

Master's Programme in Public Health

The journey to a more active lifestyle:

A Patient Perspective Qualitative Content Analysis on FaR - the Swedish Concept of Physical Activity on Prescription

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Author

Karolina Fischerström

Supervisor

Martin Stafström Department of Social Medicine and Global Health Lund University

Abstract

Background: Physical inactivity is a worldwide public health issue and the fourth leading risk factor for global mortality. As a measure of prevention or treatment several countries have developed concepts of physical activity on prescription (PAP) to tackle the common issue of sedentary behavior and thereby decrease the risk of chronic illness and premature death. The Swedish model of PAP, "Fysisk Aktivitet på Recept" (FaR) is a relatively new concept and does consequently belong to a little explored field in research.

Aim: The aim of this study was to describe patients' experiences and perceptions of FaR and to understand how FaR influenced the processes of changing the patients' physical activity behavior.

Methods: The study was based on 8 semi-structured interviews with patients who had received FaR and the data was analyzed using qualitative content analysis.

Findings: Three themes emerged from the data analysis and illustrate patients' experiences of changing physical activity behavior. Possessing the tools but awaiting an opportunity to make a change illustrates the patients' awareness of their potential benefits of physical activity although they still waited for another motive to make a change. Completing the puzzle through the missing piece illustrates how FaR influenced the patients to take the first step to a behavioral change. A bumpy road to reach the destination illustrates the difficult journey of changing physical activity behavior that the patients experienced.

Conclusion: FaR functions as a final helping-tool to become physically active when patients are already aware of needing to change their physical activity behavior. FaR interacts with other processes that influences the individual such as life events and level of motivation and therefore should not be considered a separate reason for success. However, more research is needed on FaR and its effects on the individual in order to develop FaR and make it more accessible to patients in Swedish health care.

Keywords; Fysisk Aktivitet på Recept, FaR, Physical Activity, Prescription, Health Promotion, Behavior Change, Public Health

Table of Contents

1. Introduction	5
1.1 FaR – the Swedish concept of Physical Activity on Prescription	7
1.2 Overall aim	10
1.3 Specific aims	11
2. Methods and Materials	11
2.1 Study design	11
2.2 Sampling	11
2.3 Data collection	12
2.4 Data analysis	12
2.5 Ethical considerations	13
3. Findings	13
Theme I: Possessing the tools and awaiting an opportunity to make a change	14
Theme II: A missing piece completing the puzzle	17
Theme III: A bumpy road to reach the destination	19
4. Discussion	21
4.1 Methodological considerations	26
5. Conclusion	28
Acknowledgements	28
References	29
Tables	
Table 1	32
Table 2	32
<i>Table 3</i>	33
Appendices	
Appendix I	34
Appendix II	35

Abbreviations

FaR - "Fysisk Aktivitet på Recept"

PA - Physical Activity

PAP - Physical Activity on Prescription

WHO - World Health Organization

SCT - Social Cognitive Theory

TTM - The Transtheoretical Model

1. Introduction

Physical inactivity (PI) is a global public health issue that requires our outmost attention. According to the World Health Organization, WHO (2010) about 3,2 million deaths annually are attributable to physical inactivity. Physical inactivity means having a sedentary lifestyle with insufficient physical activity that can be hazardous to health (Socialstyrelsen, 2013). It is estimated that physical inactivity comprises 6% of the annual deaths occurring worldwide and is hence the fourth leading risk factor for global mortality. In 2008, 31% of the global population age 15 or above were insufficiently active. Women were lacking physical activity to a greater extent than men (34% and 28% respectively) and men were in almost every country more physically active than women. In addition to global mortality physical inactivity is defined as a main cause for several medical conditions such as diabetes, ischemic heart disease and various types of cancer (WHO, 2010).

As an independent risk factor for several diseases and premature death, physical inactivity is related to the physiological effects on energy expenditure, gene expression and lipometabolism resulting from muscular effort. These effects of physical inactivity are associated with medical conditions such as the metabolic syndrome, obesity and diabetes. There is a dose-response relationship between duration of PI and risk factors like high Body Mass Index (BMI), hypertension and central obesity (Folkhälsomyndigheten, 2014). A sedentary behavior or a sedentary lifestyle signifies less than 30 minutes of daily moderate intensity physical activity, hence the general recommendations by WHO regarding level of physical activity to increase or maintain health (WHO, 2010). Global as well as Swedish recommendations emphasize the importance to activate the body through regular short breaks for people with a sedentary behavior (Yrkesföreningar för Fysisk Aktivitet, 2011). A review by Lynch et al (2010) identified positive associations between sedentary behavior and cancer outcomes for various types of cancer including colorectal, ovarian and prostate cancer.

Physical activity (PA) is "any body movement produced by skeletal muscles that results in energy expenditure" (Caspersen et al., 1985). Daily physical activities include activities in everyday life carried out at work, at home or in another place. Examples of daily activities are playing, working, gardening, transportation such as biking or walking, recreational activities and housework. The effects of physical activity are determined by intensity, duration, frequency, type of activity, surrounding factors, age and sex of the individual and other factors such as if the activity takes place indoors or outdoors and if the effort is voluntary and pleasurable or involuntary and stressful

(Folkhälsomyndigheten, 2014a). Worldwide the level of people's physical activity over time has decreased. WHO (2010) estimates that two thirds of the population in Europe adapts to an insufficiently active lifestyle. In northern Europe only about 50% of the population adapts to a lifestyle that corresponds to the given recommendations for PA (Folkhälsomyndigheten, 2014).

In Sweden, 40 % of the adult population follows lifestyle patterns that corresponds to increased health related risks due to the low level of physical activity. In addition 10 % of the population is considered physically inactive. In the last 10 years sedentary behavior in Sweden has increased, especially among women between 65 and 84, people in low socioeconomic groups, people born outside the Nordic countries and people with disabilities (Folkhälsomyndigheten, 2014). Measured in Disability Adjusted Life Years, DALYs, physical inactivity is estimated to comprise 3,7 % of the total burden of disease in Sweden (Allebeck et al., 2006).

Physical inactivity constitutes a substantial cost for society. The Public Health Agency of Sweden estimates that diseases related to physical inactivity represent a total societal cost of 7 billion SEK annually. Adding on diseases related to high BMI the annual costs raise to 25 billion SEK. The high societal costs are mainly indirect costs such as production losses due to disease and premature death but also direct costs of health care treatment (Folkhälsomyndigheten, 2010).

Physical fitness is referred to as a set of attributes to perform physical activity such as aerobic capacity, muscular strength, flexibility and body composition (Folkhälsomyndigheten 2014b). PA is of vast importance to increase health, decrease the risk of chronic disease and prevent premature deaths as well as to maintain or increase physical fitness. The Public Health Agency of Sweden has set up 12 national public health development goals. One of them regards physical activity and aims to increase physical activity among the population both in schools, in work places and during leisure time (Folkhälsomyndigheten, 2014b). National guidelines for the population recommend that adults get at least 150 minutes of moderate physical activity per week. If the intensity is high, 75 minutes of PA per week is sufficient. Each session of PA should last for 10 minutes or longer to increase the cardiorespiratory load i.e. increased heart- and respiratory rate (Yrkesföreningar för Fysisk Aktivitet, 2011). In more detail physical activity to promote muscular strength should be practiced twice a week and for people age 65 or above balance training should be added or included in the PA. People with chronic diseases or disabilities who are not able to live up to the above mentioned recommendations should be encouraged to be as physically active possible and the activity should be adjusted according to the specific condition (WHO, 2010). A clustered randomized controlled trial among people with sedentary lifestyles conducted in New Zeeland

identified long-term effectiveness of physical activity on prescription. Oral and written recommendations at a regular consultation with the general practitioner showed higher levels of PA after one year compared to the control group (Elley et al., 2003).

