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Physiotherapists’ management of challenging situations in guiding people with rheumatoid arthritis to health-enhancing physical activity

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ABSTRACT

Objectives: To explore strategies used by physiotherapists (PTs) in guiding people with rheumatoid arthritis to health-enhancing physical activity (HEPA) in a group setting during a 1-year intervention study. Methods: Exploratory design with qualitative video analysis performed in three steps. Eleven female PTs were video recorded while leading support group sessions aiming at facilitating HEPA (twice-weekly exercise sessions at public gym and 150 weekly minutes of moderately intense aerobic physical activity). Results: Three categories of challenging situations emerged. They occurred when the HEPA intervention participants reported barriers to performing physical activity, when they neglected to use the planning tool for physical activity as intended in the program, and when they received negative results from physical capacity tests. PTs used different strategies to manage these challenges, with main focus either on information-giving, corresponding to a traditional health professional approach, or utilizing group resources by organizing participation. Conclusions: This study provides detailed descriptions of PTs’ clinical behavior in video-recorded sessions. The results imply that motivated PTs can, despite their biomedical and practitioner-focused training, learn to adapt their communication strategies to different situations, altering between traditional information-giving and utilizing group resources by organizing participation.

Introduction

Physical activity is an active treatment component for people with rheumatoid arthritis (RA) (Iversen, Brawerman, and Iversen, 2012; Plasqui, 2008; Vliet Vlieland and Den Ende, 2011) that can be hard to comply with (Demmelmaier et al, 2013; Tierney, Fraser, and Kennedy, 2012). Behavior theory, such as social cognitive theory (SCT), may be used to inform intervention studies (Kinzie, 2005) aiming to improve self-management and physical activity among people with rheumatic diseases (Iversen, Hammond, and Betteridge, 2010). Two central determinants of behavior in SCT are self-efficacy, defined as a person’s beliefs about their own capability to perform a specific behavior in a specific situation, and self-regulation, defined as the ability to influence one’s own patterns of behavior (Bandura, 1997).

The Physical Activity in Rheumatoid Arthritis (PARA) study included a 1-year, physiotherapist (PT)-led intervention to promote the adoption and maintenance of health-enhancing physical activity (HEPA) in people with RA (Nordgren et al, 2012). For a detailed description of the intervention, see the “Methods” section.

By long tradition, PTs perform their clinical practice in line with a biomedical model (Foster and Delitto, 2011) and use mainly practitioner-centered communication (Cruz, Moore, and Cross, 2012; Hiller, Guillemin, and Delany, 2015; Opsommer and Schoeb, 2014), which may result in under-utilization of patients’ resources (e.g., their capability to cope with a health condition) (Josephson and Bülöw, 2014). Previous studies have reported difficulties for health professionals to change their behavior in clinical practice (Eccles et al, 2005), that it takes time and effort (Nessen, Opava, Martin, and Demmelmaier, 2014), and that PTs feel they need more training in realistic goal-setting and effective communication (Alexanders, Anderson, and Henderson, 2015). Direct observations of PTs’ behavior when guiding people to HEPA are scarce and may complement self-reports of clinical practice. The aim of the present study was to explore PTs’ observed strategies during support group sessions.
aiming to guide people with RA toward HEPA during a 1-year intervention, including exercise at public gyms and free-living physical activity.

Methods

Design and setting

The design was exploratory, using qualitative analysis of audio material from video-recorded support group sessions. The PARA 2010 intervention comprised exercise sessions at public gyms, free-living physical activity, and biweekly 1-hour support group sessions led by PTs to help participants integrate HEPA into their daily routines (Nordgren et al, 2012). The content of the support group sessions was based on an SCT framework and focused on increasing self-efficacy and self-regulation of HEPA in the participants. HEPA was defined as twice-weekly aerobic exercise and muscle strength training and 30 min of moderately intense aerobic physical activity on the remaining days of the week (Haskell et al, 2007).

The intervention took place at seven public gyms located in six Swedish cities, with support group sessions held in adjacent conference rooms. The intervention targeted people with RA who did not achieve HEPA before the start of the study, with each group consisting of 5–10 participants, for a total of 20 1-hour group sessions. The intervention participants used study-specific handbooks containing general information and discussion points on behavior change, HEPA, aerobic exercise, and muscle strength training, along with information on study-specific tests. The handbook also included tools for applying behavior change techniques (BCTs), among them a journal for weekly goal-setting, planning, and self-monitoring of physical activity.

