A tailored skills training programme for professionals in primary health care to increase prescriptions of physical activity on prescription, FaR®

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ABSTRACT

Aim: The aim of this study was to evaluate and study the effects of a tailored behavioural skills intervention on the amount of FaR® prescribed, and to describe self-efficacy over time for prescribing FaR® in participants from primary health care units.

Method: A quasi-experimental single-case design with multiple–baseline across time and settings was used. Each baseline had an ABC design, baseline (A), intervention (B) and post-intervention (C). The intervention was introduced across two different PHCUs at different times. It was seven participants included. Primary outcome measurements were repeatedly collected for participants in settings. The method was based on behavioural medicine principles. Key concepts from SCT theory was used in the intervention.

Result: The result seemed to demonstrate an effect on the prescribing behaviour in terms of a slightly increased amount of prescribed FaR® during the intervention phase, even though not for all participants. It was no or short latency for the changed behaviour during intervention. Adopted behaviour was not maintained in the post-intervention phase. Self-efficacy for prescribing FaR® varied. The variation of overall self-efficacy between baseline and post-intervention was from -10% to 81%.

Conclusion: This study indicated that a tailored skills training programme might have the potential to change the prescribing behaviour among professionals in primary health care. An intervention lasting for eleven weeks seemed not enough to maintain the achieved performance. No conclusion could be done on self-efficacy.

Keywords: Quasi-experimental single-case design, physical activity on prescription FaR®, behavioural medicine, implementation, primary care.
SAMMANFATTNING

**Syfte:** Syftet med studien var att studera effekten av ett skräddarsytt beteendestöd för förskrivning av fysisk aktivitet på recept, FaR® på personal i primärvård och att beskriva tilltro till egen förskrivnings förmåga.

**Metod:** En single-case desing med flera baslinjer över tid och över plats/enhet användes. Varje baslinje innehöll tre faser; baslinje, interventionsfas och fas efter intervention. Interventionsfasen introducerades till enheterna med tidsförskjutning. Huvudutfall mättes regelbundet och kontinuerligt för samtliga deltagare under hela studiens gång. Interventionen baserades på beteendemedicinska principer.

**Resultat:** Resultatet verkar visa att interventionen hade viss effekt på förskrivning av FaR® under interventionsfasen. Förändringen är liten och den sker inte hos alla deltagare. Beteendeförändringen kom i interventionsfasen med kort eller ingen fördjupning. I fas efter interventionen bibehölls inte förändringen av förskrivningsbeteendet. Tilltro till egen förmåga att förskriva FaR® varierade från baslinjemätning till mätningen i fas efter utbildning. Skillnad i tilltro till egen förskrivningsförmåga varierade från -10% till 81%.

**Slutsats:** Ett skräddarsytt beteendestöd för förskrivning av FaR® på personal i primärvård kan ha effekt på förskrivning av FaR®. Interventionen som varade under elva veckor var dock inte tillräcklig för att vidmakthålla förändringen av förskrivningen. Ingen slutsats kunde göras på tilltro till egen förskrivningsförmåga.

**Nyckelord:** Quasi-experimentel single-case design, fysisk aktivitet på recept (FaR®), beteende medicin, implementering, primär vård.
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<td>FaR®</td>
<td>Physical activity on prescription</td>
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<td>MBD</td>
<td>Multipel Baseline Design</td>
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<td>PA</td>
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<td>PHCU</td>
<td>Primary Health Care Unit</td>
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BACKGROUND

Physical inactivity is one of the leading global causes for mortality in the world today. Mortality due to a sedentary lifestyle is equal the mortality due to high blood pressure (WHO 2009). A sedentary lifestyle contributes to chronic diseases and is a dangerous modern health threat. As new evidence about the importance of an active lifestyle comes forward it is equally important to health care professionals to change their behaviour and clinical practice so that patients are treated and supported in the best possible way (Guldbrandsson 2007). Difficulties arise when introducing evidence and clinical guidelines into routine daily practice (Grol & Grimshaw 2003). To adopt new guidelines different types of interventions can be used (Bero et al 1998, Eccles et al 2006, Grol & Grimshaw 2003). To change the behaviour of health care providers, the science of guideline implementation needs to be better understood (Gross et al 2001).

Lifestyle, risks and health promotion

Populations have become less and less physically active which has well-documented negative consequences for health and well-being (WHO 2002). This sedentary lifestyle is estimated to cause 1.9 million deaths globally. Cardiovascular diseases, overweight/obesity, diabetes type II, cancer, dementia and depression are linked to physical inactivity. The industrial and social development has moved the physical activity from the workday to leisure time (Schäfer et al 2006). In Sweden one third of the population is not enough physically active to reach current recommendations (Socialstyrelsen 2009). In another Swedish report from 2006, just about 50% of the women reported that they were physically active at least twice a week, less than 50% of the men reported they were physically active twice a week or more (SCB, ULF). A sedentary lifestyle increases the risk for premature morbidity and mortality while a physically active life promotes both physical and mental health, increases quality of life and well-being and functional independence (Foster et al 2009, Orsini et al 2009, Pedersen & Saltin 2006).

Physical activity (PA) is health promoting and has the property of preventing diseases. Health care service has an important role in the challenge to promote physical activity and to decrease physical inactivity, and an especially important role in reaching elderly, individuals on sick-leave and last but not the least in getting contact with the socio-economically disadvantaged (Kallings 2008, Kallings & Leijon 2003). Professionals in the health care system are credible sources of health information and patients expect health counselling during visit (Leijon et al 2010).
Physical activity

Definition of PA is: “any bodily movement produced by the contraction of skeletal muscle that increase energy expenditure above basal level”. This is a broad definition and can include all kinds of PA and it can be categorized into occupational, sports, household or other activities (Caspersen et al 1985). PA can provide physical and mental health benefits (Orsini et al 2009, Pedersen & Saltin 2006). It is one important determinant for public health. Evidence for the benefits of regular PA has developed well over the last 50 years. PA has well-established effects on a number of diseases such as: preventing development of hypertension and lower blood pressure (Ketelhut et al 2004, Pescatello et al 2004). Reduction in coronary heart disease, including angina pectoris myocardial infarction, revascularization, stroke and coronary death (Lee et al 2000, Manson et al 2002, Sesso et al 2000). Preventing the metabolic syndrome and type 2 diabetes (Lakka & Laaksonen 2007, Sigal et al 2007, Tuomilehto et al 2001). Reduce concurrent depression in depressed patients (Harris et al 2006). Delay onset of dementia and Alzheimer disease (Larson et al 2006) and reduced incidence of breast cancer among postmenopausal women (Sesso et al 1998).

Recommendations for physical activity

The recommendations for PA are: all individuals need to be physical active at a moderate level, for at least 30 minutes per day, five days a week (Haskell et al 2007, Kallings & Leijon 2003). If the amount of time is increased or the intensity is higher can further health benefits be achieved (Jansson & Anderssen 2008). To maintain or increase muscular strength a minimum of two days of exercise per week is needed. For elderly it is also important to add practice for better balance (Haskell et al 2007).

