A qualitative study exploring physical therapists’ views on the Otago Exercise Programme for fall prevention: a stepping stone to “age in place” and to give faith in the future

Sara Cederbom, Maria Bjerk & Astrid Bergland

To cite this article: Sara Cederbom, Maria Bjerk & Astrid Bergland (2020): A qualitative study exploring physical therapists’ views on the Otago Exercise Programme for fall prevention: a stepping stone to “age in place” and to give faith in the future, Physiotherapy Theory and Practice

To link to this article: https://doi.org/10.1080/09593985.2020.1731895

© 2020 The Author(s). Published with license by Taylor & Francis Group, LLC.
A qualitative study exploring physical therapists’ views on the Otago Exercise Programme for fall prevention: a stepping stone to “age in place” and to give faith in the future

Sara Cederbom, PhD, PT, Maria Bjerk, MSc, PT, and Astrid Bergland, PhD, PT

Department of Physiotherapy, Faculty of Health Sciences, OsloMet - Oslo Metropolitan University, Oslo, Norway

**ABSTRACT**

**Background:** One of the most effective interventions to prevent falls is exercise. A commonly used program that prevents falls is the Otago Exercise Programme (OEP). Despite this, user-based knowledge of its applicability in real-world settings for older adults who are dependent on formal care in their homes is lacking. **Purposes:** To explore how physical therapists (PTs) experience the applicability of the OEP in clinical practice for home-dwelling older adults who are dependent on formal home care and to determine their beliefs regarding the benefits of the OEP for living longer at home. **Methods:** Semi-structured interviews were conducted with 17 physical therapists. Data were analyzed using qualitative thematic analysis. **Results:** The OEP was described by PTs to be applicable in clinical practice. Their experience was that the OEP seemed to be meaningful and to have a strong relationship with everyday activities. The OEP improved physical function, mood, self-efficacy, and participation in social activities in older adults, as well as provided faith in the future. **Conclusion:** The OEP is suitable for use in a primary care setting, and according to the perceptions of physical therapists, the OEP contributes to older adults’ capability to live longer at home.

**CONTACT** Sara Cederbom, PhD, PT sara.cederbom@regionvastmanland.se Department of Physiotherapy, Faculty of Health Sciences, OsloMet - Oslo Metropolitan University, Oslo, Norway

© 2020 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

**ARTICLE HISTORY**

Received 8 April 2019
Revised 17 December 2019
Accepted 16 January 2020

**KEYWORDS**
Fall; home-based intervention; independence; older; self-efficacy

**Introduction**

“Age in place” is defined as “older people’s ability to live in their own homes, wherever that might be, for as long as one can feel confident and comfortable” (Wiles et al, 2011). It is a major focus of aging-related policies, programs, and scholarships (Yen and Anderson, 2012). In order to remain at home, a large percentage of the aged population in Europe, as well as in Norway, need professional home care services, such as practical assistance, home nursing, or a safety alarm (Irwin, Bliss, and Poole, 2018; Mørk et al, 2016). According to Fletcher and Hirdes (2004) and Bjerk, Brovold, Skelton, and Bergland (2018), home care recipients have a higher incidence of falls, lower levels of fall self-efficacy, poorer physical function, and lower levels of health-related quality of life (HRQOL) compared to the general population of older adults. This target population is in a transitional period as they are neither independent community-living older adults nor residents of care facilities (Vikman, Nordlund, Näslund, and Nyberg, 2011).

Globally, falls in the frail population of older adults are an important health issue. Because of the increasing number of older adults in the population, the incidence of falls is increasing, and there are serious consequences for these individuals and the public health system. About 30% of older adults over 65 years of age experience at least one fall yearly, and falling is a leading cause of morbidity, mortality, functional deterioration, hospitalization, and institutionalization in older adults (Gillespie et al., 2012; Masud and Morris, 2001). Effective health care interventions aimed at preventing falls in this population are essential to reduce the expenditure of health and social services (Rubenstein, 2006; Sherrington et al, 2019), and most importantly, to decrease the negative effects that falls can have on older persons (Gillespie et al, 2012). Up to 40% of all nursing home admissions have been found to be related to falls, and a fall due to instability may result in older adults developing an intense fear of repeated falls, nursing home admittance, and eventual loss of independence (Bergland, Hellen, and Bruusgaard, 2008).