To prepare the PARA PTs for their group leader task, we gave a 6-day course to increase knowledge and practical skills to lead support group sessions based on a structured protocol (Nordgren et al, 2012). The PTs were trained to guide intervention participants to use specific BCTs (Michie et al, 2013), such as goal-setting, self-monitoring, planning, problem-solving, and social support related to HEPA. The PTs also practiced how to involve the intervention participants during group sessions by inviting them to discussions based on previous experiences, rather than giving lectures in a traditional teacher-oriented format. The PT course consisted of lectures and seminars, role-playing, individual homework assignments, and specific feedback on their performance when leading support group sessions during the intervention.

Study sample

Of the 12 PTs in the PARA 2010 intervention, 11 consented to be video recorded at support group sessions at least once during the intervention year; these recorded PTs constitute the present sample. The Stockholm Regional Ethical Review Board provided ethical approval for the study (2010/1232-31/1). Each PT in the study gave written informed consent and permission to video record the support group sessions. In addition, each intervention participant was informed two weeks in advance about the planned video recordings and given the opportunity to abstain from attending.

They were all women, aged between 25 and 59 years (median 42), with 2–22 years of professional experience (median 14), of which 0–18 years were within rheumatology (median 2). Nine of them had received further education in motivational interviewing, cognitive behavioral therapy, or behavioral medicine, ranging from a 2-day program up to 38 weeks of university studies. Of the 11 PTs, 6 had further education in physical activity in rheumatic diseases, ranging from a 1-day program to 20 weeks of university studies.

The HEPA intervention participants (n = 220) were independent in daily living and did not reach recommendations on HEPA at the start of the intervention. Additional background data are presented in Table 1.

Data collection and procedure

Video recordings were taken during support group sessions, one recorded early in the intervention year and one toward the end. Eight PTs were recorded twice and two were recorded only once; one was a PT who dropped out of the study for personal reasons and the other was missed out for logistical reasons. In addition, one PT was recorded on four occasions (two

<table>
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<th>Table 1. Background data on HEPA intervention participants (n = 220).</th>
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*100 indicates the worst rating.*
early and two late) because she led multiple support groups. A total of 22 video recordings (1433 min in total) were made, ranging from 46 to 78 min in length (mean 57 min).

The video camera (a Sony Handycam HDR) was mounted on a tripod in the corner of the support group session room by the last author, who stayed in the room as a passive bystander for minimal intrusion on the session. The camera was pointed at the PT, and the intervention participants were informed that the support group session was being recorded to study how the PT performed in her group leader role. The intervention participants’ voices were recorded and used in the analysis.

**Analysis procedure**

The analysis procedure was informed by the method described by Heath, Hindmarsh, and Luff (2010) drawing on conversation analysis. The video recordings were iteratively reviewed in three main stages (Table 2). All reviews and analyses were performed by the first author together with the co-authors as described below. Researcher triangulation by frequent and repeated discussions between all authors was used to enhance trustworthiness. The analytic process stretched over 5 months.

In a preliminary review, two video recordings were selected to be watched and coded by the first and last author so as to triangulate the coding procedures. Subsequently, all 22 video recordings were watched by the first author, and 8 of them were selected for further analysis as they included events and actions that demonstrated variation in the PTs’ way of guiding and communicating. The events and actions were coded exploratory and inductively. These codes were then discussed among the authors, who subsequently decided to review the strategies that PTs used in situations deemed by the researchers to be challenging or potentially challenging. The rationale for this decision was that it would provide knowledge of clinical interest.

During the substantive review, three additional video recordings were coded based on potential challenges. New codes were made to describe how the PTs managed those challenges when addressing intervention participants’ reports of barriers to performing physical activity. The codes and contexts were discussed among the co-authors, and it was agreed that the analysis should specifically focus on the challenges deemed to be of interest and clinically relevant to healthcare professionals in various clinical settings. Following this, all 22 video recordings were reviewed, and a number of challenges for the PTs were identified. For each challenge, situations were identified where the PTs used different strategies to manage the challenges.

During the analytic search and following another review of all video recordings, 11 such situations were extracted. Of these 11 strategies, 7 were selected to be used in the final analysis since they were considered to provide rich data and were likely to be of clinical interest. The strategies were defined and labeled, and suitable examples illustrating the strategies were extracted from the material. The labeling procedure was informed by a taxonomy for BCTs describing observable, replicable, and irreducible active ingredients (Michie et al, 2013), thus adding coherence to the analysis.