Promotion of physical activity

Strategies as physical activity on prescription to promote PA are used in many countries (Aittasalo M et al 2006, Croteau K et al 2006, Engedahl et al 2008, Kallings & Leijon 2003). In Sweden the method is called Fysisk aktivitet på recept (FaR®). In year 2001 was a national programme conducted, “Sweden on the move”. The National Institute of Public Health got a task to sort out how to promote health and how to enhance physical activity in the Swedish population (Kallings & Leijon 2003). A pilot study was conducted in the health care system. The overall goals in the area of healthcare system were to make healthcare professionals more aware of the preventive effects of PA. The study lasted for one year and included ten primary care- and three occupational healthcare units. Focus was on FaR® as a working method and
the implementations process. There was on the whole a positive response about prescribing FaR® both from healthcare professionals and from sport- and recreational organizations. Identified supporting factors and barriers from the study is presented in, table 1.

Table 1 Supporting factors and barriers from the pilot study (Kallings & Leijon 2003)

<table>
<thead>
<tr>
<th>Supporting factors</th>
<th>Barriers</th>
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<td>A community based network between hospital, primary health care units, sport organizations and recreational areas. To have a coordinator who works within each unit and also have the support of the management. To have a visible structure within the organization and among stakeholders outside the clinic.</td>
<td>Lack of time.</td>
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<td>Staff turnover.</td>
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<td>Too many projects running at the same time.</td>
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<td>Insufficient communication within the own organization and among stakeholders outside the clinic.</td>
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<td>Changing behaviour takes time.</td>
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Physical activity on prescription, FaR®

FaR® is one possible method to promote PA that can be used in health care service and in corporation with volunteer and sport organizations (Kallings & Leijon 2003). The goal is to improve the possibilities for a patient to become physically active (or more active) and to be able to maintain the activity on a regular base on his or her own. It is important from a public health view to integrate health promotion and sickness preventions in the health and medical service (Prop 2007/08:110). The prescribed PA needs to be individually tailored on terms of dosage (intensity, duration and frequency) and type of activity, figure 1 (Faskunger et al 2007). The receipt can be a simple suggestion of an activity or a more complex solution with support from the prescriber, activity organizer/organization or a supportive structure which helps the patient to effectuate its recipes. Prescribed PA can be used both in prevention and treatment purposes and it is a complement to or reimbursement of medicines. Follow-up of a FaR® should be done in same matters as all other medical treatments. The prescriber have the medical responsibility and shall document the prescription in the patient’s record. The prescriber of the prescription for PA should have sufficient qualification and adequate knowledge of the patient’s current health status. The prescription can be carried out by any licensed professional group in the Swedish medical system.
Figure 1. The prescription used in Uppsala primary health care, from Cosmic. Diagnos and/or reason for prescribing, activity, dose, and if the patient agree on contact with the “lots”. The name of the patient, the prescriber and the date. At the bottom is it a diary for the patient.

Evidence for physical activity on prescription

A number of studies have shown that physical activity on prescription increase PA (Aittasalo et al 2006, Duncan et al 2005, Heath and Stuart 2002, Lawton et al 2008, Elley et al 2003). Improvements in PA can be achieved and maintained over 24 months via prescription on exercise (Duncan et al 2005, Lawton et al 2009) which is confirmed in a review (Sorensen et al 2006). Also for elderly it is useful to prescribe exercise (Heath & Stuart 2002). A Cochrane review suggests that advice and guidance from primary care health giver with continued support can encourage people to become more physically active (Foster et al 2009). A Swedish study shows that FaR® increased PA level three times more than in a control group and adherence to the prescription is as god as to other treatments of chronic diseases (Kallings...
FaR® is a method that can be used in the Swedish health care system to promote patients to get more physically active (Leijon et al 2010).

The County Council of Uppsala

The county council of Uppsala ran a project during three years, 2004-2008. The aim was to develop an own model for the FaR® method and to implement it in the primary health care (Holmbäck 2007, Anér 2008). A model for defining groups of patients based on degree of illness and degree of motivation and confidence in own ability in terms of PA was one result. Another result was the description of the recommended guidance to support patients to get more physically active. Informative material for both patients and professionals were produced. All professionals were offered an educational day. To create a link between the medical care service and health promotion organisations in Uppsala the Friskvårdslotsprojektet was conducted 2005-2008 (Käll, 2008). An individual who are prescribed a FaR® can either carry out the activity on his/her own and if he/she needs support to get started the recipe can be sent to the Friskvårdslotsen. The person himself/herself takes contact with the “Friskvårdslots” by phone and by using 3-4 telephone contacts the individual will be guided and supported into an activity. At the end of contact the “Friskvårdslots” reports back both the process and the result to the health care professional who prescribed the FaR®. The “Friskvårdslots” is now established in Uppsala County and supporting patients who get a FaR®. In an evaluation of the “Friskvårdslots” project (Holmbäck 2007) it is demonstrated that not all of the patients who would make a profit on a FaR® do get that possibility. If 1-2 % of all prescribed prescriptions were a FaR® Uppsala would achieve around 4500 prescriptions a year. That is ten times more compared to what is actually produced. The primary health care is to use a systematic way of work orienting towards health promoting among the residents. It should generate and advance interventions aiming to achieve improved or maintain health, remain functionality or improved circumstances of life for the population in Uppsala County (Landstinget Uppsala län, vårdavtal 2009).

How to turn research into practice- implementation

Today’s’ health care is more designed to provide acute care, than it is to satisfy the requirement of care for the chronically ill (Gross et al 2001). It is concentrated towards treatment of symptoms and reliance on laboratory investigations, prescriptions and brief patient education. Chronic illness and preventive health service require interactions between caregivers and patients with an attention to preventive guidelines and behavioural support of
the patient’s role as self-manager are important. Research and health service continue to produce findings that might lead to better and more effective patient care, however difficulties arise in introducing the research findings into routine daily practice (Bero et al 1998, Eccles et al 2005, Godin et al 2008, Grol & Grimshaw 2003). Even though the evidence of lowering the risks for non communicable diseases by increasing the level of PA is it viscous for the method FaR® to be taken for granted (Guldbrandson 2007). To implement FaR® into the Swedish health- and medical service implies a change in behaviour among health care professionals. Different types of interventions can be used to promote the implementation, and no one is the gold-standard. In two systematic reviews the results showed that interventions targeted at specific obstacles to change seem to be effective as well as to use multifaceted interventions (Bero et al 1998, Grol & Grimshaw 2003). Another systematic review showed that there seems to be a relationship between the intentions of a health care professional and their later behaviour (Eccles et al 2006). To adopt new guidelines health care professionals need to be motivated to change their behaviour and they might need to have their own experience and to reflect on own solutions and discuss difficulties with colleagues (Grol & Grimshaw 2003).

