Title in original language:
Sociaal Vitaal

Which 'life stage' for CVDs prevention targets the intervention?
Ageing. Target group: Older population (men and women); sedentary, frail older adults in deprived areas. The recruitment phase was tailored to include this vulnerable group.

Short description of the intervention:
Sociaal Vitaal is an intervention programme for community-dwelling, sedentary frail older adults in deprived areas. The aim of the intervention is to promote ‘healthy ageing’ in the target population. Focus is on 1) increasing the physical activity of elderly; 2) develop resilience to cope with ageing and 3) increase social skills to make contact with others. The intervention consists of the recruitment of participants, screening of participants for physical inactivity, loneliness and lack of resilience. The elderly will be recruited by volunteers through home-to-home visits. Elderly that are interested in the project will be screened by a fitness test in combination with a questionnaire that measures loneliness and resilience. The project consists of a 1) multifaceted exercise programme in their own neighbourhood where participants will be supported to meet the Dutch Norm on Physical Activity; 2) a resilience training focussing on coping with fear, gaining of self-confidence, setting boundaries and getting grip on emotions and own behaviour; 3) social skills training focussing on an increased insight in the social interactions and to improve social skills to make and maintain social contacts; 4) education of several health and social topics, adapted to the participants needs, which will help to increase health literacy. The various projects are integrated. All practitioners received specific training for the intervention. To improve and maintain health behaviour, participants receive self-management training for 6 months after the intervention. This training focusses on how to implement the lessons learned during the intervention in daily practice. The following 18 months are used to implement and sustain the intervention by align with local policy plans and support the groups to be self-sufficient.

A protocol is available in which the intervention is explained step-by-step. The health promotion material, letters to participants, recruitment protocol, screening protocol and outline of the trainings are described in a comprehensive protocol (in Dutch). Training is available for practitioners of the exercise class. Instructions and training for the social skills and resilience training are also available.

Frequency/duration/intensity of training: Social skills training: 4 sessions of 45 minutes; Exercise class: 60 minutes weekly; Resilience training: 12 sessions 45 minutes
The intervention will last for 9 months. After the intervention, a continuation phase takes place of 24 months. During this period, participants receive a self-management training. In 5 meetings participants are trained to recruit new members for their own activity group in their own neighbourhood and to organize and manage this group by themselves, Also in these 5 meetings they are encouraged to join other activities in their neighbourhood.

Was the design of the intervention appropriate and built upon relevant data, theory, context, evidence, previous practice including pilot studies?
The conceptual model assumes that low socio-economic status and ageing adversely affect the health literacy, lifestyle and resilience of sedentary frail older adults in deprived areas. This leads to physical frailty and psychosocial frailty and subsequently leading to health and adverse quality of life.

For the conceptual model, the following theories are used: the Health-Related Fitness and Physical Activity” model (Toronto model: Bouchard & Shephard, 1994), the evolution-biological play theory (Bult, 1994), the Reserve Capacity Model (Matthews et al., 2008; Meyers, 2009), the Resilience theory (Windle et al., 2008; Hildon et al., 2010 and the Ecological Model to promote healthy behaviour (Sallis et al., 2008)

Furthermore, a cross-sectional analysis of the relationship between quality-of-life, social functioning, depressive symptoms, self-efficacy, physical functioning and socio-economic status (SES) in community dwelling elderly was carried out prior to the intervention. The path analysis indicated an indirect effect of SES on the Quality of Life by social functioning, depressive symptoms and self-efficacy in the target population.

**Did the design thoroughly describe the practice in terms of purpose, SMART objectives, methods?**

Please see the answers on the individual components (objectives, methods & activities)

**To which type of interventions does your example of good practice belong to?**

Individual Intervention

**How is this example of good practice funded?**

National/regional/local government.

**What is/was the level of implementation of your example of good practice?**

National - Local (municipality level). The intervention is implemented locally, but with support on a national level. All regional sport organizations have adopted this intervention and are willing to implement the intervention in the municipalities.