A few modifications were made to the examples when translating them into English to improve readability. To verify that the essence of the examples was not altered by these modifications, the last author compared the modified examples to the original video recordings and made minor adjustments. The illustrative examples of PT strategies, including narratives describing the background and context, are presented with “PT” indicating physiotherapist and “PART” representing intervention participant. Two slashes (//) within the quotation marks signify omitted text within an utterance, and two slashes after the quotation marks signify abridged discussion. Author comments, such as background sounds or additional comments, are inserted in square brackets. Video recordings were managed and analyzed using a qualitative data management program, Atlas.ti® version 7 (Scientific Software Development GmbH, Berlin, Germany).

**Results**

The analytic search revealed that the PTs used a variety of strategies to manage challenging or potentially challenging situations during support group sessions (Table 3). The PTs alternated between providing information and instructions to the group and inviting the participants to interact and share their experiences.
Table 3. Overview of challenging situations during support group sessions and physiotherapists’ strategies to manage them.

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**Challenge 1: intervention participants reporting barriers to performing physical activity**

The participants reported physiological, psychological, and contextual issues preventing performance of physical activity. PTs managed this by inviting group peers to (a) provide social support, (b) discuss problem-solving, and (c) discuss acceptance of barriers and review plans for future physical activity. See excerpts below, where “PART” stands for intervention participant. The PTs have been assigned numbers to indicate the individual PT.

**Strategy 1a: inviting group peers to provide social support**

Preceding the conversation described below, the group was talking about the previous weeks’ exercise and goals.

PT 7: “And [PART 1], you were supposed to schedule exercise/or what was it that we talked about last time?”

PART 1: “I mean, last week my daughter was sick, and then I was trying to find reasons not to exercise.”

PT 7: “I don’t know, but I want to; it’s bad.”

PART 1: “But, have you done any exercise?”

PT 7: “Yes, today/.”

PT 7: “Does anyone else have tips for [PART 1], about how you can find a reason to exercise?”

PART 2: “If I can ask you [PART 1], if I don’t go here [to the gym] in a week my conscience feels so guilty, so that affects me; I force myself to go. To feel that I’ve been good, that I’ve been here and exercised. The truth is I don’t really like to exercise, but it’s my guilty conscience that drives me. Don’t you have any guilty conscience? [Laughter].”

PART 1: “Yeah, but….”

PART 2: “But it doesn’t help?”

PART 1: “I am going to shape up; next time I’m not going to set such high goals.”

PT 7: “Nah, [PART 3] is waning, do you have any solutions?”

PART 2: “Do you have anyone close to you that you meet regularly at work or/that you could talk to and report to, who could be a stand-in guilty conscience? I mean, on Sunday it was really difficult to get going, but then my husband gave me a ride and he did something else in the meanwhile//Then I couldn’t get away from exercising. So the other pressure, not just our pressure, during the week, that there is someone else that pushes you.”

**Strategy 1b: inviting group peers to discussions on problem-solving (two examples)**

Preceding the conversation below, the group discussed strategies and solutions for overcoming obstacles to exercise. Participant 1 had a problem with her Achilles tendon that affected her exercise, which the PT confirmed.

Participant 1 had adjusted her exercise, trying to find solutions. PT referred to the topic in the participants’ handbook concerning use of strategies and solutions to overcome obstacles and encouraged the participants to discuss the issue. A group discussion ensued on how the exercise had worked out for the participants and how they had solved their problems. Below are two excerpts demonstrating how the PT invites the group participants to discussions on problem-solving.

**Example 1**

**PART 1:** “So you’re in pain you try to perform the training that’s possible, in another way than…”

**PART 2:** “I think, if I’m in pain, what is important is to know is that it is OK to continue to exercise//So I only need to know that it is OK to continue to exercise, and then I can do it, sort of, at the pace I can do. That’s what you want—some form of confirmation, yeah, that it is OK, and then you can continue. That it doesn’t have any detrimental effect, what you are doing. If you have that [confirmation] then you can probably find the means to do it as well.”

**PART 3:** “In the case of the Achilles tendon problem you shouldn’t continue with it.”

**PART 1:** “You are supposed to try to treat it and then, but still try to continue to exercise.”

**PART 3:** “No, not with this one.”

**PART 2:** “I think you have to listen to your body a lot as well//In the end I think that if there’s something that hurts a lot, then you give up, then there’s no fun. Then it’s better to skip that part/*.”

**Example 2**

**PART 1:** “But there was someone in this group last time that had experienced this. That you exercise and get more pain but you still continue on a lower level, and so, she sort of had to know her body. I can’t remember who it was. Is this something you’ve experienced?”

**PART 2:** “What?”

**PART 1:** “That when you are in pain you can still continue, but on a lower level, and you get to know your body, that it goes in cycles, that it passes.”