Barriers and facilitators to new behaviour

Studies have identified both internal and external barriers to successful use of guidelines (Cabana et al 1999, Haagen et al 2005). Lack of familiarity, lack of agreement, lack of self-efficacy and lack of outcome expectancy were identified but not for every guideline. Lacking educational materials and not enough specific training are reported as hinder for advising PA among practice nurses and health visitors (Douglas et al 2006). The presence of a barrier to adherence is based on the respondent’s perception of the barrier, which may not reflect how problematic a barrier is (Cabana et al 1999). These barriers may require tailored interventions with skills training, practice audit, feedback by peers or from population-level successes. In a systematic review, Godin et al (2008) examined the application of different social cognitive theories for the study of clinical related behaviours of health professionals, which is important in identifying variables explaining intention in clinical related behaviour. Individual decisions are central in adoption of clinical behaviour and more need to be known about the mechanism underlying these behaviours. A lot of factors influencing health care professionals’ clinical practice, e. i. individual motivation, predispositions to change, economic- and organizational context. It is possible to change clinical behaviour but it generally requires comprehensive approaches at different levels, tailored to specific settings and targeted groups (Grol & Grimshaw 2003). To produce change in specified clinical behaviour among physiotherapists
is it suggested the interventions based on social cognitive theory are effective (Demmelmaier 2010).

Theoretical perspective on behaviour

Social Cognitive Theory (SCT) provides a framework for understanding factors that influence human behaviour and the process through which learning a new behaviour occurs. The theory also provides a frame for intervention strategies (McAlister et al 2008). The theory explains how people acquire and maintain behavioural patterns. In the SCT Bandura defines human behaviour as a dynamic and reciprocal interaction of behaviour, cognition, personal- and environmental factors. They all operate as interacting determinants that influence each other. Those are the core assumptions and a change in one of the components has implications for the others (McAlister et al 2008, Bandura 1998, 2004). People are agents of experience and the physiological systems are tools they use to accomplish tasks and goals that give meaning and satisfaction to their lives (Bandura 2001). A person intentionally makes things happen by her or his actions. The environment shapes an individual’s behaviour and at the same time has a person the ability to influence its environment to suit purposes he or her devise. Cognitive factors as self-regulation and self-efficacy play an important role in predicting human behaviour and outcome (McAlister et al 2008, Bandura 1998, 2004). Self-regulation can be achieved through self-monitoring, goal-setting and feed-back. Self-efficacy consists of a person’s beliefs of her capacity to perform certain behaviour. Self-efficacy can be developed through mastery experience, by social models, social persuasion and by improving physical and emotional states. The mastery experience includes knowledge and training of skills. The SCT stresses the importance of peoples’ beliefs about their capability to perform a behaviour that leads to a desired outcome i.e. self-efficacy.

Single subject experimental design

In experimental group experiments the comparisons are made between groups which are treated in different ways (Zhan & Ottenbacher 2001). The result is based on a sample of many subjects. In clinical research it can be difficult to obtain large homogenous samples why single-case design has gained ground. Key characteristic for single-case designs are; continuous assessment, baseline assessment, stability of performance and use of different phases (Kazdin 2003, Backman et al 1997).

- Continuous assessment, Outcome data is assessed or observed for all subjects continuously, daily or weekly ahead of intervention, during intervention and post-
intervention. This is to provide information on which data evaluation and intervention phases depend.

- **Baseline assessment** is done during the time before the intervention phase. Current level of performance and what outcome data is likely to be predicted in the nearest future, without an intervention. It is important to have an idea of how performance is likely to be in the future without the intervention to be able to determine whether the intervention have had any effect on performance.

- **Stability of performance** is when there is little variability over time in outcome performance. With a stable baseline is the pattern of future behaviour rather clear, small fluctuations are accepted. A slope or trend can also show stability, with no or small variations/fluctuations.

- **Phases** are different periods of time, can be days, weeks in which data are collected. To test whether the behaviour continues or changes, when transferring into a different phase.

Single case research comprehends different designs (Kazdin 2003, Sim 1995). They have at least two phases, one baseline phase and an interventions phase, called AB design. ABA design is called withdrawal design, includes a baseline, intervention phase and then back to baseline. Multiple baseline design (MBD) is an extension from the classical baseline and intervention phases (Backman et al 1997). The MBD is appropriate to use when withdrawal of the intervention would not result in the outcome behaviour returning to baseline levels. It should be at least two baselines included in MBD (Kazdin 2003). In the MBDs are baselines turned into intervention phase at different points of time (Backman et al 1997, Kazdin 2003, Sim 1995). The change in performance should occur with no or short latency when the intervention is introduced, in sequence to each baseline. If changes in the outcome variable occur along with the transitions between different phases, it is inferred that this is a result of changes of an intervention. Comparison is made within the subject between the different phases and evaluation is made across different baselines. By varying the baseline phase’s length across subjects or units is it possible to control for threats to internal validity. The experimental nature is shown by the controlled way in which independent variables is implemented and the dependent variable(s) are measured. The design compares performance within a subject or a small group. To be able to generalise results from a single-case design, the result must be replicated in another single-case design or in a controlled randomized trial (Ottenbacher 1990). A case can be a subject or a group. Few subjects and many assessments
stand in for many subjects and few assessments. The subject or the group serves as her or his or their own control. Data from single-case studies are usually visually analyzed without relying on statistical tests (Backman et al 1997, Kazdin 2003, Tankersley et al 2006, Zahn & Ottenbacher 2001). Data are graphically presented and the graph shows the pattern of the targeted behaviour during the different phases. If the intervention changes the pattern of data an inference of the interventions’ effect can be done. Change in trend (slope) and latency of change are two of the characteristics used when analysing data. Single-case studies can evaluate the effects of an intervention and are well suited to choose when a program needs to be developed or implemented in the health care system.

Problem formulating

Physical inactivity is a leading global risk for mortality in the world today (WHO 2009, WHO 2002). Almost half of the Swedish adult population does not reach the recommendations of PA (Folkhälsorapport 2009, SCB: ULF). PA can reduce risk for chronic diseases and can provide physical and mental benefits (Orsinin et al 2009, Pedersen & Saltin 2006). FaR® is an effective method to increase the PA (Kallings & Leijon 2003). Studies in Uppsala show that FaR® is used, but not as much as it could be. FaR® can to a higher degree be implemented in the daily work among health care professionals (Holmbäck 2007). Incorporating the method in health care service means that professionals need to change their behaviour. For changing behaviour is distributed educational material usually not enough. By combining education with practical training and feedback can a new method better be implemented in a clinical setting and become a natural part of everyday work (Bero et al 1998, Demmelmaier 2010, Grol & Grimshaw 2003). No studies had been done to evaluate if a tailored skills training programme based on SCT principles for professionals in primary health care could increase prescriptions of FaR®.