**What are the main aim and the main objectives of your example of good practice?**

The main aim of the intervention is to promote healthy ageing in community-dwelling, sedentary, frail older adults in deprived areas by specific objectives:

1) Promote physical activity levels (1.1), enjoy physical activity (1.2) and an increase physical functioning (1.4). The effects will be measured with validated and standardized tools, as described below. An increase in leg strength and aerobic endurance by 10% is expected. The effects will be assessed 24 months after the intervention. It is expected that 75% of the participants will maintain physically active.

2) An increase of resilience by learning to cope with physical and mental frailty. The effects will be measured using the Groningen Ageing Resilience Questionnaire (GARI), as described below. It measures three dimensions of resilience. It is expected that two dimensions (self-efficacy and adaptive coping mechanisms) will increase by 7.5%.

3) An increase in social skills and social networking to make contacts, maintain new contacts and improve the quality of old friends. A 10% increase in self-confidence to make new friends and a 7.5% increase in social networking size is expected.

4) An increase in knowledge on several aspects of healthy living: physical exercise, smoking, alcohol use, nutrition and relaxation. An increase in knowledge on those topics will be 15%. Pilot studies have shown that the expected changes are feasible.

**Please give a description of the problem the good practice example wants to tackle:**

Elderly with a low socio-economic status are more likely to have unhealthy lifestyle characteristics, such as low levels of physical activity, unhealthy dietary habits, smoking and excessive alcohol intake compared to elderly with...
a high socio-economic status. Moreover, low SES elderly are more likely to experience physical and psychological problems, leading to frailty. Those persons have a higher risk of developing non-communicable diseases such as diabetes, depression, dementia and multi-morbidity.

In the Netherlands there are 2.56 million elderly aged 60 to 85 years, of which 15% (384,000) has a low level of education. It is estimated that 76,800 elderly suffer from frailty due to low levels of physical activity, lack of mental resilience and loneliness. Health forecasts (2014) predict that in 2060 636,000 elderly will have a low SES status. This will lead to increased health care expenses.

**Is your example of good practice embedded in a broader national/regional/local policy or action plan?**

Yes. The intervention is embedded within the Government Programme on Sport and Physical Activity Close to Home ("Sport in de buurt"). One of the actions is to grant money for sport and exercise projects for sedentary or low participation groups (Sport Impulse). Sport clubs, fitness centres or other sport providers develop or implement activity programs for sedentary or low participation groups. The main requirement is that they work together with local neighbourhood partners, and must be aimed at one of three target groups, amongst others sedentary people. The maximum grant period is two years. After that, the activity should continue without governmental funding. Sociaal Vitaal is one of the interventions that is selected as a best practice to be implemented by sport providers in the different municipalities.

**Implementation of your example of good practice is/was:**

Continuous (integrated in the system)

**During implementation were specific actions taken to address the equity dimensions?**

The intervention focuses on sedentary, frail older adults in deprived areas. The recruitment phase was tailored to include this vulnerable group. Also the training material was adapted to the target group. Furthermore, in the continuation phase there was specific attention to the sustainability of the intervention and the empowerment of the target group.

**In design, did relevant dimensions of equity were adequately taken into consideration?**

Yes, in the Netherlands, national funding is available for sedentary people through the Sport Impulse (Part of the Policy programme Sport and Physical Activity Close to Home). Also, specific attention should be paid to decrease health inequalities due to SES. This intervention is specifically focusing on frail, older subjects living in deprived areas. A disadvantage is that only subjects fluent in Dutch meet the inclusion criteria of the intervention (the training material is only available in Dutch). Therefore, certain ethnic minorities could not participate in the project. At the moment, the intervention is adapted to suit the need of inclusion of participants, not fluent in Dutch. The training material will be translated and the activities will be adapted to those ethnic minorities.

**Did the intervention have a comprehensive approach to health promotion addressing all relevant determinants, and using different strategies?**

Yes, the intervention has a multidimensional approach, that it addresses three different health determinants (health literacy, lifestyle factors and resilience and social skills) and is performed in deprived areas (community approach).

**Was an effective partnership in place (e.g. multidisciplinary, inter-sector, multi- and alliances)?**

Prior to the intervention, a multidisciplinary team is formed (from sports, welfare and the municipality). For more details on this team, please see the question on the implementation of the programme.
Was the intervention aligned with a policy plan at the local, national, institutional and international level?