1.1 FaR – the Swedish concept of Physical Activity on Prescription

"Fysisk Aktivitet på Recept" (FaR) is a trademarked Swedish concept of physical activity on prescription. FaR is a widespread tool to promote physical activity in the population, primarily among society's least active individuals. The concept was first used in 2001, although previous attempts to prescribe PA in Sweden occurred already decades before (Statens Folkhälsoinstitut, 2011). Studies have shown that physical activity on prescription is associated with increased level of PA as well as increased quality of life (Kallings, Leijon, Hellénius et al., 2008). From a public health perspective, reaching out to the physical inactive part of the population is one of the most important target groups in order to increase health (Folkhälsomyndigheten, 2014b). Through FaR the proportion of inactive patients decreases. Furthermore the group of patients that performs PA regularly increases (Leijon et al., 2009). Engaging a greater number of people to make small changes of their PA has shown to be more effective than supporting a smaller number of people to make more notable changes in their level of activity (Folkhälsomyndigheten, 2014b). The study by Kallings, Sierra Johnsson, Fisher et al (2009) is one example of that FaR as a concept has shown good results for the part of the population with sedentary behavior as well as the part performing a low level of physical activity.

There are several reasons to why FaR should be offered to patients. The main implication is that insufficient PA from a health point of view is hazardous and PA can be used as both prevention and treatment of medical conditions (Folkhälsomyndigheten, 2014c). FaR is also associated with positive effects on both physical and mental health (Kallings et al., 2008). A prevention program focusing on giving individuals advice of physical activity was carried out in a suburb to Stockholm, Sweden. At follow-up one year later results of decreasing cholesterol levels as well as lowered blood pressure could be seen in both men and women (Hellénius et al., 1993).

FaR in Sweden differs from similar concepts in other countries. What makes the Swedish method special is the patient-centered approach where the individual constitutes the process starting point. Prescription and counseling are both based on the individual context and adapting the prescription

to the individual remains the main concern in every step throughout the process. Furthermore, the Swedish model emphasizes daily physical activity (Statens Folkhälsoinstitut, 2011).

FaR is prescribed by licensed health care professionals with expertise concerning the FaR method, the procedures for prescribing physical activity as well as insight in the patient's health condition and how PA can be used for treating or preventing medical conditions. Moreover, to prescribe FaR, knowledge in patient-centered counseling is required. Overall, FaR is mostly prescribed within primary health care settings but it is also commonly used in the specialist health care such as within psychiatry. Though there is a basic model of FaR, the various county councils - who are in charge of the health care in Sweden - create different versions of FaR adapted to local conditions (Statens Folkhälsoinstitut, 2011).

According to the National Public Health Agency of Sweden, applying FaR in practice requires the following five components that constitute the foundation for the process; (1) the patient-centered approach, (2) the written prescription, (3) "Physical Activity in the Prevention and Treatment of Disease" – FYSS, (4) cooperation with activity organizers and (5) the follow-up. In addition, to secure sustainable results patients must be prepared and willing to make a behavioral change in order to manage PA on their own once the prescription expires (Statens Folkhälsoinstitut, 2011).

In order to prescribe PA on a suitable level for the individual, the initial contact with the patient should result in a conversation with detailed content including an activity anamnesis to get a fair idea of the patient's background related to physical activity and an overall broad picture of the current situation. Potential risks of PA should also be considered. *The patient-centered approach* makes it easier to assess where the activity takes place - in daily activities, as active transportation or in organized activities. Furthermore the level of intensity should be estimated for the various PA. To achieve high level of compliance and minimize risks of failure the PA must be individually adapted and advice should be given on the individual's premises. Details of the prescription should be decided on in agreement between patient and health care provider. The written prescription in meant to symbolize a contract and the patient should be encouraged to express personal goals to facilitate a behavioral change. It is important to design goals that are meaningful to the patient. Goals can be set and evaluated subjectively and must not necessarily be objectively measurable. As an accessible reminder to the patient, goals should be written down and not merely brought up for discussion (Statens Folkhälsoinstitut, 2011).

The written prescription should be specific and contain clear advice grounded in evidence based knowledge and practice. To create a thorough prescription the following sections should be

written down; current level of PA; reason for prescription; patient's own goals; activities where type of activity, frequency, duration and intensity are specified; possible precautions; patient's consent (for external co-workers); responsibility for follow-up and expected outcome (Statens Folkhälsoinstitut, 2011).

FYSS - Physical Activity in the Prevention and Treatment of Disease is used as a knowledge bank for health professionals with prescriptive right and explains what effects could be expected from physical activity on a number of diseases or health states. FYSS is closely interlinked with FaR and considered a helping tool for health professionals to know how and why physical activity should be implemented and encouraged (Statens Folkhälsoinstitut, 2011).

Activity organizers or activity arrangers exist throughout the country with a varying activity supply. Organizers are committed to offer activities to people who received FaR either by recommending suitable, already existing, activities for the ones concerned or by creating activity programs specifically tailored for FaR-participants. The activity organizers are required to be knowledgeable in both FaR and FYSS as well as having the capacity to offer organized physical activity (Statens Folkhälsoinstitut, 2011).

The follow-up session is important in order to show the patient the significance of PA and creates an opportunity to adjust the prescribed PA by either duration, intensity or frequency. It is also a chance to view if the prescribed activity turned out suitable, to prevent relapses and to help out with questions or issues that have arisen during the process. In the follow-up session it is of great importance to emphasize changes that has lead to improvements and identify those as factors for success even when measurable indicators has not yet reached the desired level. If expressed goals have been obtained the follow-up session gives an opportunity for the health care provider to help the patient maintain the beneficial behavior. A follow-up can be performed in several ways either by revisits, by phone, mail, email or text messages. The evaluation is not necessarily carried out by the one prescribing FaR and can be done by another health care professional or other participator engaged in FaR (Statens Folkhälsoinstitut, 2011).

The concept of FaR was developed and inspired by various models, which explain health behavior and health behavior change. The benefit of using interventions based on theoretical models is that it creates an opportunity to identify and try out which factors that promote the behavioral change. Moreover, a theory-based intervention like FaR generates structure and facilitates how to prioritize among indicators for evaluation. FaR is built on four behavioral theories; the theory of planned

behavior, the health belief model, the transtheoretical model and the social cognitive theory but is mainly based on the latter two theories (Folkhälsomyndigheten, 2014d).

Insufficient physical activity is a severe threat to public health. Increasing physical activity is not only a matter to the individual but a societal issue that must be combated with an approach that is both multi-disciplinary and multi-sectored as well as culturally relevant (WHO, 2010). In the region of Scania, Sweden, the number of both men and women that are physically inactive is above the national average and the biggest increase in physical inactivity between 2000 and 2012 were among men aged 65-80. On the other hand, a national survey from 2012 presented that the number of people in Scania that would like to increase their level of physical activity was representative to the national average (Fridh, Modén, Lindström et al., 2013). Between 2004 and 2010 the number of FaRs prescribed in Sweden increased from 3500 totally in 2004 to approximately 49000 in 2010. Specific numbers for Scania was first registered in 2008 when 512 people received FaR. Two years later, in 2010, the FaR prescriptions had increased to 7300 (Statens Folkhälsoinstitut, 2011). The Swedish health care system should have the possibility and capacity to reach out to a large proportion of the population. Through extended use of FaR the positive effects of physical activity could become reality to more people, people either at risk of developing non-communicable diseases or people in need of alternatives to pharmaceutical therapy.