Aim

The aim of this study was to evaluate and study the effects of a tailored skills training programme on the amount of FaR® prescribed, and to describe self-efficacy over time for prescribing FaR® in participating individuals from primary health care units (PHCU).
METHOD

Design
A quasi-experimental single-case design with multiple–baseline across time and settings was used (Kazdin 2003). Each baseline had an ABC design, baseline (A), intervention (B) and post-intervention (C). The intervention was introduced across two different PHCUs at different times. The performance of participants was then evaluated over time. The participants were not exposed to any part of the intervention during baseline. Primary outcome measurements were repeatedly collected for participants in both settings with the beginning in week 38, 2010. The intervention was first introduced to the first PHCU, called A, (PHCU A) and then a week later it was introduced to the second PHCU, called PHCU B.

Phases: The baseline lasted for eight weeks (week 38-45) for PHCU A and for nine weeks (week 38-46) for PHCU B. The intervention period lasted for 11 weeks (v. 46, 2010-v.4 2011, or v.47, 2010-v5, 2011), and the post-intervention phase lasted for seven/eight weeks after finishing the intervention.

Selection of participants
The study was conducted in primary health care in Uppsala County. Altogether were 28 PHCUs eligible, all using the medical journal system Cosmic. All primary health nurses, health visitors/district nurses and physiotherapists at respective PHCU were invited to take part in the intervention, after their executive agreed on taking part in the study. Primary care physicians were excluded as per contract with the public health unit. It was a convenient sample both for the PHCUs and the individual participators. As a MBD needs to have at least two baselines was the intention to recruit three PHCUs and three to five health care professionals at each unit. At the start of the intervention three PHCUs took part. However, just before the second session one unit decided not to take part in the study. They did not have enough time to take part. The intervention was therefore completed with two units.

Procedures
The public health unit and the Primary Care Manager gave their permission to carry out the intervention. An invitation letter, appendix 1 was sent to the executives at all PHCUs. Some of the executives were responsible for more than one PHCU, which meant they got more than one invitation. Information about the study’s aim, the intervention, how many participants at the unit needed, how much time would be spent and contact data to the author and the supervisor was also included in the invitation, appendix 2. Two weeks after the letter was
sent, the author contacted the executives at the PHCUs to hear if they were willing to take part in the study. Two of the executives agreed immediately to take part and one executive wanted to think for a week before a response could be given. The executives, asked the employees to participate in the intervention and in the study.

**Participants**

The PHCU A was situated in the city of Uppsala, manned with physicians, nurses, physiotherapists, midwives, laboratory personnel, health visitors/district nurses and psychologists. PHCU B was situated in the countryside and manned with same kind of professionals. Participators are named with a number and the letter belonging to the unit were they were employed. At both PHCUs all participants were female. The descriptive data of participants were collected with a specific questionnaire, appendix 3.

**Participant A: 1**

The first participant at the PHCU A was a 39 years old physiotherapist, with 5 years’ experience of working in primary care. In the assessment she agreed fairly well that physical activity has implications for health and well-being. Almost always she raised PA with her patients and gave advice. Her ability to motivate her patients to PA was pretty good and her attitude to FaR® was fairly positive. She had taken part in the primary health care’s educational day about FaR®. Her PA was less than two hours a week and she was not prescribing FaR® frequently. On a 0-10 scale she put down 4, to answer the question how strong is your willingness to prescribe FaR® or to prescribe more FaR®, zero, 0 is weak and ten, 10 is very strong.

**Participant A: 2**

The second participant was a 57 years’ old physiotherapist. She had been working in primary care for 35 years. She agreed that it is well know physical activity has implications for with health and well-being. Almost always she was discussing PA and recommending it. Her abilities to motivate her patients were pretty good and her attitude to FaR® was very positive. Education about FaR® was the primary health care’s education day. Her PA was at least two hours a week. She was frequently prescribing FaR®. On a 0-10 scale she put down 5.
Participant A: 3

The third participant was 49 years old nurse. She had been working as a nurse for 25 years. Her further education was a nursing instructor and in management and organisation. She agreed that it is well known that PA has implications for health and well-being. She was raising the subject of PA with patients with diagnoses as diabetes type2, overweight and high blood pressure. She gave advice about PA to patients with fatigue and discomfort from muscles and joints (musculoskeletal system). Her attitude to FaR® as a working tool was fairly positive and she also thought her possibilities to motivate her patients to physical activity were pretty good. She had no education in FaR®. Her PA was 1-2 times a week. She was not regularly prescribing FaR®. On the 0-10 scale she put down a five, 5.

Participant A: 4

The fourth participant was a 65 years old health visitor, who had been working for 40 years in primary health care. She agreed well that PA comes into well-being and health. Often, not always, she brought up the subject PA and recommended it to her patients. Her ability to motivate the patients to be physically active was pretty good and her attitude to FaR® as a method within health-care working was very positive. She had taken part in the primary care’s FaR® education day. Data from this participant is missing, due to an uncompleted questionnaire: her PA, how often she was prescribing, and her PA and willingness to change prescribing behaviour.

Participant B: 1

The participant was a nurse, 47 years who had been working within primary health care for 12 years. She was further educated in Diabetes care. She agreed well that physical activity has implications for health and well-being. She almost always raised PA with her patients. Often, with some diagnoses she was giving advice about it. She estimated her ability to motivate her patients to be physical active as rather poor. Her attitude to FaR® was neither good nor bad. She had been to the primary health care’s education day. She was not prescribing physical activity on a regular basis. Her own physical activity was at least 30 minutes, one to two times a week. On 0-10 scale she put herself on five, 5.
Participant B: 2

The second participant was a health visitor at 57 years old and with 20 years of experience in primary health care. She agreed well that physical activity count for health and well-being. She was often bringing up physical activity with her patients. She thought she had pretty good potential to motivate her patients to get physical active and her attitude to FaR® was fairly positive. She had no education about FaR®. Her own PA was 1-2 times a week. She was not frequently prescribing PA to her patients. On a 0-10 scale she put down 5.

Participant B: 3

The third participant was a 56 years old nurse. She had taken a course in diabetes health care. Her working experience in primary health care was 29 years. She agreed well that physical activity has implications for health and well-being. Often, she was talking about PA with her patients and giving recommendation and advice to the same. She assessed her possibility to motivate her patients to PA to pretty good and her orientation to FaR® was fairly positive. She knew how to fill in the prescription for physical activity in the Cosmic medical journal system. She had no education about FaR®. At least three times a week she was doing some kind of sports activity. She was not prescribing FaR® on a regular basis. She put an 8 on a 0-10 scale.

Intervention

The intention with the intervention was to provide successful experience to the participants in prescribing physical activity on prescription and thus to support a behaviour change by acquisition of knowledge and skills training. When working to change individual behaviour and also health care professionals’ behaviour theories from health psychology can be used (Eccles et al 2005). SCT (Bandura 1986) was used to organize the strategies for the intervention. Used key concepts from the theory were self-regulation, observational learning and self-efficacy.