Previous research has shown that the most effective prevention for falls is exercise (Stubbs, Brefka, and Denkinger, 2015). This type of intervention has positive effects on HRQOL, physical function, instrumental activities of daily living, and walking speed in older...
home care recipients (Bonnefoy et al., 2012; Markle-Reid et al., 2010). An example of such a program is the evidence-based intervention Otago Exercise Programme (OEP) (Campbell et al., 1997). The OEP is home-based, individually tailored, and includes exercises for improving strength and balance in addition to walking. The OEP is commonly used in Nordic countries and around the globe (Arkkukangas, Söderlund, Eriksson, and Johansson, 2018; Bjerk, Brovold, Skelton, and Bergland, 2017; Thomas, Mackintosh, and Halbert, 2010). The OEP has been shown to reduce the number of falls and injuries from falls, improve strength and balance, and decrease fall-related self-efficacy in home-dwelling older adults (Campbell and Robertson, 2003). Bjerk et al. (2019) conducted a randomized controlled trial (RCT) and concluded that the OEP can contribute to improved HRQOL. Moreover, the OEP has been shown to decrease the risk of death (Thomas, Mackintosh, and Halbert, 2010).

Although the research on fall prevention in older adults is comprehensive, there is a lack of knowledge about the clinical implementation of fall prevention programs (van Rhyn and Barwick, 2019). To improve the implementation of fall prevention programs at the individual, organizational, and societal levels, clinicians’ experiences and understanding of fall prevention are of high interest (Child et al., 2012). The effect of the OEP has been largely evaluated from a quantitative perspective (Bjerk et al., 2019; Thomas, Mackintosh, and Halbert, 2010), but qualitative studies are scarce. Recently published research has shown that the OEP has been conducted effectively in clinical primary care settings as well as by home care recipients who have experienced falls (Bjerk et al., 2019). The impact of the OEP has recently been explored in a qualitative study from the viewpoint of older adults, (Arkkukangas et al., 2017), and the findings demonstrated its positive impact on everyday life. However, how PTs experience using OEP in daily practice in a primary care setting remain unknown. In addition, there is a lack of information about PTs believes on how the OEP may contribute to older people living longer in their own homes. Access to this knowledge from a PT’s viewpoint would be helpful so that PTs’ can encourage participation in and adherence to exercise interventions among older adults and improve their ability to “age in place.” Therefore, this study aimed to explore how PTs experience the applicability of the OEP in clinical practice for older home care recipients and to determine their beliefs regarding the benefits of the OEP for living longer at home.

Methods

Philosophical orientation

This study used a phenomenological perspective, which explores how human beings make sense of experiences and transform those experiences into consciousness, both individually and as a shared meaning (Forde and Slater, 2006). A phenomenological perspective incorporates the perceptions and feelings of people associated with what they experience, not merely the observations of the experience itself (Creswell and Poth, 2017; Patton, 2002). The goals of a phenomenological perspective are to summarize individual experiences and provide descriptions that include ‘what’ people experience and ‘how’ they experience it (Grbich, 2007; Hays and Singh, 2012).

Design

The study used a qualitative inductive design, which means that a process starts with the details from the experience and moves to a more general picture of the phenomenon of interest (Burke Johnson and Christensen, 2014).

Informants and setting

Seventeen PTs were recruited through purposive sampling, with an attempt to observe the maximum variation in characteristics including age, sex, years of experience as PTs, years of experience in primary health care, additional education, professional position, and workplace. The PTs had been engaged in an ongoing controlled trial with the aim to evaluate the OEP in primary health care in six municipalities in Eastern Norway. The participants were properly trained in the use of the OEP and were supervised during the entire intervention by a PT who had expert knowledge of the OEP. Furthermore, all informants had clinical experience in fall prevention and working with older adults.

The intervention consisted of five home visits and seven motivational telephone calls and lasted 12 weeks. More details on the intervention are described in the study protocol of the RCT (Bjerk, Brovold, Skelton, and Bergland, 2017). Additionally, in order to be able to participate in this study, the informants had to speak and understand Norwegian and have experience using the OEP with at least one older adult before the interview was conducted.

Creswell and Poth (2017) stated that in qualitative studies “15 ± 10 participants” is considered a sufficient
sample size to obtain information about the research phenomena and yield a manageable amount of data. Therefore, we aimed to recruit all PTs involved in performing the OEP or to continue recruitment until we reached data saturation (Creswell and Poth, 2017).

