

Press release of 13 June 2014

More autonomy thanks to interactive exercise programme
An easy way of fending off age-related problems

Which everyday tasks do elderly people struggle with? How can they exercise the functions required for these tasks more specifically? And how can caregivers be involved? Participating in an international project, the Research Unit for Occupational Therapy at the ZHAW has thoroughly researched these questions. The answers form the basis of an IT-supported interactive training programme.

Buttoning up a shirt causes problems, the short journey to the bus stop is an exhausting feat and tying your shoelaces is a lot more difficult than it used to be. In old age, activities of daily living can be challenging. Suddenly you need help with them. Heidrun Becker, Professor of Occupational Therapy, is convinced that "Targeted training enables the elderly to maintain their independence for longer and supplements the resources of caregivers." As part of the "WeTakeCare" project, funded by the European Commission's "Ambient Assisted Living (AAL) Joint Programme", she is therefore working with an interdisciplinary team to explore the possible form such training should take.

Exercising basic physical functions and discovering new strategies

In the first part of the project, which is being run under the auspices of the ZHAW Research Unit for Occupational Therapy, Professor Becker and her colleagues have identified key activities of daily living that cause difficulties in old age. These activities include, for example "bending over" and "walking short distances" as well as "getting up from a chair", "having a bath/shower" or "cooking a simple meal". In order to maintain their ability to do these things independently, elderly people first of all need to exercise the necessary physical attributes - such as strength, agility and balance. Secondly, they need to develop alternative strategies, for example using appropriate aids, so that they can continue to perform their usual tasks. The interactive training programme being developed by the researchers is therefore aimed not only at the elderly people themselves but also their caregivers, who have indicated in focus group interviews that their main requirement is for information and networking opportunities. They also welcomed input concerned with safeguarding their own health, by means of relaxation exercises, for example, as this is an aspect that is often neglected in the light of their "caring responsibilities", says Professor Becker.

National and gender-specific differences

The focus group interviews, which were conducted in Switzerland and Spain, confirmed the cultural differences also identified in health surveys. In Spain, older people often reported difficulties in basic activities of daily living such as eating, drinking or bathing. In contrast, German-speaking people of the same age mentioned fewer and less serious limitations, relating mainly to mobility, dressing themselves, cleaning or cooking. Apart from the general level of fitness, which tends to be higher in Switzerland, Germany and Austria, Professor Becker suspects that this may also be due to a difference in attitude: "It is perhaps culturally more acceptable to admit to having problems in Spain than it is in German-speaking countries." The same effect is probably at play when it comes to the difference in responses from the two genders: Women mentioned having more difficulty with everyday activities than did men of the same age, except when it came to typical household chores such as cooking or washing up.

Practice makes perfect

Severe impairments were usually only found in people over 80 years of age and were independent of nationality and gender. However, the first signs of these problems show up much earlier. For this reason, the highly specific training programme is aimed at people aged



fifty upwards, who encounter mild to moderate limitations. According to Professor Becker, this is the right time to address the negative aspects of ageing: "Other studies have shown that it is much more difficult to change habitual patterns later in life."

Based on the findings from the first part of the project, a software program is now being developed, validated and evaluated in collaboration with the international project partners and this can be installed on standard games consoles so that it is accessible to a large section of the population.

For further information

Report published in the [2014 Research Brochure of the School of Health Professions](#) (pp. 9-10)

[Interim report](#) on the "WeTakeCare" project

The project website: www.wetakecare.ibv.org

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