Although the positive health effects of PA have proved to be many the knowledge of how to motivate patients to increase their level of PA is limited. A deeper understanding of patients' experiences of prescribed physical activity and how FaR affects the individual's behavioral change process could facilitate the work with FaR both for FaR prescribers and providers of PA. Most of all, increased knowledge of FaR would favour the patients. Patients' perceived weaknesses of FaR could be pinpointed and perceived strengths could be emphasized. This information could help develop and improve the concept of FaR and consequently, help patients through the transition to a more active lifestyle.

1.2 Overall aim

The overall aim of this study was to describe patients' experiences and perceptions of FaR and to understand how FaR influenced the processes of changing the patients' physical activity behavior.

1.3 Specific aims

- To understand patients' experiences of PA and how they perceived PA.
- To understand patients' experiences of FaR and how they perceived FaR.
- To explore which factors induced a change in patients' physical activity behavior.

2. Methods and materials

2.1. Study design

A qualitative research design was deemed the most suitable approach to explore and better understand individuals' experiences and perceptions of a behavioral change. In-depth interviews were used in order to bring forth the participants' personal experiences since experiences of receiving FaR are both individual and potentially a result of something sensitive to the participant. The concept of FaR should be individually designed and put into practice depending on the characteristics of the individual (Folkhälsomyndigheten, 2014). The theoretical framework of FaR was an inspiration and guidance for the researcher who aimed to develop the interview guide in the most informed way possible. Through an emergent design the researcher continuously adapted to evolving knowledge throughout the time of research.

2.2. Sampling

Informants were purposively selected by the criteria of a received ongoing or previous prescription of FaR and a minimum age of 18 years. The emergent design allowed time for reflection, which guided the sampling process. Information about the study was sent to contact persons responsible for FaR, mainly nurses, in several primary health care centers in Lund, Lomma and Malmö in the region of Scania, Sweden. The information sheet was also sent to the responsible for FaR at a large training center in Lund. With the help of two contact persons as gatekeepers, 8 people volunteered to participate in the study. Out of the 8 participants two were mediated through a primary health care center in Lund and the remaining 6 from the training center in Lund. Three of the participants were male and 5 were female. They were all 50 years or above with varying motives for why they had received FaR (Table 1).

All participants were initially contacted by phone or e-mail and given information about the study and the purpose of it. The interviewer and participant then agreed on a date and place for the interview.

2.3. Data collection

An interview guide (Appendix II) was created with the acquired knowledge of FaR with its origin and its development together with a review of previous studies on PAP and FaR. During 4 weeks in May and June 2014, 8 semi-structured in-depth interviews were carried out. During the interviews the interviewer used open-ended questions and additional probing questions in order to acquire as rich answers possible and encouraging the participants to speak freely. The initial questions aimed at understanding the participant's context and background and more specific FaR-related questions were then added consequently. The interviews took place in either a small conference room at Skåne's University Hospital or in the participant's home according to the participant's preference. After approval from the participants the interviews were tape-recorded. The interviews were carried out in Swedish and the interviewer made additional written notes during all interview sessions. Each interview lasted between 60 and 100 minutes. The participants did not receive any reimbursement for their participation.

2.4. Data analysis

With the purpose to describe patients' perceptions and experiences of PA and FaR and FaR's influence on changing PA behavior, qualitative content analysis based on Graneheim and Lundman (2004) was chosen as the most suitable analytical approach. The decision was grounded in the author's wish to describe the content of the informants' narratives and stay as close to the informants' words as possible while still enable an interpretation of the content on a latent level. Initially the interviews were transcribed verbatim in Swedish and read through in order for the author to get acquainted with the data. After reducing material deemed redundant, data from the 8 units of analysis was segmented into meaning units from which the analysis took form through condensed meaning units and codes followed by categories with subcategories and themes. The process of structuring and reducing the data to create categories and themes was done through a data-driven (inductive) strategy (Kvale & Brinkmann, 2009).

To get a clear structure and overview a Microsoft Excel spreadsheet was used for the analytical process to easily follow each step throughout the procedure. In the coding process the author translated all codes from Swedish to continue the analysis process in English. To check for consistency in the coding procedure the author coded one of the interviews twice to compare the results at two different points in time (Schreier, 2012). After coding the condensed meaning units, categorization was done manually by clotting together related codes under three broad content areas. The content areas were created and based on the study's specific aims. Within each content area, categories and subcategories were developed to capture the manifest meaning of the codes. As a final step in the analytical process themes emerged to express the latent meaning of the data. An example of the analytical process is given in Table 2.

2.5. Ethical considerations

Written information about the study as well as an informed consent form (Appendix I) was sent to each participant before the date of the interview. In this way the participants had the chance to unhurriedly read through the information sheet and thereafter decide whether to participate in the study or not. Also, participants had the opportunity to come up with questions regarding the interview session and receive answers from the interviewer prior to the interview. In-depth interviews might address topics that are sensitive and make the situation stressful to the individual (Kvale & Brinkmann, 2009). Participants were assured anonymity and confidentiality of participation and at the start of each interview the participants were reminded of the possibility to withdraw from the study at any time and of the option to not answer interview questions. Prior to the interview each participant gave his or her permission to tape-record the interview. Also, agreement to participate was tape-recorded in connection to the interview.

3. Findings

In the analysis of the eight interviews three themes emerged. The themes illustrate how the informants perceived the overall process of changing behavior and how it was influenced by FaR. *Possessing the tools and awaiting an opportunity to make a change* illustrates the informants' own attitudes and perceptions of PA, their awareness of their own situation, the positive effects PA was considered to lead to as well as the threats informants dreaded to face by deciding not to make a change. *A missing piece completing the puzzle* relates to the introduction of FaR and the eye-

opening effect it had on the informants to take steps towards a more active lifestyle. By feeling seen and confirmed informants experienced becoming prepared and motivated to change their behavior. A bumpy road to reach the destination regards how the informants perceived FaR and the process of changing behavior and how motivation was obtained and maintained (see Table 3 for overview). Below the findings are presented with themes in bold headings, categories in bold throughout the text and sub-categories written in italics.

Theme I: Possessing the tools and awaiting an opportunity to make a change

The first theme is built up by categories and sub-categories concerning the informants' experiences and knowledge of PA and how those were perceived to have influenced attitudes to PA and PA behavior throughout life:

"Somehow I've always been aware that PA is healthy, I've simply just been too lazy to deal with it and didn't have the built-in need for PA like other people seemed to have... But I'm realizing I feel better, that PA makes me feel good." (Informant 3)

PA experiences setting standards illustrates the informants' perceptions of *creating habits of PA in youth*. An early-adapted interest in PA was experienced to create a natural pattern of PA in young years and thereafter maintained throughout life:

"I was a scout so I used to be outdoors a lot...well, I always liked running and orienteering and things like that which has made me create a need for it [PA]." (Informant 6)

"I've always been active but never done sports...instead it [PA] came automatically and without effort."

(Informant 2)

For others PA was experienced as something that was never pleasurable and with many negative feelings associated to it:

"I have avoided exercise all my life...until now. So I'm not an exercising person who feels a need to move just for the sake of motion." (Informant 5)

"I never liked physical education in school. I was clumsy and moved with difficulty even though I didn't have this belly. There was something wrong. The other children could do this and that but I never managed... I always felt a strong resistance to those things... So it was a big step for me, going to the training center with all my experience." (Informant 7)

Informants felt they lacked ability to carry out PA, something associated with difficulty and awkwardness and therefore something that was avoided. Through *adapting to the life situation* informants experienced adapting PA to the life they were living. A physical or sedentary profession or living in the countryside or in a city were considered influential factors that the informants learnt to adapt to in their everyday life:

"When I used to work my job included a lot of PA. Besides, at that time I lived in a house in the countryside with my wife and two children. And of course that required quite a lot of physical effort."