The study was conducted in accordance with the principles of the Declaration of Helsinki of the World Medical Association (2013). Verbal information about the study was provided to the participants, and oral and written informed consent were obtained from all participants before data collection. The participants were guaranteed confidentiality and reassured that their participation was voluntary and that they could withdraw from the study at any time without needing to state their reasons. This study was approved by The Regional Committee for Medical Research Ethics in South Norway (approval number: 2014/2051) and is registered in clinicaltrials.gov, number NCT02374307. The second author contacted the participants by telephone, provided information about the study, and invited them to participate. If consent to participate was given, the interview was scheduled by the last author. All 17 PTs accepted the invitation.

**Data collection**

One researcher (third author) with several years of experience interviewing health care professionals, especially PTs, performed the interviews. She had not been involved in the intervention and had not previously met the participants.

The data were collected using individual semi-structured interviews based on an interview guide. Before the interview started, the interviewer explained the purpose of the interview to the informant. All interviews were introduced in the same way, starting with the question: “Overall, what was your experience with using the OEP in the present project?” The questions were presented in a dialogue form, allowing the participants to talk freely about their experiences with the OEP for older home care recipients in a primary care setting.

The guide comprised main questions about the following topics: participants’ thoughts about the applicability of the OEP, if they had observed any benefits using the OEP with older adults, any thoughts they had about the target population in relation to the OEP, and their thoughts as to whether the OEP contributed to living longer at home.

The interview comprised of follow-up questions based on the participants’ answers to the main questions (Kvale and Brinkmann, 2009). The interviews were conducted over a period of five months (October 2016 to February 2017). Each interview lasted for about 1 hour and was conducted in the interviewer’s work office. After completing 15 interviews, no substantially new information was obtained.

**Data analysis**

The interviews were audio recorded and then transcribed verbatim by an independent person. The transcriptions from 17 interviews amounted to 253 pages. Thematic analysis, according to Braun and Clarke (2006), was applied to analyze the content of the interviews. Thematic analysis is based on the researcher’s holistic view and a theme that answers the question “How?” (Braun and Clarke, 2006). A theme is a thread of an underlying meaning through condensed meaning units on an interpretative level, which means that the researcher can use the manifest and/or the latent level in the analysis (Braun and Clarke, 2006). The analysis followed six steps and an example of the analysis process is described in Table 1. The six steps were: 1) The text was read through several times while listening to the interviews in order to obtain a sense of the entire interview. Field notes were made about initial ideas; 2) The entire data set was coded. A code identified a feature of the data that appeared interesting to the analyst; 3) Codes were collated into potential themes, gathering all data relevant to each potential theme; 4) Themes were checked to see if they reflected the coded extracts and the entire data set; 5) The specifics of each theme were refined; thus, generating clear definitions and names for each theme; and 6) An overall result of the analysis was produced.

The preparation step started with the authors working separately, each reading through the interviews while listening to the audio-recorded version in order to obtain a sense of the content. All three authors discussed the classification and formulation of the codes for all interviews, created themes and subthemes for all the interviews, and made changes until consensus was achieved.

<table>
<thead>
<tr>
<th>Meaning unit</th>
<th>Code</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program is safe, which it must be since it is a self-training program</td>
<td>Safe</td>
<td>Easy to use and applicable in the clinical setting</td>
</tr>
<tr>
<td>The exercise improves self-efficacy in performing everyday activities and improves physical function</td>
<td>Self-efficacy Better physical function</td>
<td>The OEP improves mastery of everyday life.</td>
</tr>
<tr>
<td>Exercising with the OEP seems to make the older person happy, giving faith in the future</td>
<td>Happy Faith in the future</td>
<td>Tension between frailty and progression: the last chance to overcome it</td>
</tr>
</tbody>
</table>
Trustworthiness

To ensure the credibility of the study, a strategic sample was chosen, which improves the possibility of answering the research question (Patton, 1987). The sample size was considered sufficient and the content of the interviews was rich and these factors contributed to the high credibility of the study. To reduce the risk of subjectivity of the analysis, it was initially performed separately by each author and then discussed several times in open dialogue until a consensus was reached. To facilitate the transferability of the findings, a clear description of the context, how the participants were selected, and the characteristics of the participants were provided. Finally, to make the research process clear to the reader, we have described the analysis process and provided quotations from study informants.