Goal-setting, self-monitoring and feed-back were used to promote self-regulation. An individually set goal was daily monitored in a log-book designed for the intervention, appendix 5. In the log-books the participants got the opportunity to put attention on their prescribing behaviour. The monitoring was a possibility to identify barriers to behavioural performance and to plan ways of overcoming those (Abraham & Michie 2008). Identified barriers and facilitators were discussed at sessions.
Observational learning was promoted by listening to others. At the sessions participants were able to expand their knowledge and skills on information from the other participants. Discussions were an opportunity to provide and share good experience.

Self-efficacy: If someone believes he/she can produce a desired effect by his/her action they have incentive to act in face of difficulties. Through group discussions, social models and setting achievable goals the development of the participants’ self-efficacy was promoted. When a goal was achieved the participants were supported to set new with increased difficulty. Mastery experience also includes knowledge which was aimed at the first meeting and by handing out a review and a Swedish summary of it by Pedersen and Saltin (2006). The review is about patient groups who can benefit of PA, “Evidence for prescribing exercise as therapy in chronic disease”.

The intervention comprised three group sessions, and one individual telephone contact. The sessions lasted for 1-1.5 hours and were lead by the author. The telephone contact lasted for half an hour. The intervention took place at the PHCU's in a meeting room. It was not made as a ready package, but tailored to suit the participants and their set goals. The structure and content is presented in table 2.

At sessions the participants were promoted to set at least one goal they were aiming to reach within the time before the next session. The goal was set according to SMART; specific, measureable, accepted and realistic and had a time limit. A diary for self-monitoring during intervention phase was used. The diary was adapted to the individual goal/goals.
Table 2. The intervention’s structure and content.

<table>
<thead>
<tr>
<th>Session</th>
<th>Session length</th>
<th>Phase</th>
<th>Content</th>
<th>Activities between sessions</th>
</tr>
</thead>
</table>
| 1       | 1.5 h          | Knowledge acquisition, goal setting and skills training | Introduction  
Discuss knowledge about FaR and evidence about physical activity | Select a goal for prescribing physical activity on prescription.  
Prescribe FaR according to set goal.  
Keeping a logbook for barriers and facilitators |
| 2       | 1 h            | Skills training  
Progressive goal setting | Feedback by reviewing logbooks. Follow up.  
Identification of facilitators and barriers for prescribing FaR. Individual goal-setting. | Set a goal; prescribe FaR according to set goal(s).  
Keeping a logbook for barriers and facilitators |
| 3       | 20-30 min telephone | Skills training  
Progressive goal setting | Feedback by reviewing logbooks. Follow up.  
Identification of facilitators and barriers for prescribing FaR. Individual goal-setting. | Set a goal; prescribe FaR according to set goal(s).  
Keeping a logbook for barriers and facilitators |
| 4       | 1 h            | Skills training, relapse prevention and progressive goal setting | Feedback by reviewing logbooks.  
Individual plan for relapse prevention.  
Individual goal setting | Set a goal; prescribe FaR according to set goal(s).  
Applicate the individual plan for relapse prevention to maintain prescribing behaviour. |

Primary outcome

The amount of prescribed FaR®. Data on the amount of prescriptions prescribed per participant per week was provided from the IT-department in the primary care in Uppsala County. It was an extraction from the medical journal Cosmic. The extraction included the prescriber, date for prescription, the patients’ sex, age and diagnose. This assessment was reported once a week from v38 2010 to v12 2011. It was a continuous assessment during baseline, intervention and post-intervention.

Secondary outcomes

Self-efficacy for prescribing FaR®. A study specific self-efficacy questionnaire was constructed by the author, appendix 4. The participants’ self-efficacy for prescribing physical activity on prescription to different patient diagnoses, age, sex, situations was assessed with the questionnaire. It consisted of 23 questions. Albert Bandura’s (Bandura, 2006) “Guide for constructing self-efficacy scales” was used to formulate instructions and items. The wording
for the instructions was: “Indicate how confident you are in prescribing physical activity on prescription. Imagine that you are prescribing PA to your next patient. Circle a number between 0 = not confident at all and 10 = very confident”. Answers were given on a 0-10 scale. The questions were pretested for face validity by one nurse and three physiotherapists. Two items were commented as ambiguous and were removed. Self-efficacy was assessed three times, at the end of baseline, at the second session during the intervention, and at the last session.

Data analysis
Data on prescribed FaR® was entered in Excel 2007 and then created into graphs (Dixon et al 2009). The graph was customised to show the different phases. Data on amount of prescribed FaR® was first showed per setting, figure 2 and then analysed per each individual, by using visual analysis. The author analysed data on both amount on prescribed FaR® and self-efficacy. The visual analysis involved judging the extent to which changes in participants’ behaviour responded across design phases (Kazdin 2003, Ottenbacher 1992, Tankersley et al 2006). The visual analysis included baseline, variability, trend and latency of the graphed data. Questions to be answered were:

- Is the baseline stable?
- Is an effect of the intervention demonstrated in the phase? (That is equivalent with a different slope in the graph). In the intervention phase, is there a change, a trend in the graph? If there is a change in the graph, when is the change appearing soon after entering intervention phase, or with latency?

Self-efficacy for prescribing physical activity on prescription was calculated as overall self-efficacy with the total sum. The total score was used to describe development over time. To evaluate changes from baseline to post-intervention was the difference of total sum calculated in percent.

Ethical considerations
The participants received written and oral information about the study and the intervention. They gave their written consent to take part. Participation was entirely voluntary and withdrawal could be made at any time. Confidentiality was insured by de-identifying data. According to Personuppgiftslag (1998:204) PuL 10 §, those who participate needed to agree
on that data on prescribed FaR® could be collected from the IT-department. Collected material was kept locked up.

**RESULTS**
The intervention was completed with two, instead of three PHCUs. At PCHU A four participants took part. Two of them participated at all meetings and at the phone call. One missed the second session and another one could not attend the last meeting. At PCHU B three participants took part. All three participated at all sessions and at the phone call. **Phases:** The baseline lasted for eight weeks (week 38-45) for PHCU A and for nine weeks (week 38-46) for PHCU B. The intervention period lasted for 11 weeks (v. 46, 2010-v.4 2011, or v.47, 2010-v5, 2011), and the post-intervention phase lasted for seven/eight weeks after finishing the intervention.

**Primary outcome amount of prescribed FaR®**
A total sum for prescriptions prescribed at each unit is shown in figure 2. The amount of prescribed physical activity on prescription is displayed in one figure for every participant figure 3-9. The amount of prescribed FaR® is presented with the amount of FaR® per week, during baseline, intervention and post-intervention.
Figure 2. Number of prescribed FaR at PHCU A and B. During baseline, intervention and post-intervention. The study’s MBD across time and setting is illustrated in the figure.
Participant A: 1

Visual inspection of prescribed FaR® during baseline was based on ten weeks and suggested no trend, but variation. During intervention the behaviour for prescribing was fluctuating and got to a higher level, a positive trend. It was some latency in the behaviour. Post-intervention suggested same trend as in baseline.

Figure 3 Participant A: 1. Number of prescribed FaR®.