(Informant 2)

"Having a family and this house, well somehow time was never enough, instead PA became more gardening and things like that. We also had a dog for many years, which is a good way to activate oneself."

(Informant 6)

Informants also described experiencing periods with physical limitations that required acknowledging the new situation and adapting to it.

The category **PA** - an essential but challenging condition for well-being illustrates how informants emphasized health as the goal of PA, although PA was not always regarded as the easy alternative. Through *a beneficial approach to health* PA was described as important and something social since it could be carried out together with others. It was also mentioned to have a positive meditative aspect to it, an opportunity to relax the mind and distract oneself from stressful thoughts. Informants considered *PA* as a necessary part of daily life or a must that is up to oneself to manage either through organized leisure time activities as playing golf or as daily activities such as walking the dog. PA was viewed as a routine that should be a natural part of daily life:

"Well, it's something indifferent. It's more like, there are things that one must do…like the dishes or making the bed and that's just the way it is. It must be done. I mean, without much feeling so to speak."

(Informant 5)

At the same time it was considered *easy to opt for convenience* where indifferent attitudes towards PA took over as PA became something demanding and difficult and made a sedentary lifestyle more convenient to the informants. One participant expressed a perceived resistance to PA:

"When one is getting older and the body kind of starts to resign, the demand for voluntary activity, so to speak, becomes more extensive. Before, all that used to come more or less automatically. Ageing means numerous limitations. Everything from cold weather to walking difficulties due to pain and it's easy to let those things take over and choose to watch television instead...and they're not imagined limitations, those are real limitations." (Informant 2)

Fearing the past - expecting the future regards the informants' perceived risks and threats to the own health if not making a behavior change as well as hopes and expectations of improved health if a change is made. *Aiming for a brighter future* describes the prospect of becoming more vital to enjoy social activities with family and friends and to remain independent as well as a wish to better cope with additional pharmaceutical treatment:

"We all become older and I like feeling fit enough go out and enjoy things. I believe, I'm convinced that it's important to stay active in one way or another to both manage the everyday life, maybe avoid others' help but also to be able to participate in family activities and things like that and seeing friends."

(Informant 6)

The sub-category *threatened physical independence* illustrates situations the informants strived to avoid:

"I often come back to having experienced not being able to walk, suffering from such pain that I couldn't walk and it was awful. Being that handicapped and dependent on others. It's horrible... I have to do it [PA] regardless if I find it enjoyable or not. That's not relevant. If I want to be able to walk, I have to do it."

(Informant 5)

Informants described their experiences leading to the decision of changing behavior as being diagnosed with a more or less severe disease leading to physical limitations with restricted mobility or as signs of aging creating a wish to be able to keep status quo both physically and mentally. Suffering from pain, feeling low or depressed were also described as motives for wanting to change the situation. *Experiencing an unsustainable situation* illustrates going through a life crisis or an overall tough period where other solutions such as medications had been tried with lacking results:

"I couldn't walk and I was forced to use the wheelchair at work and outside the house. I was really low, I felt like 'this is it'. I was about to turn 50 and my life was already over." (Informant 4)

"They explained to me that there was nothing they could do, that it was an age-related change that could not be treated other than by strengthening the muscles and increase the blood flow. Well, it was a clear reason for actually doing the right thing and I mean, I was aware of that I needed to exercise. But I had kind of disregarded it for quite a long time. I was healthy! And then, when symptoms started to show I thought like 'Am I going to have it like this for the rest of my life?' I just didn't want that. And if there was anything I could do I decided I would. Without blinking an eye!" (Informant 3)

Theme II: A missing piece completing the puzzle

This second theme builds on categories and sub-categories illustrating how FaR influenced the behavior changing process. Through **feeling confirmed by FaR to take the first step** informants described FaR as a final piece in their decision-making process. FaR was seen as *a significant piece of paper* that confirmed the need for PA, emphasized the severity of the current situation and raised awareness of potential positive effects to the individual. FaR was described as a proof to show others that justified using time to take care of the body through exercise:

"I'm quite old-fashioned. I have difficulty leaving work in the middle of the day to dedicate time to myself, so to speak. When I'm at work then that's where I'm supposed to be, that's what I get paid for. But with this prescription I felt like I got some kind of receipt or a confirmation of that I needed this." (Informant 6)

Informants also explained how the economic incentive attached to FaR as well as the follow-up where results were confirmed black on white, increased self-esteem and motivation and were consequently considered important parts of the concept. Follow-up was also mentioned to be associated with a feeling of failure if results were not obtained:

"FaR is mainly up to you, that you keep being active one your own and if you don't, if you cannot even manage that it probably does something to your self-esteem. That you can't even do that." (Informant 8)

By received recommendations and emphasized benefits of becoming more active FaR was considered *the departure point of exercise*:

"It gets you started. It's definitely a push to get started. I would never had tried this [FaR] if I hadn't received it even if it was me wanting it from the start...having that piece of paper to show others that 'Look, I need this!' means a lot to one's self-esteem... And it's a relief when feeling old." (Informant 2)

The category **FaR** - a helpful concept creating a sense of responsibility explains how the informants perceived the FaR experience. In *feeling safe in a flexible process* informants highlighted the wide variety and flexibility of activities that were offered with the help of FaR. Informants described the activities as thought-through and careful but efficient and the overall process as smooth. The participants also expressed feeling safe in the training center environment and comfortable with the people working there. Guidance was experienced of importance to make one feel acknowledged. A sense of being encouraged and looked after while at the same time

reliant on others' expertise and steered by and responsible to someone else was described in the sub-categories *feeling acknowledged* and *becoming dependent*:

"The great instructors meant a lot to me. They've encouraged me and they've seen my improvements... I don't want to disappoint them by not showing up, which is good as well." (Informant 4)

"Some are just general gym instructors who basically know the machines and not anything more. So everything depends on which instructor you meet." (Informant 2)

Informants did also express fear of losing motivation once FaR expired due to lacking guidance and were therefore requesting an unlimited prescription period. *A social cohesion* regards the informants' perceptions of receiving FaR at an activity arranger. Feelings associated with insecurity, being different, not being part of the network, feeling old, young or other motives for not fitting in were described by the participants:

"The classes were during daytime and those were great classes but there were no others I could identify myself with. I was always fighting with these thoughts and it wasn't easy. I constantly had to bring forth energy to participate. I was very quiet. I mean, it's a social community where people meet and talk to each other... I was not a part of all that." (Informant 8)

At the same time being part of a group was described as feeling participant, a way to meet new people and to meet people in similar situations to one's own, a sense of becoming a part of something and an overall satisfaction:

"It [organized activity] was exactly what I needed because I had more or less locked myself inside the house and started to become less and less social. I was having a very tough time. But it forced me out of the house to meet people...and to become a part of something." (Informant 4)

Group activity at an activity arranger was also perceived as a help to make the effort. A positive group pressure where everyone is doing the same thing and where no one wants to be the one giving up was mentioned as something positive:

"I think it's this group pressure, everyone doing the same thing...one might laugh at it, everyone laying there on the floor to exercise...of free will in the middle of the day! But when you exercise at home it becomes tougher and that's hard to ignore and it's much easier to cheat. With group activities you don't really get away with it." (Informant 6)

At the same time participants expressed feelings of embarrassment or frustration during group activities:

"I have difficulty coordinating my body. It's extremely frustrating when I can't get my arms and legs to do as I want. So no, it doesn't suit me. Luckily it suits many but not me." (Informant 5)

Through *an eye-opening experience* and *a measure for prevention, maintenance and treatment* the concept of FaR is presented in the category **FaR - a long-term holistic solution**. Informants described their experiences of FaR as a well-working concept functioning as an eye-opener regardless if FaR resulted in serious lifestyle changes or not:

"It [FaR] has made me see things from a new perspective and I'm grateful. I'm thinking...people in different situations, some might not have any habit of physical activity...but for me, it was more like a bonus or...thankfulness." (Informant 1)

"I mean, if one doesn't believe in it [FaR] initially it could be a motive to change direction and eventually one becomes convinced of it being something beneficial. Not only in regards to certain symptoms but an overall feeling of increased well-being. Perhaps it would most easily be acknowledged through recovering faster. So there's an aspect of it, that it can strengthen motivation, increase motivation enough to continue once FaR expires." (Informant 8)

The FaR-experience was seen as either a preventive measure, a complement to other treatment or a salvation beneficial both to the individual and the society as a whole. Informants experienced FaR as suitable for everyone with positive results on health and without disadvantages:

"It [FaR] has strengthened my belief that it [PA] is something good, and when you're sick...it is also something hopeful to it." (Informant 1)

"It [FaR] somehow demonstrates the positive effects of going through with the medication, through the prescription. It leads to improvement. The medication leads to improvement either as pharmaceuticals or PA." (Informant 3)

Theme III: A bumpy road to reach the destination

This theme emerged from the informants' descriptions of why and how they felt motivated or unmotivated during the behavior change process. In the category **struggling for motivation** several *surrounding factors* were described as *both hindering and helping*:

"When I started working I was really scared that I wouldn't be able to be physically active. The classes were during daytime and it was comfortable, it was like a job. From my point of view one shouldn't have to

exercise in the evening after a workday, it's extremely difficult. When you have small children they become the excuse and when you get older you don't have the energy." (Informant 8)

In addition to difficulty in combining work and exercise in one day informants experienced inconvenience of having to do exercise at home on one's own. Informants described exercise at home as tough, easy to forget, easier to cheat and more difficult to maintain motivation than together with others in a training center:

"The risk is that the motivation fades away after a few times and then you forget to do it. That's my experience of exercising on my own." (Informant 4)

Other influential circumstances that were mentioned to either help or hinder motivation were weather, time and distance to the training center. Yet some participants described surrounding factors as neither harming nor helping. The sub-category *a painful journey to physical improvements* regards the importance of noticeable physical improvements or symptoms in regression to maintain motivation:

"It [PA] is positive and it makes me feel good. It has given me so much. Even when the weather is bad and my motivation is failing I think one step ahead, the feeling I get after exercise, satisfaction of having gone through with it and knowing that I become better for each time and stronger in my leg...that's not something I can just ignore." (Informant 4)

The participants described pain as an obstacle that lead to difficulty of carrying out PA and a reason for decreased motivation. Participants also highlighted illness and tiredness as reasons for affecting compliance negatively. Struggling to find a rhythm illustrates what informants experienced to be important assets and matters in the process of becoming more physically active:

"I was strict with finding a rhythm quickly. Getting started, like when you get children. I knew I would sink deeper otherwise." (Informant 8)

"So I have held on to it [exercise] and it has made me feel good. Also, it has sort of become the backbone of my daily life. Knowing that Tuesdays and Thursdays, that's when I go to the gym for exercise."

(Informant 6)

Being stubborn, focused and strict to oneself were described as helpful personal qualities, as were knowing one's capacities and limitations and being attentive to the body's signals in order to adjust the activity to it. Participants acknowledged starting off easily and making gradual changes

throughout the PA-sessions as a successful approach. Pushing through harmless pain or negative thoughts and carry out exercise with indifference were also described as favorable means to gain compliance.

Fortifying the self is the category illustrating the destination informants headed for and reached. Participants experienced *increased positive effects on body and soul* such as better sleep, improved physical fitness, vanishing symptoms and less pain and frustration. Being in a good mood and feeling enthusiastic, happy, energetic, motivated and hopeful were also associated benefits to the results of becoming more active:

"A fantastic feeling for the body...so I've started to become more friends with my body, so to speak, because I used to see me, the soul, and the body as separate parts since I never liked my body... it was not me." (Informant 4)

"Well, it's been life changing. Or maybe not life changing but it's been of great importance because it has resulted in evident improvements, both considering my knee and my overall physical fitness."

(Informant 3)

Informants also underlined the good feeling of satisfaction and pride associated with reaching a goal. One informant expressed that symptoms in some cases worsened after a PA-session though the overall experience of PA was mainly positive and beneficial. Furthermore, a *feeling of managing more* was illustrated as managing daily tasks easier, recovering faster, coping better with pharmaceuticals, becoming more independent and social as well as the overriding sensation of being better prepared for dips:

"I felt exhausted from walking 300 meters to the supermarket in slow pace. 300 meters. That was not good. And not to mention climbing stairs...then I was dead before I'd even finished. But that has become much, much easier!" (Informant 2-72A)

4. Discussion

This study illustrates how patients' experiences and perceptions of FaR and of PA were experienced to have influenced the behavioral change process of becoming more physically active. Three themes emerged from the informants' experiences and perceptions of PA, their experiences and perceptions of FaR and their perceived motives for changing their physical activity behavior. The themes emerged illustrate the informant's behavior change process in three steps with FaR

integrated in the process. The first theme, possessing the tools and awaiting an opportunity to make a change, illustrated that despite the awareness of potential benefits a behavior change could result in, it was not given that informants would enhance a behavior change on their own. This provokes the question of why one does not become physically active despite the knowledge and awareness of PA being something beneficial. Here, intrinsic and extrinsic motivators play an important role. Extrinsic motivation is the desire to gain a reward or avoid a negative outcome by changing PA behavior while intrinsic motivation is the joy, satisfaction or other positively related feeling that occurs by doing PA (Ryan & Deci, 2000). Regardless of how strong intrinsic motivation the participants in this study felt, they repeatedly expressed their fears of what would happen if they did not change PA behavior as well as the positive effects they expected and hoped for if they would do a behavioral change. They all had strong extrinsic motivation while the intrinsic motivation differed more widely between participants. According to DiClemente, Bellino and Neavins (1999) patients that are experiencing or have experienced the consequences of a health state are more easily motivated to try measures of treatment that could change their health situation to the better. Without intrinsic motivation though, the patients will have difficulty to sustain the behavioral changes they have made. Becoming motivated mainly by extrinsic motivators therefore strengthens the implication for FaR as a measure of treatment since the participants had experienced or were experiencing physical conditions which they struggled to avoid or improve. However, if FaR is to be used only as a preventive measure, the individual's intrinsic motivation must be considered to have more extensive impact on the process since intrinsic motivation is a prerequisite to maintain healthy behaviors over time (Seifert, Chapman, Hart et al., 2012). To many participants, something was needed to complement the already acquired awareness. FaR became a supplementary incentive enough to motivate the individual to make a change as illustrated in the theme a missing piece completing the puzzle. According to Statens Folkhälsoinstitut (2011) the written prescription is meant to function as a contract between the prescriber and the patient. This would require the patient to feel responsibility enough not to break the contract. This study mirrors this aspect of how FaR ought to be perceived by the patient as participants described a sense of responsibility connected to FaR and the written prescription as a confirmation and something substantial.

Leijon, Faskunger, Bendtsen et al (2011) studied adherence to physical activity referrals in Sweden which showed that economic factors were one of the main reasons for non-adherence among young people. In addition the study showed that economic factors were a common reason for non-adherence among patients who were referred to an activity arranger compared to patients

who were prescribed home-based PA. The participants in this study were all 50 years of age or above and were either working or retired. Economic reasons were not an actual hindrance to the participants to go through with the process, although the economic incentive was mentioned as an important motivator. According to the Public Health Agency of Sweden, FaR is a concept made to suit everyone and should consequently not exclude people due to economic hindrances. The author of this study finds it relevant to underline that people in low socio-economic groups such as pensioners should not need to compromise economically to afford PA. Neither should FaR at an activity organizer be a question of socio-economical status. FaR has a limited prescription period of 3+3 months during which PA is subsidized (Statens Folkhälsoinstitut, 2011). Since participants in this study expressed the economic incentive as motivating, a limited prescription period should be considered a risk to decreasing motivation after the FaR-expiry.