Reflexivity

The process of defining, reviewing, and naming themes led to extensive discussions among the authors, who all had backgrounds in physical therapy and extensive clinical and research experience in healthcare for older adults. Our preconceptions might have influenced the interpretation of data at all levels. However, in order to preserve variability and reflexivity, and establish credibility, all authors carried out the analysis (Morse, 2015).

Results

Table 2 presents demographic information about the informants’ age, sex, years of experience as PTs, years of experience in primary health care, additional education, and position and/or unit.

When the informants were asked to describe their experiences with the applicability of the OEP in their clinical practice and their thoughts on how the OEP may contribute to live longer at home, one overarching main theme and three themes emerged.

The overarching main theme was revealed as follows: The OEP – A stepping stone to “age in place” and to give faith in the future. This theme mirrors the PTs’ experiences of how the OEP contributed to improvement in both physical and mental health. They observed that older adults were able to manage their everyday activities in a better way due to improved physical function and self-efficacy, as well as improvement of social activities. The older adults also told the PTs that they felt that the OEP gave them hope for the future. All these gains were seen by the PTs to possibly contribute to living longer at home.

The three themes that emerged were: 1) easy to use and applicable in the clinical setting; 2) the OEP improves mastery of everyday life; and 3) tension between frailty and progression: the last chance to overcome it. In the following paragraphs, the findings are presented according to the themes and illustrated.

Table 2. Participants’ characteristics.

<table>
<thead>
<tr>
<th>Physical therapist #</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Years of experience</th>
<th>Years working in primary health care</th>
<th>Additional education</th>
<th>Position/unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31</td>
<td>Male</td>
<td>2</td>
<td>2</td>
<td>Sports teacher</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>2</td>
<td>34</td>
<td>Male</td>
<td>6</td>
<td>6</td>
<td>Physical therapy for older adults</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>Female</td>
<td>3</td>
<td>1.5</td>
<td>None</td>
<td>Multidisciplinary rehabilitation team</td>
</tr>
<tr>
<td>4</td>
<td>37</td>
<td>Female</td>
<td>13</td>
<td>7</td>
<td>None</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
<td>Male</td>
<td>1</td>
<td>0.5</td>
<td>None</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td>Male</td>
<td>8</td>
<td>2</td>
<td>Health communication</td>
<td>Multidisciplinary rehabilitation team</td>
</tr>
<tr>
<td>7</td>
<td>46</td>
<td>Female</td>
<td>19</td>
<td>15</td>
<td>Health communication</td>
<td>Manager, Physical therapy unit</td>
</tr>
<tr>
<td>8</td>
<td>37</td>
<td>Female</td>
<td>12</td>
<td>12</td>
<td>None</td>
<td>Rehabilitation and preventative care</td>
</tr>
<tr>
<td>9</td>
<td>30</td>
<td>Male</td>
<td>5</td>
<td>5</td>
<td>Physical therapy for older adults</td>
<td>Rehabilitation and preventative care</td>
</tr>
<tr>
<td>10</td>
<td>42</td>
<td>Female</td>
<td>16</td>
<td>14</td>
<td>Physical therapy for older adults</td>
<td>Rehabilitation and preventative care</td>
</tr>
<tr>
<td>11</td>
<td>39</td>
<td>Male</td>
<td>15</td>
<td>15</td>
<td>Physical therapy for older adults</td>
<td>Rehabilitation and preventative care</td>
</tr>
<tr>
<td>12</td>
<td>49</td>
<td>Female</td>
<td>25</td>
<td>14.5</td>
<td>Health communication</td>
<td>Rehabilitation unit institution</td>
</tr>
<tr>
<td>13</td>
<td>39</td>
<td>Female</td>
<td>12</td>
<td>10</td>
<td>None</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>14</td>
<td>53</td>
<td>Female</td>
<td>25</td>
<td>25</td>
<td>Physical therapy for older adults</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>15</td>
<td>63</td>
<td>Female</td>
<td>40</td>
<td>4</td>
<td>Mental health work</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>16</td>
<td>38</td>
<td>Female</td>
<td>10</td>
<td>4</td>
<td>None</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>17</td>
<td>29</td>
<td>Female</td>
<td>4</td>
<td>3</td>
<td>None</td>
<td>Multidisciplinary rehabilitation team</td>
</tr>
</tbody>
</table>
with quotations from the interviews. The quotations are provided by informant number according to Table 2.