Participant A: 2

Visual inspection of prescribed FaR® during baseline was based on ten weeks and showed no trend. During intervention there was no trend of changed behaviour for prescribing physical activity on prescription. Post-intervention was at the same level.

Figure 4. Participant A: 2. Number of prescribed FaR®.
Participant: A 3

Visual inspection of prescribed FaR® during baseline was based on ten weeks and shows no trend. A positive trend during the intervention phase indicated an increased prescribing behaviour. The change came with short latency. At post-intervention the behaviour turned back to baseline level.

![Participant A: 3. Number of prescribed FaR®.](image)

Participant A: 4

Visual inspection of prescribed FaR® during baseline was based on ten weeks and shows no trend. During the intervention phase the prescribing behaviour was kept at the same level. No change of behaviour could be seen when baseline and post-intervention was compared.

![Participant A: 4. Number of prescribed FaR®.](image)
Participant B: 1

Visual inspection of prescribed FaR® during baseline was based on ten weeks and showed no trend. During intervention no trend was indicated. The change was uneven and interpreted as solitarily occasions. No change of behaviour could be seen, when comparing baseline with post-intervention phase.

![Participant B: 1](image)

Figure 7. Participant B: 1. Number of prescribed FaR®.

Participant B: 2

Visual inspection of prescribed FaR® during baseline was based on ten weeks and showed no trend. A positive trend during intervention indicated increased prescribing, the change was fluctuating. The short latency of change suggests a change related to the intervention.

![Participant B: 2](image)

Figure 8 Participant B: 2. Number of prescribed FaR®.
Participant B: 3

Visual inspection of prescribed FaR® during baseline was based on ten weeks and showed no trend. During intervention there was a positive trend of increased prescribing behaviour and the change had a short latency. The positive trend was not kept in the post-intervention phase.

Figure nr 9 Participant B: 3. Number of prescribed FaR®.

Secondary outcome self-efficacy

Self-efficacy for prescribing FaR® at baseline, during intervention and post-intervention is shown in table 3. Participants A: 1, A: 2 and B: 2 did not change their reported self-efficacy. Participants A: 4 and B: 1 reported an increased self-efficacy for prescribing FaR®. B: 3 reported a slightly decreased self-efficacy and A: 3 increased her reported self-efficacy.

Table 3. The overall Self-efficacy for prescribing FaR®, Baseline (base), intervention (interv.) and post-intervention (post). Change in % of total sum from baseline to post-intervention.

<table>
<thead>
<tr>
<th>Participant</th>
<th>base</th>
<th>interv.</th>
<th>post</th>
<th>change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>A:1</td>
<td>148</td>
<td>121</td>
<td>148</td>
<td>0%</td>
</tr>
<tr>
<td>A:2</td>
<td>209</td>
<td>198</td>
<td>203</td>
<td>-3%</td>
</tr>
<tr>
<td>A:3</td>
<td>100</td>
<td>132</td>
<td>181</td>
<td>81%</td>
</tr>
<tr>
<td>A:4</td>
<td>138</td>
<td>*</td>
<td>180</td>
<td>30%</td>
</tr>
<tr>
<td>B:1</td>
<td>113</td>
<td>93</td>
<td>146</td>
<td>30%</td>
</tr>
<tr>
<td>B:2</td>
<td>131</td>
<td>111</td>
<td>135</td>
<td>0,30%</td>
</tr>
<tr>
<td>B:3</td>
<td>218</td>
<td>203</td>
<td>196</td>
<td>-10%</td>
</tr>
</tbody>
</table>

All items in the questionnaire were assessed from 0 to 10.
Minimum sum could be 0 and maximum score 230.
*data missing from second assessment.
DISCUSSION

This single-case study with multiple baselines evaluated and studied the effects of a tailored skills training intervention based on behavioural medicine principles on health professionals’ prescription of physical activity on prescription, FaR®, in primary care. The result seemed to demonstrate an effect on the prescribing behaviour in terms of a slightly increased amount of prescribed FaR® during the intervention phase, even though not for all participants. It was no or short latency for the changed behaviour during intervention. The behaviour adopted during the intervention phase was not maintained in the post-intervention phase. The study also described self-efficacy over time for prescribing FaR® in participating individuals. The variation of overall self-efficacy between baseline and post-intervention was from -10% to 81%. For all individuals is the reported self-efficacy fluctuating during the study.

Result discussion

Four out of seven participants changed their prescribing behaviour during the intervention phase. It is possible to change clinical behaviour but it generally requires comprehensive approaches at different levels, tailored to specific settings and targeted groups. Central in adopting a new behaviour is the individual’s decisions (Godin et al 2008). Reflecting on solutions, skills training and feed-back have been key factors when changing behaviour in clinical work (Cabana et al 1999, Francis et al 2009). Monitoring performance has documented positive effect when implementing guidelines into clinical practice (Grol & Grimshaw 2003, Gross et al 2001). The intervention in this study was directed towards the individuals, not a readymade package but tailored to correspond to demands of the participants. By using individual goals own decisions were promoted. Everyone managed to reach a set goal during the time of the intervention phase. In the log-book the participants monitored their performance and could describe barriers and facilitators for prescribing a FaR®. All participants got the possibility to tell their experience and to discuss difficulties and/or facilitators at the sessions. Feed-back was given in the group both from the author and between participants. Time between sessions was time to train skills. When compared to results in other studies on changing daily clinical behaviour the result in this study seemed to be a respond to the intervention as the intervention included different approaches.

The behaviour adopted during the intervention phase was not maintained in the post-intervention phase. The result from a systematic review shows that the intentions of health care professionals had a relationship to their later behaviour (Eccles et al 2006). All seven
participants had a goal they managed within the intervention phase. At the last sessions everyone were asked and supported to set a goal for the upcoming three months. One participant set a goal at the sessions, all others would write it down and send it to the author later. The intentions of the participants were not clearly enunciated and that could be a possibility for a non maintained behaviour.

A quasi–experimental single-subject design was used to evaluate the effect of a tailored skills training intervention on physiotherapists’ screening behaviour in primary health care (Demmelmaier 2010). It was suggested that interventions based on SCT are effective in producing change in specified clinical behaviours in health care professionals. Demmelmaiers’ study and this current study had more than one similar key concept, but one is mentioned here. The intervention phase in that study lasted for 24 weeks, included six sessions, five of them for three hours. Between sessions the author had contact with the participants by e-mail or telephone. In this present study the intervention lasted for eleven weeks, included three sessions, all of them lasting for one hour and one telephone contact for 20-30 minutes. The current intervention was shorter, had fewer sessions that lasted shorter time, when compared to Demmelmaiers. Less time for the intervention phase is probably not the only reason for a non maintained clinical behaviour, but it could matter. Problems with the medical journal system could have been a hinder and implementation of other guidelines along with the intervention in this study. A new executive could have matter.