Bohman och Flodman (2006) found that a short distance to the training center, the social cohesion and having PA on a fixed schedule were the most important motivators to participants who had received FaR. This is coherent with the results of this study. The social aspect of PA at an activity arranger was mentioned to create an important feeling of becoming a part of something. This aspect of FaR illustrates how important FaR can be to people's well-being apart from the physical benefits. One of the most important reasons why elderly are not physically active is the lack of a social network, an important notion as social support plays an important role in maintaining physical activity behavior (Faskunger, 2002). Regardless if patients are retired or for one reason or another do not feel socially included in everyday life, PA through FaR could help bring routines into the daily life contributing to an overall well-being.

The study on FaR by Kallings et al (2008) presented positive effects on both physical and mental health. Similarly, the participants in this study expressed results of FaR as increased positive effects on body and soul. In the study by Leijon, Faskunger, Bendtsen et al (2009) on FaR and level of PA, effectiveness in PA was measured through patients' self-reported PA. No age-related association to patients' effectiveness was seen, neither could the profession of the prescriber be associated with differences in effectiveness. Though this study did not aim to measure effectiveness the third theme *a bumpy road to reach the destination* explained how different factors such as weather and working full-time influenced the participants during the process of changing physical activity behavior. According to the Public Health Agency of Sweden FaR is for anyone regardless age, gender and situation which is mirrored in the findings of this study since all participants were differing in age, gender and diagnosis but still experienced FaR in a similar way.

In order to correlate effects of FaR to differences in diagnosis etc. quantitative research on FaR and its effects is needed.

A behavior change process is usually associated with different stages of change (Nutbeam, Harris & Wise, 2010). As mentioned in the introduction, FaR is mainly based on two behavioral change theories, the transtheoretical (stages of change) model (TTM) and the social cognitive theory (SCT). In the TTM a behavior change is considered a process that requires time and cannot be accomplished in an instant. By their varying level of motivation individuals are considered differently prepared to make a change. The TTM comprises five stages of change; precontemplation – the individual does not consider a change in behavior or does consciously intend not to change, contemplation – the individual starts to consider a change in behavior but is ambivalent, determination – the individual has decided to make a change, action – the individual starts to make behavioral changes and maintenance – the individual should be helped to sustain accomplished changes and to avoid relapse (Nutbeam et al., 2010).

Informants in this study often expressed their attitudes to PA as something beneficial, healthy and something that one should do, yet a change to a more active lifestyle was not made until the introduction of FaR, irrespectively if FaR was considered the main reason for change or simply a helping tool. By looking into the TTM's five stages of change participants in this study could be considered to belong in either the contemplative stage or the determination stage as this study explains FaR as the last piece needed in order to take action, all of which demonstrates participants' already existing thought of changing behavior. This possibly implies that patients who find themselves at the contemplative or determination stage of changing physical activity behavior easily could be helped by the means of FaR. On the other hand, findings of this study cannot provide information about the role FaR plays for patients at the precontemplative stage. Neither do the findings of this study give insight into how patients at the stage of action can proceed to the final stage - maintenance - to remain physically active.

The TTM also underlines the context of change, that internal and external environments constitute a noticeable contribution to the process of change (DiClemente, 2005). Participants in this study described surrounding factors as both hindering and helping. They also expressed unsustainable situations prior to perceiving FaR.

According to the social cognitive theory the interaction between the individual, the environment and a certain behavior is emphasized. Self-efficacy means belief in one's own ability to change behavior and is both environment-specific and situation-specific i.e. physical and social

circumstances can provide both incentives and disincentives to behavioral change depending on the specific situation. Experiences as well as thoughts and ideas of an existing or non-existing behavior influence self-efficacy (Nutbeam et al., 2010). Informants experienced FaR as a proof or a confirmation of the right to exercise, both as verification to oneself but also in order to show others. Even though FaR might be considered a slightly different way of giving oral recommendations to a patient, informants in this study perceived FaR as more to it. The possibility to go through possible modes of exercise or PA together with the prescriber or a contact person at the training center influenced informants' self-efficacy positively. So did the follow-up session. Increased self-efficacy was described by the participants as feeling acknowledged.

The SCT also underlines the influence of peer pressure and social norms. By observing others' behaviors associations turn into either positive or negative feelings (Nutbeam et al, 2010). This is called 'observational learning' and must be accounted for in the work of changing health behaviors. As an example from this study, participants expressed both positive and negative feelings regarding their experiences of doing PA as a group at a training center, which influenced their motivation to exercise. In addition to observational learning, 'participatory learning' where the individual under supervision practices and repeats, generates knowledge and useful tools to manage a behavioral change and to build self-confidence (Nutbeam et al, 2010). In this study the importance of participatory learning was obvious since informants emphasized guidance and getting advice as two central aspects of the FaR-experience.

The author considers this study to have achieved its original purpose of providing an understanding of how patients who received FaR experienced the concept and how they perceived FaR to have influenced their processes of changing physical activity behavior. This knowledge is relevant as a support to adjust and develop FaR to become a well-working health promotional tool and to be used more widely to increase public health in Sweden. Even though FaR implicates a relevant aspect of public health it is a rather new concept and has not been widely studied. This study's contribution to the research field should therefore be considered of value. Another strength of the study was the rich data provided by the participants that enabled the author to bring forth many quotations from each interviewee and to make the overall study more substantial.

This study aimed to include participants with a wide range of age. Though the study managed to include patients between the ages of 50 and 85, the absence of younger participants should not be ignored. The main limitation of this study is that it did not reach any participants that for one reason or another did not use the prescribed FaR. Due to time constraints the author did not have

the possibility to include more participants in order to reach a more widespread group of informants. Another limitation of the study was that the acquired data needed to be translated during the analytical process. Though the author felt confident with this task it should always be considered a risk where relevant information could be lost in the translation process.

4.1 Methodological considerations

The author chose to recruit informants through gatekeepers both in primary health care centers and in a training center. In this way patients were requested to participate either at the stage of prescription or follow-up at the primary health care centers or after establishing a contact with the activity arranger. Most participants that volunteered for this study did so through the activity arranger, i.e. training center which means that they had not just received the prescription they had also made the effort to use it. This fact could imply that participants found at the training center to a larger extent viewed FaR as a favorable concept or could be considered already motivated to make a change since they had already decided to make an attempt to change. Two participants from the primary health care centers chose to volunteer and again, both of them had already started the process of changing physical activity behavior through exercise. In other words all patients who volunteered to participate in this study were all aware of the need for a change and had also accepted FaR and utilized it. Experiences from patients who received FaR but never used it were consequently not part of this study and its results.

The study had two inclusion criteria, the minimum age of 18 and the requirement of having received FaR. The age limit was set due to the fact that FaR was developed mainly to suit adults (Statens Folkhälsoinstitut, 2011). The author also considered recruiting and interviewing children a more complex task and something the author lacked experience in and therefore did not feel comfortable with. Furthermore, the author deemed it irrelevant to the study purpose to define specific reasons for receiving FaR as an inclusion criterion since FaR is a concept developed to suit anyone who would benefit from becoming more physically active. The idea of this study was to hear individuals' narratives of FaR and PA and not to look into how FaR influenced people with certain diagnosis. Neither did this study in any way aim to evaluate effects of FaR, instead the focus laid on the concept of FaR and the individual's process of changing physical activity behavior

The interviews were kept in original language, Swedish, until the coding phase when they were translated into English. To more easily proceed to working in a different language i.e. English, the author considered the coding phase an appropriate point in the analysis to start processing the acquired data in another language. To the author switching languages at an early point facilitated the continuing thesis process.