**Easy to use and applicable in the clinical setting**

Overall, the PTs reported that the OEP was easy and safe to apply to their clinical practice and to the home environment. They reported that older adults could easily follow the program, and when the older person had learned the exercises, they were easy to remember. One of the PTs described the applicability of the OEP in the home environment in these words:

“It is not too complicated, and you can do it without large appliances and equipment. Everything is very accessible, organized, and simple. Then one can do it at home, so that is no problem.” (PT4)

The instructions on how the OEP should be performed, individualized, and progressed in relation to the older adults’ prerequisites and resources were seen to be sufficient and very easy to understand.

“The amount of exercise is great so there are always some exercises that are relevant for most of the home care recipients; hence, it gives them the opportunity to progress.” (PT2)

Furthermore, the OEP was perceived to be safe to perform as a self-training program, which was seen as very important.

“The fact that it is safe is important. It wouldn’t be nice if we experienced that more people fell because of the challenges, especially in light of the fact that it is a self-training program.” (PT6)

The PTs perceived that the support they delivered was an essential part of the intervention and a key to adherence of the program. However, it became clear that it could be improved if the support could be individualized based on the older adults’ needs, especially the home visits.

“… so the home visits and calls has been entirely appropriate. Those phone calls to check ‘Are you doing well?’ and the visits I’ve been performing, and so. But she, the one who dropped out … should have had a visit every week …” (PT8)

Finally, the knowledge of the OEP as a research-based program gave it a high status and ensured the quality of the intervention:

“The program is, after all, research-based, and it is based on knowledge about exercise and the mechanisms that links exercises to balance, muscle strength – yes, risk factors related to falls, both physical and psychological risk factors.” (PT3)

**The OEP improves mastery of everyday life**

The PTs’ overall experience was that the OEP seemed to be meaningful and contribute to increased self-efficacy and social participation for the older person. Additionally, the exercises were observed to be transferable to everyday activities, which promoted and supported the older adults’ ability to perform and manage everyday activities better. One PT stated:

“The program is quite simple, but it seems that it can be quite transferable to some things you do in everyday life. So, it is about being able to stand for a longer time in the kitchen, e.g. making food more often, being able to go on a visit because you know you are able to stand up from any chair … that kind of thing. It seems like they are getting feedback that they manage more things than they might not have managed before.” (PT10)

Further, another PT confirmed:

“There are exercises that are important for mastering daily life. The daily life of older adults demands balance and strength in the lower extremities and the ability to transfer themselves from e.g. a chair or walk.” (PT5)

Reportedly, the OEP also contributed to empowerment and self-efficacy in that the older adults felt safer and more experienced with more control as this quote illustrates:

“But perhaps the most important thing is how the patients experience their everyday lives, and whether they think they master their everyday lives better and feel safer.” (PT16)

Additionally, the OEP was seen to promote daily routines in a positive way and improve the possibility of older adults participating in social activities and experiencing feelings of happiness. One PT reported:

“Some people have in some way got a different structure of their everyday life, because they have had a daily routine of doing these exercises or had a time that is set up, and the experience has been very positive.” (PT1)

Another PT said the following in reference to an older adult performing the OEP:

“She just gets very happy. She said that her life has become completely different – she sees opportunities to receive a visit, get out on visits, and more often attend outdoor activities.” (PT17)

At last, the PTs believed that the OEP promoted older adults’ ability to remain at home for a longer time and gave them more faith and a more optimistic perspective on the future, as this PT said:
“They even convey that they get more faith in the future. They say it actually straight out … they are very happy to participate, and just that they take it seriously.” (PT9)

**Tension between frailty and progression: the last chance to overcome it**

According to the informants, the older adults who seemed to benefit the most from the OEP were those who were pre-frail or frail, had fallen, and had begun to restrict their everyday activities but were still able to manage the exercises on their own. One PT said the following:

“The target group is first and foremost those who have fallen, have reduced balance, and are afraid of falling and are about 80 years old. There are those who suddenly have changed their level of activity. Maybe when they stop being active and are one day less active or when they become anxious, or avoid going to day centers, or getting outdoors. Avoid doing everyday activities due to either weakness or not having the energy or fear of pain during moving. Many perceive that ‘closing time’ is near; their level of frailty may have surprised them, and they fear institutionalization.” (PT12)

