

## **The effectiveness of psychosocial group rehabilitation**

This abstract is based on the following research reports and articles.

### *Research reports of The Central Union for the Welfare of the Aged:*

Pitkälä K, Routasalo P, Kautiainen H, Savikko N, Tilvis R: The effectiveness of psychosocial group rehabilitation. Research and development project on geriatric rehabilitation, report no 11 (In Finnish). The Central Union for the Welfare of the Aged. Gummerus, Saarijärvi 2005.

### *Scientific articles:*

Routasalo P, Pitkälä K, Tilvis RS. Alleviation of older people's feelings of loneliness with intervention. In: Aho AL et al. Making nursing research visible – how to answer to people's and societies challenges (In Finnish). VIII National nursing scientific congress, University of Tampere 24.-25.9.2004.

Routasalo P, Kautiainen H, Savikko N, Tilvis R, Pitkälä K. Psychosocial group rehabilitation and alleviation of older people's loneliness (In Finnish). IX National nursing scientific congress, University of Turku 2006.

### ***Background***

Loneliness is a common problem among older people. Older people's loneliness may lead to decreased quality of life, cognitive decline, increase in the use of health services, early institutionalization and increased mortality. Interventions aiming at alleviating older people's loneliness and to socially activate them have been increasing their social activation have been developed. However, their effectiveness have been quite modest. Some of them have shown that group interventions may have effects on loneliness and psychological well-being. However, the effects on hard end-points such as health, cognition or mortality, have not been studied.

### ***Objectives***

The main objective of the research was to study whether psychosocial group intervention taking into account older people's own interests is effective in alleviating their loneliness, in socially activating them, in increasing their psychological well-being and quality of life as well as in having a positive impact on their health. Another objective was to examine the effects of the intervention on the use of social and health care services and on the mortality of the participants.

Participants consisted of 235 older people ( $\geq 75$  years), recruited by population-based survey in which they expressed their loneliness, willingness to participate in group activities and interest in the contents of a particular group available. The exclusion criteria were moderate or severe dementia, living in an institution, blindness or deafness. In addition, in groups that involved physical exercise the participants were required able to move independently at least at NYHA 2 performance level.

### ***Intervention***

The intervention was based on older people's joint experiences and sharing of feelings of loneliness with each other in groups in which professional leaders facilitated relationships between the participants as well as aimed at supporting their empowerment and overcoming their own limits.

The essential features of the intervention were utilising group dynamics and supporting the independence and maturation of the groups. All the group leaders had training for over 1,5 years and participated in work mentoring. Group rehabilitation was based on closed groups with 7-8 participants. There were 12 group meetings for 2-6 hours at a time during a three-month period. Groups with three different contents were organised: 1. Arts and inspirational activities; 2. Physical exercise and health related discussions; and 3. Group therapy and therapeutic writing. The randomization into groups was based on the participants' interest in the different group contents. The group contents were tailored also according to the participants' wishes.

### ***Design***

Randomized controlled trial.

### ***Methods***

The members of both the intervention and control groups were interviewed and assessed three times: at the baseline, right after the intervention that lasted for three months, and six months after the intervention. In addition, the participants responded to a postal questionnaire before the randomization and one year after the baseline. In the assessments, the participants were inquired about their loneliness (UCLA), social activity (Lubben; number of new friends, group meetings, satisfaction with social relationships), psychological well-being, quality of life (15D), cognition (ADAS-Cog), subjective health status, depression (MADRS), anxiety (Hamilton), and in the exercise group also about the participants' functional ability (Timed Up & Go, 10 meter walking test, balance test and getting up from a chair). Participants' use of social and health care services were examined during the mean period of 1.6 years, and the mean cost of services was calculated per person year. Mortality was retrieved from a central registers.

### ***Findings***

Randomization was successful. At baseline, intervention and control groups were very similar with respect to demographic factors, health-related factors, social network, psychological well-being, anxiety, depression, loneliness and cognition. The participants were old (mean age 80 years, range 75-92 years), and over two thirds of them were widowed and three out of four were women. Psychosocial group rehabilitation had several positive effects on the lives of lonely older people. Rehabilitation activated them socially: 40% of the participants had continued the group meetings independently one year after the group meetings officially ended. A significantly larger proportion of participants in the intervention group had got new friends during the last year compared to control group (45 % vs. 32 %,  $p = 0.048$ ). After the termination of official group meetings, 72% of intervention group participants had met members of their group. However, according to UCLA and Lubben, there was no improvement in their loneliness or in the number of their social contacts. The positive effects of group rehabilitation showed an increase in psychological well-being (change in well-being score in intervention group 0.011 (95 % CI 0.04 , 0.13) vs. control group 0.00 (95 % CI -0.05 , 0.07),  $p = 0.045$ ). A significantly larger proportion of intervention group participants felt being needed by someone after the intervention compared to control group (intervention 66 % vs. control 49 %,  $p = 0.019$ ). In addition, cognition improved significantly more in intervention group compared to control group (change in ADAS-Cog in intervention group -2.5 points (95 % CI -3.2, -1.8) and in control group -1.3 points (95 % CI -1.9, -0.7),  $p = 0.003$ ). Improvement in cognition was seen also as an improvement in the mental functions section of 15D Quality of Life Measurement Scale as compared with the control group. Of the intervention group participants, a significantly larger proportion felt themselves healthy compared with the control group (intervention 81 % vs. control 60 %,  $p < 0.001$ ). The improvement in health was also seen in decreasing use of social and health care services in intervention group as compared with the control group. The costs of using social and health care services were significantly lower in intervention

group as compared with the control group. When all costs were estimated per person year, the costs of intervention group were 3 122 (95 % CI: 2 392, 3 970) euros and control group 4 752 (95 % CI: 2 392, 6 137) euros. The difference between the groups is a statistically significant -1 630 (95 % CI -3 194, -333) (p = 0.022)) euros. In intervention group the survival rate was 97 % (95 % CI 92, 99) and in control group 93 % (95 % CI 86, 96). Age and gender standardised HR was 2.48 (95 % CI 0.65, 9.43; p=0.18).

### ***Conclusions***

A carefully planned and implemented psychosocial group rehabilitation programme for lonely older people may socially activate and empower them. In the intervention, group rehabilitation improved the participants' psychosocial well-being, cognition and health so that the improvement was detectable in several factors supporting each other. In addition, group rehabilitation decreased the cost of social and health care services.

The effectiveness of group rehabilitation requires a specific target group (e.g. older people who suffer from loneliness), participants' interest in the available group contents and their willingness to commit themselves to the group objectives. In addition, it is essential that group leaders are professionals and work in pairs. The group leaders' training must involve elements of goal-oriented activity, utilization of group dynamics, supporting group members' social activity, and supporting their adherence to the groups. Effectiveness of the groups requires also valuing of older people as well as listening to them and taking into account their opinions in arranging the group activities.