Four criteria must be considered to appoint the study's trustworthiness; credibility, dependability, confirmability and transferability. A study's credibility regards the extent to which the intended purpose remains in focus throughout the analysis process of the data (Graneheim & Lundman, 2003). Due to the wide inclusion criteria of this study the participants varied in age and gender as well as reasons for receiving FaR, different perspectives on FaR and PA were provided bringing rich descriptions of the main focus to this study. Another motive under-pinning this study's credibility is the rich data provided by the in-depth interviews. The informants were engaged during the interviews and gave detailed answers to the interview questions. To emphasize credibility of this study many quotations were presented to give the reader a clearer view of the similarities and differences between the categories and subcategories. Finally, to assure credibility the author coded one interview twice at two different points in time allowing for discovery of potential discrepancies in how data was analyzed by the author. Confirmability regards the neutrality of the data. In this study the author aimed to stay close to the data during the analytical process. Through a reflexive approach to the data collection and analysis the author bracketed her own preconceptions during the interview sessions with the informants.

In qualitative research dependability considers accounting for the constantly changing conditions during the research process. The interviewer and the informants influence and affect each other and are seen as interrelated and inseparable (Dahlgren et al, 2007). To strengthen dependability in this study the author took written notes during all interviews and kept detailed notes throughout the whole process of analysis.

It is up to the reader to decide if the study is transferable to another context. To facilitate this process for the reader a study must include thick descriptions of the research context (Dahlgren et al, 2007). The findings of this study were presented to the reader by several quotations from the informants in addition to overall descriptions of what emerged from the data. Furthermore, the author described the processes of data collection and analysis to give the reader better in-sight in how the study was carried out in order to easier tackle the issue of transferability.

According to the above-mentioned aspects, the trustworthiness of this study should be considered comparatively high.

5. Conclusion

This study shows that FaR functions as the conclusive helping-tool for patients to become physically active when they are already aware of the need or the benefits of changing their physical activity behavior. It also shows that taking the step to a more physically active lifestyle is an effortful process and requires several motivators to the individual in order to enhance positive results and make the process as smooth as possible. FaR interacts with other processes that influences the patients such as life events and the individual level of motivation and therefore should not be considered a separate reason for success. Measures to manage a behavioral change must be individually adapted to the individual's existing readiness to change and FaR should be regarded as a helpful tool to achieve this. However, more research is needed for a more profound understanding of how patients perceive FaR, FaR's role in Swedish health care practice as well as FaR's impact on individual and public health.

6. Acknowledgements

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7. References

ALLEBECK, P., MORADI, T. & JACOBSSON, A. (2006). Sjukdomsbördan I Sverige och dess Riskfaktorer. Svensk Tillämpning av WHO:s "DALY-metod" för Beräkning av Sjukdomsbörda och Riskfaktorer. Stockholm: Institutionen för Folkhälsovetenskap, Karolinska Institutet.

BOHMAN, A-K & FLODMAN, S. (2006). Att Förändra sin Livsstil genom Fysisk Aktivitet på Recept. Masteruppsats, Institutionen för Psykologi, Lunds Universitet. Lund: Lunds Universitet.

CASPERSEN, CJ., POWELL, KE. & CHRISTENSON, GM. (1985). Physical Activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Rep. 100*(2), pp. 126-31

DICLEMENTE, C. (2005). Conceptual models and applied research: the ongoing of the transtheoretical model. *Journal of Addictions Nursing*. *16*(1-2), pp. 5-12.

DICLEMENTE, C., BELLINO, L. & NEAVINS, T. (1999). Motivation for Change and Alcoholism Treatment. *Alcohol Research and Health*. 23(2), pp. 86-92

ELLEY, CR., KERSE, N., ARROLL, B. & ROBINSON, E. (2003). Effectiveness of counseling patients on physical activity in general practice: cluster randomised controlled trial. *BMJ*. *326*(7393), p. 793

FOLKHÄLSOMYNDIGHETEN (2010). Folkhälsopolitisk Rapport 2010 Framtidens Folkhälsa - allas ansvar. (Rapport 2010:16). Östersund: Statens Folkhälsoinstitut.

FOLKHÄLSOMYNDIGHETEN (2014). *Stillasittande – en oberoende riskfaktor*. [WWW] Available from: http://www.folkhalsomyndigheten.se/far/teori-och-vetenskap/stillasittande-en-oberoende-riskfaktor/ [Accessed: 18/9/14]

FOLKHÄLSOMYNDIGHETEN (2014a). *Vad är fysisk aktivitet?* [WWW] Available from: http://www.folkhalsomyndigheten.se/far/inledning/vad-ar-fysisk-aktivitet/ [Accessed: 7/11/14]

FOLKHÄLSOMYNDIGHETEN (2014b). *Fysisk Aktivitet*. [WWW] Available from: http://www.folkhalsomyndigheten.se/amnesomraden/livsvillkor-och-levnadsvanor/folkhalsans-utveckling-malomraden/fysisk-aktivitet/ [Accessed: 7/11/14]

FOLKHÄLSOMYNDIGHETEN (2014c). *Effekter av FaR*. [WWW] Available from: http://www.folkhalsomyndigheten.se/far/teori-och-vetenskap/effekter-av-far/ [Accessed: 7/11/14]

FOLKHÄLSOMYNDIGHETEN (2014d). *FaR i Praktiken*. [WWW] Available from: http://www.folkhalsomyndigheten.se/far/far-i-praktiken/ [Accessed: 22/9/14]

FOSTER, C. (2000). *Guidelines for Health-Enhancing Physical Activity Promotion Programmes*. Tampere: UKK Institute.

GRANEHEIM, UH. & LUNDMAN, B. (2004). Qualitative Content Analysis in Nursing Research: Concepts, Measures and Procedures to Achieve Trustworthiness. *Nurse Education Today*. 24(2), pp. 105-112

HELLÉNIUS, ML., DE FAIRE, U., KRAKAU, I. & BERGLUND, B. (1993). Prevention of Cardiovascular Disease within the Primary Health Care System. Feasibility of a Prevention Program within the Sollentuna Primary Health Catchment Area. *Scandinavian Journal of Primary Health Care*. *11*(1), pp. 68-73

KALLINGS, LV., LEIJON, M., HELLÉNIUS, ML. & STAHLE, A. (2008). Physical Activity on Prescription in Primary Health Care: a Follow-up of Physical Activity Level and Quality of Life. *Scandinavian Journal of Medicine and Science in Sports*. *18*(2), pp. 154-161

KALLINGS, LV., SIERRA JOHNSON, J., FISHER, RM., DE FAIRE, U., STAHLE, A., HEMMINGSSON, E. & HELLÉNIUS, ML. (2009). Beneficial Effects of Individualized Physcial Activity on Prescription on Body Composition and Cardiometabolic Risk Factors: Results from a Randomized Controlled Trial. *European Journal of Cardiovascular Prevention and Rehabilitation*. *16*(1), pp. 80-84

KVALE, S. & BRINKMANN, S. (2009). *Interviews – Learning the Craft of Qualitative Research Interviewing* (2nd ed.). United Stated of America: SAGE Publications, Inc.