National level: The Dutch Policy programme “Sport and Physical Activity close to home” aims to make it easier for people to adapt an active and healthy lifestyle, by providing sport facilities close to home. Sport Impuls grants are specified to set up activity programmes for sedentary or low participation groups. The only aim is that they should work together with local neighbourhood partners. Two years after implementation, the activity should continue without government funding.

Local level: Dutch municipalities have their own health policies in place. These health policies may focus on elderly, low SES groups or on subjects with health inequalities. Most likely, the intervention will be implemented in municipalities that focus on those high-risk groups.

Was the intervention implemented equitably, i.e. proportional to needs?

Specific attention was paid to include a vulnerable group of elderly (lonely, sedentary low-SES elderly) in the recruitment phase. Elderly wanting to participate but not meeting the inclusion criteria (e.g. physically active) were referred to other interventions. A needs assessment was carried out to identify the needs of the target population.

Were potential burdens, including harm, of the intervention for the target population addressed?

A protocol was developed at the physical performance test that when a subject had a score above a certain limit, they were referred to a doctor. Certain subjects had to get permission of their GP or physician to participate in the project. The procedure was explained to the potential participants prior to the test.

Were the intervention’s objectives and strategy transparent to the target population and stakeholders involved?

An evaluation of three pilot projects showed that the intervention matched the needs of the elderly with a low socio-economic status. The intervention has been implemented by several municipalities, thereby meeting the needs of the stakeholders. All regional sport organizations have adopted the intervention and have decided to implement the intervention in their region. It is anticipated that from 2016 20 projects will be implemented each year.

Did the evaluation results achieve the stated goals and objectives?

At the moment, the effectiveness of the intervention is evaluated in 2 pilot studies, 16 months and 9 months after the intervention. The following conclusions were drawn:

1. 25% of the initial target population was reached;
2. Participation in the project resulted in an increased fitness, increased self-efficacy and improved social skills for social networking (not quantified).

A process evaluation showed that the project met the need and living situation of elderly with a low-socio-economic status.

Did the intervention a defined and appropriate evaluation framework assessing structure, processes and outcomes?

The outcome of the intervention will be evaluated by an effect evaluation, results are expected in 2015. Effects of the pilot study show effects on the outcome measures. This outcome has been evaluated by a pre-experimental design, without control group. For more information on the outcome measures, please go to other questions on evaluation.
The process of the pilot study has been evaluated. In this process evaluation, the reach, success factors, evaluation of participants, trainers and coordinators are evaluated. In addition, points for improvements have been formulated and have been taken in account during the development and implementation of the intervention.

**Did the intervention have any information /monitoring systems in place to regularly deliver data aligned with evaluation and reporting needs?**

Quality control is conducted by the owner of the intervention (GALM), and focusses on the following aspects:
- Screening of locally executed projects, implementation of the trainers, execution of the programme according to the protocols and modules
- Make use of the fitness protocol and evaluation of the effects on fitness by comparing pre and post intervention measures
- Evaluation of experiences of participants per intervention, trainers and municipalities and other institutions
- Evaluation of effects

**Who did the evaluation?**

An internal party (representatives of the intervention, own organisation): GALM

**Specifically, what has been measured / evaluated?**

Process evaluation (respondents, method, participants satisfaction): In the process evaluation the focus was on the reach, success factors, evaluation of participants, trainers and coordinators are evaluated. In addition, points for improvements have been formulated. Results were based on interviews with the target group and intermediate groups. There were three pilots (N=19, N=30 and N=104) Findings are:
- new people are found (not known by welfare organizations)
- people are more assertive
- less depressed
- people have fun and the social aspects of the intervention are appreciated
- more positive thinking

Evaluation of the impacts/effects/outcome (please describe the design): A scientific research study was developed to assess the effect of the intervention on physical fitness, resilience, social skills and social networking and quality of life. The outcome of the evaluation of an RCT is expected in 2015.

In the pilot phase, the effect of the intervention has been evaluated using a pre-experimental design. The physical functioning was measured with two validated and standardized performance-based tests:
1. *Leg strength* was assessed using the 30-second Sit-To-Stand test the number of complete sit-to-stand tests in 30 seconds without using arms was counted
2. *Aerobic endurance* was assessed by using the Two Minute Step Test. During this test, the participant marched in place for 2 minutes while lifting the knees. The total number of times the knee was lifted was counted.