Or as this PT experienced it:

“The program helps them from not only being down-hearted by their own frailty, but they grasp something that builds them up and make them less frail. Doing something that can contribute to change is important. They appreciate that something can be done with something they experience they need.” (PT14)

However, in the interviews, the PTs also explained how frailty was seen as a challenge in the context of being able to perform the OEP as planned, as well as to achieve results. It became clear that performing the program requires a high degree of motivation from the older person to succeed and achieve results:

“… They are fragile. They are very much at this threshold level of mobilization and are very often alone and do not have so many people around who can get them started. Everything really is up to them alone …” (PT15)

Regardless of the older adults’ motivation, diseases or other life events could hinder their success. When this happens, it sometimes feels hopeless with one PT describing it as a “therapy without results.” Other PTs reported the following:

“Not that they don’t want to, but there are the medical conditions that makes it difficult then. And that they do not have the energy, like that.” (PT6)

“After all, many people have experienced several losses. Both function and, perhaps, spouse or friends have passed away, and there is little that is pleasurable … Experiencing loss means sorrow, which requires energy. Older people have different ways of solving or dealing with it.” (PT2)

“Clearly, for those who experience illness along the way and may be admitted to the hospital or something like that, have started on a program that they initially had hopes for and then they had to interrupt due to illnesses and failing health may be perceived as frustrating and in fact make them experience that the quality of life gets worse as they are a little frustrated not having this opportunity or being able to complete the program in the way they had hoped.” (PT4)

According to the experience of the PTs, even if the older adults struggled with their fluctuating health and difficult life events that affected their ability to perform the exercises in a negative way, the exercises could be seen as something positive because that was something the older person could influence:

“Long-term illness takes a lot of time and will for many be the main focus of one’s life, and then the exercise is experienced as a place to start to [put] the energy [into] something one can do something about.” (PT7)

**Discussion**

To our knowledge, no previous study has explored how PTs view the applicability of the OEP in clinical practice and how exercising according to the OEP may contribute to an older person’s capability to “age in place.” Therefore, we believe that this study contributes new and valuable knowledge to both clinicians and researchers in the field of fall prevention. It can be concluded that the OEP was considered as easy and applicable for use in clinical practice, as well as an important contributor to this particular group of frail older adults remaining at home for a longer time.

Our findings clearly demonstrated that PTs considered the OEP to be an easy and applicable evidence-based program in clinical practice, even if some smaller challenges were found. These findings are in line with results presented in a previous study that evaluated the feasibility of the OEP from the PTs’ point of view in a Swedish primary care setting, as it confirmed that the OEP is a feasible intervention within the target context (Arkkukangas et al., 2015).

In the OEP, self-training is an important element, and the user should feel that he/she can master the program and feel safe when performing it. Therefore, the description that the OEP is easy to individualize and adapt to older adults’ physical abilities is very
encouraging, particularly given that these factors have been proven to promote adherence to exercise among this target population (Cederbom et al., 2014b; Manor and Lipsitz, 2013). Other crucial factors in the context of promoting adherence are that the intervention is performed in an environment that is suitable for the individual and that it provides available support (Arkkukangas et al., 2017; Cederbom, Nortvedt, and Lillekroken, 2019; Jiménez-Beatty Navarro et al., 2007), which the present study confirmed. Moreover, when implementing the OEP in clinical practice, the present study’s findings show how important it is to carefully customize and adapt the support of PTs based on the older person’s needs, such as the number of home visits and support by telephone. Ultimately, these actions will promote and optimize the possibility of the older adult reaching the overall goal of the OEP, which in the long-term, is to remain at home longer (Cederbom, Von Heideken Wägert, Söderlund, and Söderbäck, 2014; Sjölund, 2014). Being able to perform everyday activities is also of high clinical value and relevant when engaging older people in exercise interventions (Cederbom, Nortvedt, and Lillekroken, 2019); which the present study’s findings also support.

The PTs observed how the exercises contributed to improving older adults’ everyday activities in many different ways. It became clear that the exercises were perceived as meaningful, they had a strong connection to everyday activities, they had positive effects on physical function and mood, and for some of the participants, they contributed to a change in exercise behavior. Moreover, the OEP contributed to strengthening the older adults’ self-efficacy in relation to performance of the exercises and everyday activities.