To change a prescribing behaviour is to change a complex behaviour and it is necessary to aim at different levels, i.e. the individual, the group, the organization (Grol 2002, Gulbrandsen 2007). The county council developed and began the implementation of the FaR® method during 2004-2008. Contact with organisations outside the medical health care and service system was done through the “Friskvårslotspot”. Instructions and information for both professionals and patients were made and educational days at the PHCUs were organised. A different part in the implementation process was aimed by the current intervention, even though it was not directly connected with the county councils’ earlier intervention and the time delay between them was long. Probably this “connection” is more a barrier than a facilitator for changing and maintaining the prescribing behaviour.

The SCT stresses the importance of peoples’ beliefs about their capability to perform a behaviour that leads to a desired outcome i.e. self-efficacy. For all individuals the reported self-efficacy is fluctuating during the study. A higher reported self-efficacy seemed not
necessarily to be associated with a higher rate of prescribing physical activity on prescription. Cognitive factors as self-regulation and self-efficacy play an important role in predicting human behaviour and outcome (McAlister et al 2008, Bandura 1998, 2004). Through self-monitoring, goal-setting and feed-back self-regulation can be achieved and self-efficacy can be developed through mastery experience. The mastery experience includes knowledge and training of skills. Some of the participants had never prescribed a FaR® before the intervention, others had. For two of those who never had prescribed FaR® earlier the self-efficacy lowered during the middle of the intervention and then got higher at the last session. One who never had prescribed FaR® earlier reported that self-efficacy got higher all the time. The importance of change in self-efficacy or how much change is needed to have an impact on maintaining a new adopted behaviour was not possible to answer with the current study design.

**Method discussion**

A MBD was used since it was not feasible to withdraw the intervention (knowledge, skills, behaviour, thoughts) once it was introduced. During baseline primary outcome data were largely unchanged and the phase interpreted as stable for all participants. The positive trends that occurred with short or no latency support a relation between intervention and outcome. This indicates that change of performance is a respond to the intervention and not due to maturation (Backman et al 1997, Kazdin 2003, Sim 1995). Even though performed behaviour during the intervention was not kept in the following phase, other qualities as knowledge and thoughts have changed. Knowledge and thoughts were not measured in this study. To evaluate the effects of this skills training programme it seemed advisable to use a MBD with ABC phases and not use a withdrawal design, ABA.

The MBD across settings and across time was used to strengthen the internal validity. A change in a performance should occur with no or short latency when the intervention is introduced and in sequence to each baseline. A weakness in the study is the short time delay between the introductions of the intervention in relation to the two baselines. A longer time delay and a third baseline would have been preferable. A third baseline was originally intended. Nevertheless, change in prescribing behaviour among participants occurred along with the transition to the intervention phases, suggesting the intervention having an impact on performance.
The author delivered the intervention and there was no observer who monitored the sessions. It would have been preferable to be more than one person delivering the intervention at the sessions. Or one person who delivered the intervention and another one taking notes. Two persons could support and remind each other or be responsible for different parts of sessions. To deliver the intervention as intended a protocol was made before every session and afterwards minutes for reflection were written. Post-it notes were used for participators to write down facilitators and barriers for prescribing FaR®. This was made to keep the variability in the intervention as little as possible and to implement it as intended, to enhance internal validity (Polit & Beck, 2008). This was made in order to keep key concept’s variability as little as possible.

Outcome measures were done by an extract from the medical journal system Cosmic. The extract was provided from the IT department. Instead of using self-reported data on the amount of prescribed FaR® the extract was used to affect the participants as little as possible. The baseline assessments were done during a period of nine or ten weeks, to ensure the current level of each participant’s performance in accordance with recommendations to guard against threats to internal validity (Logan et al 2008).

Result from single-case designs represent included subjects. To enhance the external validity of the research a replication and/or an experimental group study need to be done (Backman et al 1997, Kazdin, 2003, Sim 1995). In this study the sample was convenient. Of 28 asked PHCUs three agreed on taking part and two fulfilled the intervention. The author tried to get a new third PHCU, since one withdrew. This did not succeed. Participating PHCU represented different areas of the Primary Care council and individual participants represented different professionals, age and experience of primary health care. Generalizability may be low in single-case design as the intervention is changed to meet the individual needs. Focus is on the internal validity and conclusion reflects the case or the subject.

Conclusion
This study indicates that a tailored skills training programme have the potential to change the prescribing behaviour among professionals in primary health care. However, an intervention lasting for eleven weeks seemed not enough to maintain the achieved performance. As various factors can influence a changed behaviour further research is needed to state moderators and mediators for changing and maintaining a new daily clinical behaviour. No conclusions could be done on the overall self-efficacy.
Implications for future research

The current study seemed to change the prescribing FaR® behaviour during the intervention phase. In future studies it would be of interest to make a large scale study with the design and intervention, to find out, what is needed to maintain an adopted behaviour. What are the predictors, mediators and moderators? To be able to do that the intervention need to be sharpened.
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Assessed: 2010-04-05


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Zhan, S. Ottenbacher, KJ. (2001) Singel subject research designs for disability research. Disability and rehabilitation, 23:1.8

Deltagare till studien rekryteras från tre vårdcentraler inom Uppsala landsting och vid varje vårdcentral söker jag tre till fem deltagare. Deltagarna ska vara sjuksköterska, distriktssjuksköterska eller sjukgymnast och träffa patienter i sitt arbete.

Studien består av en intervention som under hösten 2010 ska genomföras med gruppträffar på vårdcentralen. Varje tillfälle beräknas ta 1,5-2 timmar och totalt handlar det om 4 träffar. Jag och min handledare kommer att hålla i dessa. Interventionen riktar sig till personal som har rätt att förskriva fysisk aktivitet på recept och syftar till att stödja och stärka deras egna arbetssätt och att stärka implementeringen av FaR på vårdcentralen. Uppföljning av förskriven fysisk aktivitet kommer att ske genom utdrag ur journalsystemet Cosmic.

Insamlat material kommer att behandlas med sekretess, vilket innebär att sammanställningen och resultatet är anonyma. Resultatet av studien kommer att redovisas i en masteruppsats vid institutionen för folkhälso- och vårdvetenskap, Uppsala universitet.

Medverkan i studien är helt frivilligt och kan när som helst avbrytas.

Jag hoppas att du och framförallt att några av de som arbetar på vårdcentralen är intresserade av att delta i studien. Jag kommer att kontakta dig under vecka XX eller XX. Om du har några frågor om studien är du välkommen att kontakta mig eller min handledare vid Uppsala universitet.

Med vänlig hälsning

Ann Månsson, leg sjukg. Pernilla Åsenlöf, Docent, leg sjukg.

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**Bilaga 2**

**Deltagarinformation** till sjuksköterska, distriktsjuksköterska eller sjukgymnast

Uppsala 2010-08-05

Du tillfrågas härmed om att delta i ett skräddarsytt utbildningsprogram för att förskriva fysisk aktivitet på recept (FaR). Interventionen strävar efter att stödja personal inom primärvård att arbeta med FaR. Syftet är att se om interventionen kan tillföra något positivt i implementering av hälsoarbetet kring patienterna.