Resilience was measure using the GARI tool. This tool was specifically developed for the intervention (van Abbema et al, 2015). Social Networking was assessed using the Lubben Social Network Scale, which is a 6-item scale where higher scores indicate a more extensive social network.

**What are the main results/conclusions/recommendations from the evaluation?**

At the moment, the effectiveness of the intervention has been evaluated in 2 pilot studies, 16 months and 9 months after the intervention. The following conclusions were drawn.
- 25% of the initial target population was reached
2) Participation in the intervention resulted in an increased fitness, increased self-efficacy and improved skills for social networking.

Is the evaluation report available, preferably in English or at least an English summary?

A PhD student (2011-2014) will evaluate the implementation of Sociaal Vitaal. Results will be published soon.

Was there a follow-up or is any follow-up evaluation planned in the future?

A PhD student will evaluate the implementation of Sociaal Vitaal from 2011-2014. This is done by a randomized-controlled trial.

Who implemented the intervention?

Stichting GALM is the owner of the intervention and takes care for national implementation. To implement Sociaal Vitaal, a local project group will be formed, in which the local municipality (policy, financial support, supply of addresses), local social welfare council (volunteers, implementation and coordination of intervention), local physiotherapists (implementation of physical activity training in neighbourhood), residence association (implementation in neighbourhood) and, if needed local mental health care services are represented.

The volunteers recruit potential participants by home visits after providing information on the importance of the program and the procedure of the intervention. The regional Sport Organization recruits the trainers of the Sociaal Vitaal groups and trains the volunteers, is responsible for the recruitment of participants, execution of the fitness tests, and coordinates the preparation and implementation of the project. Stichting GALM supports the project by providing the protocols, organizing the training for the trainers and promote the self-management training for the groups. They are also responsible for the monitoring of the progress of the intervention. The exercise component of the intervention will be executed by specifically trained and certified teachers. Stichting GALM coordinates the training of the practitioners (mostly physiotherapists). Health promotion activities will be carried out by physiotherapists, the general practitioner, the pharmacist, the dietician, the notary or a civil servant of the municipality. The intervention will be carried out in a community centre in the neighbourhood.

What core activities are/have been implemented?

The total duration of the intervention is 38 months, and consists of three phases.
- The preparation phase is 5 months, the implementation phase takes 9 months and the continuation phase is 24 months.

Preparation phase:
- Creating of support for the intervention and forming a working group of all collaborating partners
- Selection of eligible neighbourhoods
- Recruitment and training of volunteers for the home-visits and the fitness test (preferably other elderly).

Protocols are available that describe 1) the profile of the volunteer; 2) training for the fitness test and 3) a protocol to conduct the fitness test.
- Preparation of a protocol of the project, containing a time schedule, work division and a budget

Implementation phase:
- Recruitment of participants
- Conducting a fitness test (sit-to-stand test, aerobic endurance and grip test), measuring blood pressure and BMI, as well as a questionnaire on loneliness, resilience and income

Implementation of the ‘Sociaal Vitaal’ intervention:
- Multifaceted exercise class, resilience training and social skills training and certain health promotion classes on diet, smoking, physical activity, alcohol use and overweight. The exercise class is the basis of the intervention. The resilience training and social skills training are based on physical exercises, thereby adapted the intervention to the experience of the target population.
The project is executed weekly (with holiday breaks). In total, 43 training classes are provided. Every other week the exercise class is combined with the resilience training (2 blocks of 6 classes) and the social skills training (4 classes).

Monitoring of the project takes place by questionnaires and execution of fitness tests, prior and after termination of the intervention.

**Continuation phase:**
The continuation phase lasts 24 months. During this phase, the groups are assisted to sustain their activities. Furthermore, a self-management training is provided aiming to 1) create social cohesion among the participations; 2) to learn skills to implement physical activity and social skills as daily routines 3) to teach resilience training and practice with goal setting to improve healthy ageing and 4) stimulate groups to be active in their own neighbourhood.

This self-management training will be taught 4 times (half yearly).

