**Conclusion:** The results showed that the positive effect of multidomal occupational therapy on pain and hand function persisted over the 2-year period, however, no significant between-group differences over time was found. No significant between-group differences were found when dividing into sub-groups, however, those later undergoing surgery in the control group scored significantly worse on pain and hand function at the time of surgical consultation. The results may imply that patients who would benefit from surgery were identified, and that surgery does not give an additional benefit in patients who have received multi-modual occupational therapy. This needs to be further investigated.

**REFERENCES:**


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**THE FALL PREVENTION PROGRAMME ‘SICHER DURCH DEN ALLTAG’ IS EFFECTIVE AND COST-EFFECTIVE**

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**Background:** Falls in older people are frequent and have often severe health consequences. Reinforced by population ageing, they represent a substantial challenge for health care systems. Falls are often due to a combination of intrinsic and extrinsic risk factors. For these reasons, the Swiss League Against Rheumatism (SLAR) developed the multidimensional, home-based fall prevention programme ‘Sicher durch den Alltag’ (Safely Through Everyday Life). The programme has been implemented nationwide since 2013 and is financed by selected health insurance companies. Trained physiotherapists (PTs) or occupational therapists (OTs) visit the senior at home for a 60-90 minutes session. They perform a detailed assessment of the senior’s individual risk of falling and subsequently eliminate identified environmental risk factors and provide tailored exercises. After 4 weeks, the PT/OT calls the senior to discuss further needs. The cost of the intervention is at 500 Swiss Francs (approximately 460 Euro) per senior.

**Objectives:** Assess the effectiveness and cost-effectiveness of this fall prevention programme.

**Methods:** A prospective, longitudinal observational study was performed. Baseline study data was assessed at the home visit, including the self-reported number of falls during a) the year and b) the month before the visit. The participants of the programme were monitored for one year after the home visit by bi-monthly telephone calls. Participants were asked to report the falls that they continuously documented in a diary. Questionnaires administered orally included the Falls Efficacy Scale-International (FES-I), a Quality of Life Questionnaire (EQ-5D-5L), and the amount of moderately intensive physical activity (PA). To compare the falls during the years before and after the home visit, the number of falls before the visit was calculated based on reported falls during a) the year and b) the month (multiplied by 12) before the visit. A 2:1 weighted mean from a) and b) was calculated, considering that retrospective reporting over one year or over one month may underestimate or overestimate, respectively, the number of falls. Statistical analysis fitted a GEE-Poisson-Model (Generalized Estimating Equations) to the data for number of falls and a Linear Mixed Model (LMM) for fear of falling, quality of life and PA. Falls related health care spending in the years before and after the intervention were compared based on health insurance claims data.

**Results:** Overall, 639 person-years of observation time were available for analysis. Participants were mainly female (59%) and had a mean age of 81.6±4.2 years. On average, rate of falling decreased from 1.35 to 1.02 per person year (-23.9%), fear of falling decreased by -1.27 (95%CI -1.50, -1.05), quality of life improved by -0.88 (95%CI -1.09, -0.68), PA increased by 9.87 minutes per day (95%CI 5.65, 14.09). Health insurance claims data showed a 48.0% reduction (95%CI 30.5%, 61.0%) of medicated falls treated. The average cost per prevented medically treated fall was estimated at 1317 Swiss Francs (approximately 1200 Euro) and the probability of the intervention being cost-saving at 47%.

**Conclusion:** This low-threshold fall prevention programme was found to be very effective and cost-effective. Home visits by trained PTs or OTs contribute substantially to reduce falls in the elderly. The high cost-effectiveness is explained by a substantial reduction of severe falls.

**REFERENCES:**


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