visit the LLT website (15).

Professor Dawn Skelton



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Visit the Later Life Training website: **http://www.laterlifetraining.co.uk/**

References

[1] World Health Organisation. Global Report on Falls Prevention in Older Age. WHO, Geneva, 2007. [http://www.who.int/ageing/publications/Falls_prevention7March.pdf]

[2] Todd C, Skelton DA. What are the main risk factors for falls amongst older people and what are the most effective interventions to prevent these falls? How should interventions to prevent falls be implemented? World health organisation, Health Evidence Network, Denmark 2004 . [http://www.euro.who.int/__data/assets/pdf_file/0018/74700/E82552.pdf]

[3] Campbell AJ, Robertson MC, Gardner MM et al. Randomized controlled trial of a general practice programme of home based exercise to prevent falls in elderly women. British Medical Journal 1997; 315: 1065-69. [http://www.ncbi.nlm.nih.gov/pubmed/9366737]

[4] Robertson MC, Devlin N, Gardner MM et al. Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. 1: A Randomised Controlled Trial. British medical Journal 2001; 322: 697-700 . [http://www.ncbi.nlm.nih.gov/pubmed/11264206]

[5] Campbell AJ, Robertson MC, La Grow SJ et al. Randomised controlled trial of prevention of falls in people aged > or =75 with severe visual impairment: the ViP trial. British Medical Journal 2005; 331(7520): 817-23. [http://www.ncbi.nlm.nih.gov/pubmed/16183652]

[6] Liu-Ambrose T, Donaldson MG, Ahamed Y et al. Otago home-based strength and balance retraining improves executive functioning in older fallers: a randomized controlled trial. Journal of American Geriatric Society 2008; 56(10): 1821-30. [http://www.ncbi.nlm.nih.gov/pubmed/18795987]

[7] Iliffe S, Kendrick D, Morris R, Masud T, Gage H, Skelton D, et al. Multi-centre cluster randomised trial comparing a community group exercise programme with home based exercise with usual care for people aged 65 and over in primary care. Health Technology Assessment 2014; 18(49):vii-xxvii, 1-105. [http://www.ncbi.nlm.nih.gov/pubmed/25098959]

[8] Davis JC, Robertson MC, Ashe MC, Lui-Ambrose T, Khan KM, Marra CA. International comparison of cost of falls in older adults living in the community: a systematic review. British Journal Sports Medicine 2010; 44(2): 80-9. [http://www.ncbi.nlm.nih.gov/pubmed/20154094]

[9] ProFouND Website [http://profound.eu.com/about/wp5-best-practice-exercise-regimen-network-development/]

[10] EIP AHA Website [http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=about]

[11] Kyrdalen IL, Moen K, Røysland AS, Helbostad JL. The Otago Exercise Program performed as group training versus home training in fall-prone older people: a randomized controlled Trial. Physiotherapy Research International 2014; 19(2): 108-16. [http://www.ncbi.nlm.nih.gov/pubmed/24339273]

[12] Department of Health. Prevention Package. Falls and Fractures: Exercise Training to prevent falls. DoH, London, 2009. [http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/dh_103146]

[13] Royal College of Physicians. Older people's experiences of therapeutic exercise as part of a falls prevention service 2011. RCP, London 2012. [https://www.rcplondon.ac.uk/projects/falls-patient-and-public-involvement]

[14] LLT Website - http://www.laterlifetraining.co.uk/courses/otago-exercise-programme-leader/

[15] ProFouND Training Portal - http://profoundtraining.dat.demokritos.gr/mod/page/view.php?id=59