These findings are consistent with results from a study on older adults’ experiences with participating in an intervention based on the OEP (Rubenstein, 2006). The older adults described how the exercises had improved their physical function, mood, performance of everyday activities, and promoted daily routines, as well as their self-efficacy (Arkkukangas et al., 2017). From a clinical perspective, we specifically wanted to highlight the positive benefit of improved self-efficacy because a decreased self-efficacy is a risk factor for the development of disability among community-dwelling older people (Cederbom, Von Heideken Wägert, Söderlund, and Söderbäck, 2014; Rejeski et al, 2001). It is also very encouraging that PTs considered the OEP to contribute to and enable the older adults to be more social and participate in social activities outside the home more often because social isolation can be a threat to an individual’s health and quality of life (Bradbeer et al, 2003; Cederbom, Nortvedt, and Lillekroken, 2019).

For the PTs, working with the target population was sometimes challenging. Older adults’ illnesses and life events could affect the intervention in a negative way, which the PTs found frustrating. Even if there were some challenges when performing the exercises, the intervention was recognized as something that promoted the older adults’ health in a positive way. Theoretically, based on this finding, it can be interpreted that the OEP is salutogenic as it focuses on factors that can promote and sustain health (Antonovsky, 1987), which is inspiring and of high clinical interest. Using a salutogenic approach in clinical practice is also essential in promoting personalized and preventive healthcare, as well as health and quality of life among community-dwelling older adults (Alivia, Guadagni, and Roberti Di Sarsina, 2011; Tan, Vehviläinen-Julkunen, and Chan, 2014).

One of the main goals of a society is to enable homedwelling older adults to live at home as long as possible and to “age in place” (Wiles et al., 2011), which according to older adults, promotes independency and autonomy (Wiles et al., 2011). The present study revealed that the OEP seems to promote “age in place” in terms of improved physical function, mastering of everyday activities, improved self-efficacy, and a higher degree of independence. This finding is in line with that of a recently published study about an intervention focusing on exercise and behavior change for older adults living with chronic pain (Cederbom, Nortvedt, and Lillekroken, 2019). Promotion of “aging in place” is of high clinical relevance, as this is the main goal for all interventions that healthcare professionals conduct in their daily practice (Cederbom, 2014). Further, this goal must be remembered in the context of developing and planning new interventions to promote active aging and quality of life for this particular group of frail older adults.

**Strengths and limitations**

This study elucidated PT experiences with the OEP in clinical practice and how it may contribute to the target population living longer at home. Knowledge in this field is sparse; thus, the aim of the present study was of high relevance. The chosen method was adequate in relation to the study aim and data, as the interviews were rich in content, and there was a high degree of congeniality among the participants.

However, this study had limitations. First, the study was limited to an urban district and restricted to PTs working in this geographical context. Therefore, the generalizability of the findings may be limited. However, we believe that the findings of this study
can be transferable to similar contexts where the OEP is used within a population of frail older adults. Second, when performing qualitative research, it is important to be aware of reflexivity (Carolan, 2002). If the researcher has a pre-understanding of the context, it is important to have an open mind when performing the analysis (Elo and Kyngäs, 2008) and to be aware of the pre-understanding (Benner, 1994). In this study, we were aware of our backgrounds and the long-term experience of the PTs from working in the field of rehabilitation for older adults. This factor may have affected both the data collection and analysis through the preconceptions that we may have had. On the other hand, this experience could also have contributed to a deeper understanding of the context in which the participants found themselves.

Conclusions

The present study demonstrates that the OEP is easy to use and applicable in the primary care setting and suitable for frail older adults. According to the PTs’ experiences, the OEP was meaningful for older adults and was transferable to everyday activities. The OEP was also seen to have a positive impact on older adults’ physical function, mood, ability to perform everyday activities, self-efficacy, and social activities. As a result, exercising with the OEP provided older adults faith in the future, which in turn may contribute to living longer at home.

Acknowledgments

We sincerely thank all the physical therapists who participated in the interviews. This study received only internal funding from OsloMet – Oslo Metropolitan University.

Funding

This work was supported by the OsloMet - Oslo Metropolitan University

Disclosure of Interest

The authors report no conflicts of interest.

References


Bjerck M, Brovold T, Skelton DA, Bergland A 2017 A falls prevention programme to improve quality of life, physical function and falls efficacy in older people receiving home help services: Study protocol for a randomised controlled trial. BMC Health Services Research 17: 559.