**PART 2:** “Sure, you can do that. I think I have done that. The only thing, as I said, is that you are unsure. Because if you don’t have any specialist that tells you it’s OK that you do it like that, that it doesn’t hurt you. You do it, but you’re unsure about it. It’s a bit on and off, you do it, but should I really do it, am I doing it right or not/*?”

**PART 1:** “That’s something we’ve talked about here that’s become an ‘aha’ experience. That you sort of have understood that exercise is not damaging. Because when I didn’t have a clue, I didn’t know. When I had a lot of pain I quit exercising. I had so much pain that I didn’t believe it could be good. But then, when you find out that it’s better to exercise and keep going, of course perhaps I can’t make as big of an effort as I did when pain-free. But I can continue, and [knew] that it wasn’t damaging to continue to exercise/*.”
Strategy 1c: initiating discussions on acceptance of barriers and reviewing plans for future physical activity

Prior to the conversation described below, one group participant had found out from her physician that she could not exercise in the gym due to joint deterioration caused by her disease.

PT 2: “... I’ve tried to start moving my body again, but I think I have to pass on the gym because my body can’t handle it... I talked to my doctor about it and she said I have had my disease such a long time that it has had time to destroy so much in the joints, so they can’t take anything. And I have understood that much as well, that they can’t take anything. But it was fun while it lasted.”

PT 1: “You’ve struggled with this, what is OK for you, and the amount of strain.”

PT 2: “Yeah, yeah, I kept on like this, yeah, for 15 years. To try to find the right level, but apparently there is no right level.”

PT 1: “I was wondering what you think about the future; what are you going to do?”

PT 2: “Yeah, I won’t go to the gym if I don’t get better and my joints recover after getting my medicines. In that case I don’t know; if the joints get better, then I maybe give it another try. But the way it is now it’s not possible. I can use my legs, but I can just as well do that at home because I’ve got a Stairmaster and a bicycle and I have, yeah. Things I can do.”

PT 2: “So walking, biking, and you could use the swimming pool as well?”

PT 1: “Yes, I can’t use the swimming pool either, because of the infections, but I’ll go to the swimming pool in the autumn if I can. But it is the same there. I can’t use my arms to any greater extent, so I have to work with my legs and the abdominals and those things. And that’s a pity, I really like it. I think it’s such a pity.”

PT 2: “But see to what works, and that the small things are better than nothing.”

PT 1: “Yes, of course, it’s like that.”

PT 2: “What do the rest of you think?”

PT 1: “I understand your grief.”

PT 2: “It’s such a pity; it’s such a terrible pity, but I’m thinking that at least I got eight weeks when I really could feel the joy to come here [to the gym]. And especially to work out on the machines, which is what I really like. I don’t think it’s that fun to sit on an exercise bike or things like that, and it went so well in the beginning, for eight weeks I managed well. I started to feel that my body was stronger, and I could do things I couldn’t do before. Even though I eventually got a setback, I was able to do it during that time.”

PT 2: “Does it feel like you can get back to that feeling?”

PT 1: “I feel I can always get that feeling back if only the body holds up, because it has always been there before.”

Strategy 2a: PT providing information about the gains of planning physical activity

PT 1: “I don’t think I’ll exercise more if I write it in the book, I don’t think so.”

PT 2: “But you haven’t tried?”

PT 1: “But I haven’t tried [laughing]; that’s why I only wrote one. I don’t know. Can I try to write two next time [laughing]?”

PT 3: “I’m thinking a bit like this; we are going to try/to do the weekly planning together, and for some this is natural and the way you work, and for others this will be a new way. Because, what I am thinking is that we also can use this [weekly planning] later, during the week, in connection with a walk or exercise, to connect to how it felt. What I’m thinking of is that some of you describe that you get pain and don’t know if it’s associated with the training or something else. So to include those reflections in the training journal, or weekly planning, or whatever you call it. That’s a suggestion. That we raise this weekly planning to a different level; but it’s still voluntary. But it can be a way to evaluate. Because if you think you may try a new strategy later on/I can’t remember what I did one or two months ago and how it felt then. Once again, to get a motivator, when the weather is bad as you mentioned. That I go outside and get it over with anyhow, because I know it became worse when I didn’t do it, or better when I did it. And there you [PART 1] have your walks at work as well, which I want you to log. Do you think you can try that?”

PT 1: “Yes.”

Strategy 2b: inviting group peers to discussions about the benefits of planning physical activity

Prior to the conversation described below, the PT asked if the participants had used the log books provided by the intervention to set behavioral goals for exercise, and the participants replied they had not.