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**Was the intervention designed and implemented in consultation with the target population?**

Prior to the development of the intervention, a needs assessment was performed among elderly with a low socio-economic status. It was concluded that elderly needed support to improve their healthy lifestyle. Furthermore, it was concluded that elderly needed support to improve the assertiveness and learn to maintain friendships.

**Did the intervention achieve meaningful participation among the intended target population?**

Evaluation have shown that the positive response rate is 6% (60 people of 1000 invited to participate). Half of subjects with a positive response will meet the inclusion criteria.

**Did the intervention develop strengths, resources and autonomy in the target population?**

Process evaluation showed that the intervention increased the self-efficacy among the participants.

**Was the target population/s defined on the basis of needs assessment including strengths and other characteristics?**

A needs assessment was performed among the target population. The target population was identified based on the conceptual model.

**Was the engagement of intermediaries/multipliers used to promote the meaningful participation of the target population?**

Volunteers were engaged to recruit the participants. The volunteers came from the same neighbourhood and were also older adults (peer group approach).

**Is the continuation of the intervention ensured through institutional ownership that guarantees funding and human resources and/or mainstreamed?**

The intervention owner is GALM. They maintain and update the protocols of the intervention. However, the first year of the funding is under responsibility of local municipalities. There are many funding sources that local governments can use for funding (e.g. Sport Impuls). The second and third year of the intervention are considered a transition phase, in which the participants will be taught to be an independent group. They will be supported to find additional funding (e.g. organizing fairs). After three years, they should be independent.

**Is there a broad support for the intervention amongst those who implement it?**
The intervention is currently implemented in many municipalities. The process evaluation showed that health workers could reach new participants that were not known prior to the intervention, due to the innovative and active way of recruitment the participants. All the regional sport organizations have adopted this intervention and are planning to implement it in the municipalities of their region.

**Is there a broad support for the intervention amongst the intended target populations?**

A needs assessment was carried out, and the process evaluation showed that participants enjoyed the intervention.

**Did the intervention include an adequate estimation of the human resources, material and budget requirements in clear relation with committed tasks?**

A worksheet is available with the hours needed, specified per each phase of the intervention and for each activity. There is also an estimation of the required budget available.

**Were sources of funding specified in regards to stability and commitment?**

No, sources of funding were only specified for the implementation of the intervention.

**Were organisational structures clearly defined and described?**

Please see the organization structure described above.

**Are there specific knowledge transfer strategies in place (evidence into practice)?**

The intervention is currently evaluated by a PhD student. The intervention is assessed as theoretically sound and included as best practice in the database of the Centre for Healthy Living in the Netherlands. In addition, the intervention is part of the Sport Impuls (see above). Municipalities can apply for a grant to implement the intervention. Therefore, it is expected that this intervention will be implemented on a broader scale.

**Is there available an analysis of requirements for eventual scaling up such as foreseen barriers and facilitators?**

Foreseen barriers are infrastructure that is needed, and the education and training of the practitioners. However, there are activities to provide a training at vocational education. Money to implement the intervention is also a barrier. However, for the next two years, every municipality can apply for the implementation of this intervention in their deprived areas because of Sport Impulse. However, facilitators are that there is an increasing group of subjects that meet the inclusion criteria for the intervention.

**What were, in your opinion, the pre-conditions for success? Were there any facilitating factors?**

The process evaluation identified several success factors for the intervention:
- Municipality with sufficient support and budget to implement Sociaal Vitaal;
- A consultant that supports the municipality with the development and implementation of Sociaal Vitaal;
- Trained staff, such as volunteers, and physiotherapists
- Availability of health promoters/GP, dieticians etc.
- An appropriate inside training facility

**What were, in your opinion, the main lessons to be learned?**
- Deviation of the protocol, especially during recruitment, will lead to the inclusion of the wrong target population.
- Counselling and teaching frail elderly with a low socio-economic status requires specific skills of the trainers (empathy and patience), and thus supervision of the trainers is important for the success of the intervention.
- Another intervention should be tailored to low SES elderly that are not fluent in Dutch. In practice, it appeared that many potential candidates could not participate because they could not speak Dutch.

Other relevant documents:

At the moment, training material is only available in Dutch.


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