LEIJON, M., BENDTSEN, P., NILSEN, P., FESTIN, K. & STÅHLE, A. (2009). Does a Physical Activity Referral Scheme Improve the Physical Activity among Routine Primary Health Care Patients? *Scandinavian Journal of Medicine and Science in Sports*. 19(5), pp. 627-636

LEIJON, M., FASKUNGER, J., BENDTSEN, P., FESTIN, K. & NILSEN, P. (2011). Who is not Adhering to Physical Activity Referrals, and Why? *Scandinavian Journal of Primary Health Care*. 29(4), pp. 234-240

LINDH, M., MODÉN, B., LINDSTRÖM, M., GRAHN, M. & ROSVALL, M. (2013). Folkhälsorapport Skåne 2013 – en Undersökning om Vuxnas Livsvillkor, Levnadsvanor och Hälsa. (Rapport 2013). Malmö: KSPrint Digitaltryck, Malmö Opera.

LYNCH, BM. (2010). Sedentary Behavior and Cancer: A Systematic Review of the Literature and Proposed Biological Mechanisms. *Cancer Epidemiology Biomarkers & Prevention*. 19(11), pp. 2691-2709

NUTBEAM, D., HARRIS, E. & WISE, M. (2010). *Theory in a Nutshell – A Practical Guide to Health Promotion Theories*. Australia: McGraw-Hill Australia Pty Ltd.

RYAN, R. & DECI, E. (2000). Intrinsic and Extrinsic Motivators: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25, pp. 54–67

SCHREIER, M. (2012). Qualitative Analysis in Practice. Croydon: SAGE Publications Ltd.

SCHÄFER ELINDER, L. & FASKUNGER, J. editors. (2006). Fysisk aktivitet och folkhälsa: Statens Folkhälsoinstitut.

Seifert, C., Chapman, L. Hart, J. & Perez, P. (2012). Enhancing Intrinsic Motivation in Health Promotion and Wellness. *American Journal of Health Promotion*. 26(3), pp. 1-12

SOCIALSTYRELSEN (2013). *Folkhälsan i Sverige* – Årsrapport 2013. (Rapport 2013). [WWW] Available from: http://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/19032/2013-3-26.pdf [Accessed: 18/9/14]

STATENS FOLKHÄLSOINSTITUT (2011). FaR – Individanpassad Skriftlig Ordination av Fysisk Aktivitet. Stockholm: Elanders.

WORLD HEALTH ORGANIZATION [WHO)] (2010). Global Recommendations on Physical Activity for Health. [WWW] Available from:

http://www.who.int/dietphysicalactivity/publications/9789241599979/en/ [Accessed: 2/9/14]

YRKESFÖRENINGAR FÖR FYSISK AKTIVITET (2011). *Rekommendationer om Fysisk Aktivitet*. [WWW] Available from: http://www.yfa.se/rekommendationer-for-fysisk-aktivitet/ [Accessed: 2/9/14]

Tables

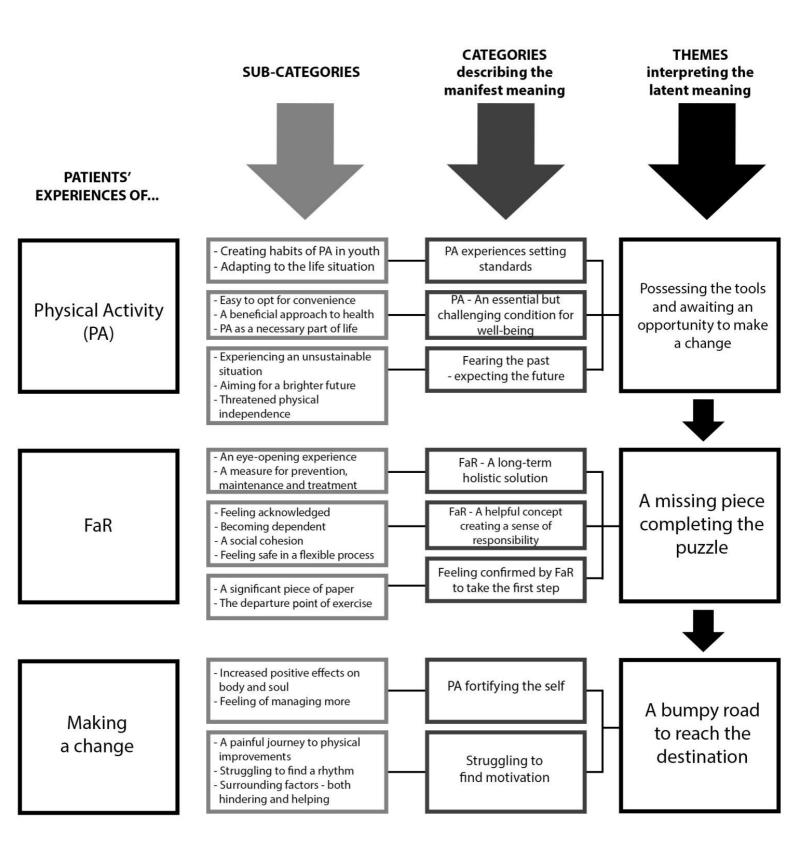
Table 1. Demographic characteristics of the participants

Age	Gender
70	Female
85	Male
75	Female
50	Female
68	Female
66	Male
57	Male
60	Female

Table 2. Example of the analytical process

Meaning unit	Condensed	Codes	Sub-category	Category	Theme
_	meaning unit				
Well, it's something indifferent. It's more like, there are things that one must dolike the dishes or making the bed and that's just the way it is. It must be done. I mean, without much feeling so to speak.	It's something indifferent. There are things that one must do, the dishes, the bed. That's the way it is. It must be		PA - A necessary part of daily life	PA - An essential but challenging condition for well-being	Possessing the tools and awaiting an opportunity to make a change

Table 3. Model of the emergent sub-categories, categories and themes



Appendix I

Informed consent

Background and Purpose

The purpose of the study is to get a deeper understanding of peoples' perceptions of physical activity and physical inactivity among people who has received physical activity on prescription (PAP). The data from the interviews will be analyzed and the findings will result in a qualitative master thesis. The research is part of the master program of Public Health at Lund University.

Confidentiality and Data collection

The interviews will be conducted by Karolina Fischerström, a current master student in Public Health at Lund University. Interview participation is voluntary and participants can choose to withdraw from the study at any time. No kind of payment or remuneration for participating will be provided.

The data collected from the interviews is confidential and will be handled anonymously and shown only to the supervisor during the course period. Personal information such as identity will be coded and the data will be stored in a protected place.

After approval from the participant a recorder will be used for the interview session and additional written notes will be taken by the interviewer. Participants' approval of the information given about the informed consent will be recorded.

For further questions, please contact:

KAROLINA FISCHERSTRÖM, Master student in Public Health, Lund University

Email: sjs07kfi@student.lu.se

Phone no: 0707-337803



Appendix II

Interview guide

Introduction:

- Can you please confirm that you have read the informed consent and that you agree to it?
- Can you please tell me a little bit about yourself?

Previous experience:

- What does PA mean to you?
- What are your experiences of PA?
- What did you know about FaR before receiving the prescription?
- What was your life situation like before FaR?
- What are your previous experiences of lifestyle changes?

The FaR-process:

- Can you please tell me about when you received FaR?
- What did your prescription include?
- Can you please tell me about your goals?
- How did you feel participant in the process?
- What was your attitude to FaR?
- How did you feel about making a change?
- Can you please tell me when FaR was easy/difficult?
- Can you please tell me about a part of the process that's been important to you?
- How was FaR evaluated?

After the introduction to FaR:

- What role has FaR play in your life?
- What advantages/disadvantages does FaR have?
- What made you want to change your situation? How did you manage?
- How has your environment influenced you during the process?

Other questions:

- How do you perceive your health?
- Can you please describe how FaR has influenced your view on PA?
- (If possible) How did you perceive the activity arrangers?
- How do you perceive FaR as a concept?

- Who do you think is suitable for receiving FaR?