**Hur går studien till?** Interventionen består gruppträffar på vårdcentralen vid fyra tillfällen och beräknas att ta 8 timmar totalt i anspråk. Vid träffarna är jag, Ann Månsson och min handledare Pernilla Åsenlöf med.

Det första tillfället kommer att vara ett utbildningstillfälle med gruppdiskussion om FaR, till vilka patientkategorierna kan fysisk aktivitet förskrivs, varför ska FaR användas etc. Du kommer även att få fylla i frågeformulär.

Det andra tillfället kommer att handla om åtgärder för att underlätta förskrivning av fysisk aktivitet. Träffen sker i grupp med gemensam diskussion.

Det tredje tillfället kommer i stort sett ha samma upplägg som nummer två. Mellan gruppträffarna ingår det hemuppgifter.

Det fjärde tillfället blir en avslutning och avrundning av interventionen och en diskussion om hur du kan ha användning av det här i framtiden.

**Hantering av data och sekretess** All dokumentation förvaras inlåst och all data aidentifieras och personuppgifter ersätts med kod. Detta görs för att i enlighet med personuppgiftslag, PuL (1998:204) skydda varje deltagares personuppgifter och lämnad information. Personuppgiftsansvarig är Pernilla Åsenlöf och enligt personuppgiftslagen har du rätt att ta del av de uppgifter om dig som har hanterats och vid behov få eventuella fel rättade.

Medverkan i studien är helt frivilligt och kan när som helst avbrytas utan särskild förklaring. Inget material får inhämtas och behandlas om samtycke återkallas.
**Presentation av resultat** kommer att ske i en masteruppsats vid institutionen för folkhälso- och vårdvetenskap vid Uppsala universitet, samt i form av artikel i vetenskaplig tidskrift. Insamlade uppgifter kommer att databehandlas och redovisas som siffror i tabeller och diagram och kommer inte kunna spåras till en enskild deltagare eller vårdcentral. Uppföljning av interventionen kommer att göras genom att se i vilken grad deltagarna förskriver FaR och informationen om antal förskrivna FaR hämtas från Cosmic.

**Ansvariga**

Om du har frågor är du välkommen att kontakta ansvariga för studien, Ann Månsson student eller Pernilla Åsenlöf handledare, se kontaktuppgifter nedan.

---

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Frågeformulär masteruppsats, Ann Månsson

1. Kön
   □ Kvinna
   □ Man

2. Ålder: ______ år

3. Yrke: __________________________________________________________

4. Hur många års yrkeserfarenhet har du inom ditt nuvarande yrke? _________ år

5. Jag anser att fysisk aktivitet har betydelse för hälsa och välbefinnande.
   □ Stämmer väl
   □ Stämmer ganska väl
   □ Stämmer inte särskilt väl
   □ Stämmer inte alls

6. Hur ofta tar du upp fysisk aktivitet med dina patienter?
   □ Så gott som alltid oavsett patientens diagnos.
   □ Ofta, men bara vid vissa diagnoser t ex diabetes, övervikt, hypertoni
   □ Sällan
   □ Aldrig

7. Hur ofta ger du råd om fysisk aktivitet med dina patienter?
   □ Så gott som alltid oavsett patientens diagnos.
   □ Ofta, men bara vid vissa diagnoser t ex diabetes, övervikt, hypertoni
   □ Sällan
   □ Aldrig

8. Hur anser du att dina möjligheter är att motivera dina patienter till fysisk aktivitet?
   □ Mycket bra
   □ Ganska bra
   □ Varken eller
   □ Ganska dåliga
   □ Mycket dåliga

9. Vilken är din inställning till FaR som metod idag?
   □ Mycket positiv
   □ Ganska positiv
   □ Varken eller
   □ Ganska negativ
10. Har du tänkt ändra hur du förskriver fysisk aktivitet på recept, FaR?
☐ Nej, jag har inte för avsikt att förändra mitt arbetssätt
☐ Ja, jag har funderat på att ändra mitt arbetssätt, men inte just nu
☐ Ja, jag är fast besluten att ändra mitt arbetssätt nu.

☐ Primärvårdensutbildning i regi av FoU/FaRsamordnare/ Friskvårdsslots
☐ Internutbildning på egna vårdcentralen
☐ Annan utbildning om FaR, vad ______________________________
☐ Läst i litteratur, på Folkhälsoundstutets hemsida
☐ Genombrott av FaRblankett hur den ska fyllas i
☐ Genombrott av Cosmic, var hittar jag FaR blanketten hur bör den fyllas i?

☐ Lite motion. Du promenerar, cyklar eller rör på dig på annat sätt mindre än 2 timmar i veckan.
☐ Måttlig motion. Du promenerar, cyklar eller rör på dig på annat sätt minst 2 timmar i veckan oftast utan att svettas. I detta räknas t.ex bowling och cykling till och från arbetet.
☐ Måttlig regelbunden motion. Du motionerar 1-2 gånger i veckan under minst 30 minuter vid varje tillfälle omklädd med en aktivitet som höjer pulsen. T.ex löpning, motionsgymnastik
☐ Regelbunden motion eller träning. Du träna eller tävlar i t.ex löpning, simning eller motionsgymnastik vid minst 3 tillfällen per vecka och minst 30 minuter per tillfälle.

13. Jag förskriver regelbundet fysisk aktivitet på recept, FaR till mina patienter
Ja/Nej

14. Jag har för avsikt att oftare förskriva fysisk aktivitet på recept, FaR till mina patienter
Ja/Nej

15. Hur stark är din vilja att skriva fler FaR/att börja förskriva fysisk aktivitet på recept på en skala mellan 0 och 10. Där 0, noll är svag och 10, tio är mycket stark?

0 ________________________________ 10
Bilaga 4

Att förskriva fysisk aktivitet på recept


Du ska svara på din upplevelse av hur säker du är på din förmåga att just nu klara av de olika situationerna och inte på hur bra du faktiskt klarar av dem.

Ringa in den siffra mellan 0 = ”ingen tilltro alls” till 10 = ”mycket hög tilltro” som bäst beskriver hur säker du är på din förmåga att förskriva fysisk aktivitet i dagsläget.

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<td>Generellt förskriva fysisk aktivitet på recept (FaR)</td>
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<td>Förskriva FaR till en patient med typ 2 diabetes</td>
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<td>Förskriva FaR till en patient med muskuloskelettal smärtat</td>
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<td>Förskriva FaR till en patient med förhöjda kolesterolvärden</td>
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<td>Förskriva FaR till en kvinna</td>
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<td>Förskriva FaR till en man</td>
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<td>Förskriva FaR till en patient 18-39 år</td>
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<td>Förskriva FaR till en patient 40-64 år</td>
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<td>Förskriva simning som FA</td>
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<td>Förskriva vattengymnastik som FA</td>
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<td>Förskriva gruppgymnastik som FA</td>
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<td>Förskriva FA som egen aktivitet till en patient</td>
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