PT 4: “Can there be something positive with writing it down that you maybe are missing out on now?”

PT 2: “It can be good to write things down to see how much you are doing each time, if you feel you can increase it, or if it stays the same. Perhaps you could improve yourself.”

PT 1: “I’ll usually try to walk a bit longer, but sometimes you may be stressed/it’s easy that it becomes the same.”

PT 4: “But do you think you would benefit from writing down your goals, or?”

PT 1: “Yes, if I wrote them so I can see them, all the time [laughs], like on the front door or something. Then you get reminded, and the more you get reminded the more you think about it. So yes, that would work. Now I have my phone that makes a sound when I should go to the gym.”

PT 4: “That’s a good thing.”

Challenge 3: intervention participants receiving negative results from physical capacity tests

Strategy 3a: explaining physiological mechanisms and providing information about health consequences of physical activity (two examples)

Challenge 2: participants neglecting to use physical activity planning tool

The participants reported that they did not use the physical activity planning tool as intended in the study and gave a number of reasons for it. Preceding the conversation below, the group was working on a physical activity plan for the two upcoming weeks provided in the participant handbook. The PT initiates a discussion on the experiences of making a plan for physical activity. One participant mentions that he does not usually set goals.
Preceding the conversation below, the participants are discussing results from the second of two tests taken during the intervention year measuring aerobic capacity, muscle function, and strength. The PT probes, informs, and inquires to facilitate understanding among the participants.

**Example 1**

PT 6: “Often it can sound like the results go one way. But sometimes it can turn out like you see. [referring to PART1, you feel that you’ve got better].”

PART 1: “Yeah, that was a bit strange, she [the assessor] probably thought so as well. But I didn’t know if it had anything to do with, [that] I take blood pressure medicine, if it affects the results, I can’t get my heart rate up.”

PT 6: “No, what do the rest of you think?”

PART 2: “I take blood pressure medicine, but I don’t know.”

PART 3: “Me too; I never get my heart rate up.”

PT 6: “What is blood pressure medicine supposed to do? What should it do in the body?”

PART 1: “It should make sure the heart works at high pressure.”

PT 6: “Suppressing.”

PART 1: “That is funny; I’ve used it [blood pressure medicine] for a couple of years, which has never been followed up. Maybe I don’t need any.”

PT 6: “No, can you talk to your doctor then?”

**Example 2**

PT 6: “If you make any changes, regarding blood pressure for example, what is important to think about? I’m thinking of the medicines that you use, for example [looking at a PART].”

PART 2: “I’m taking a diuretic with the blood pressure medicine, because my doctor said I should take those together.”

PT 6: “And that you have consent from the doctor, so you don’t try to change the medicines. But an effect of exercise can be that you can make changes when it comes to blood pressure medicine. But when you did the bicycle test, you got to ride it on a certain resistance; did they increase it?”

PART 1: “Yes.”

PT 6: “So you increased the resistance when you took the bicycle test.”

PART 1: “That is almost the only thing I remember from the previous time, that I thought it was strenuous to ride the bike, and now it wasn’t at all.”

PT 6: “Exactly, because you rated it after that Borg scale.”

PART 1: “Of course I felt that I was riding the bike, but on that [Borg] scale it wasn’t especially strenuous.”

PT 6: “No, and in spite of the fact that you actually increased your load, it wasn’t that hard. So sometimes you don’t see it in the test result, even though you feel it.”

PART 1: “That is almost more important, what I am feeling.”

PT 6: “Absolutely, and when you are on blood pressure medicine, because it’s the effect it has, it should slow it down, keep the heart rate down and the blood pressure.”

PART 4: “Do you get a worse aerobic capacity then? Because then the heart doesn’t get up to the pressure it should have?”

PT 6: “No, I wouldn’t put it, interpret it, like that. What do you think?”

PART 1: “You’re sweating anyway.”

**Strategy 3b: PT initiating discussions about health consequences of physical activity (two examples)**

Prior to the conversation described below, the participants reported test results indicating no change or even deterioration in aerobic capacity, lower limb muscle function, and/or grip strength from baseline to the end of the intervention year.

**Example 1**

PART 1: “/I think that this was a bit of a disappointment, to find out the results. First, I scored less strength in my hands; it wasn’t much but . . .”

PART 4: “Me too.”

PART 1: “I think that’s strange. Second, my aerobic capacity hadn’t increased, and that’s also strange, because I kind of feel . . . yeah.”

PART 2: “I made the mistake that I exercised and then I went [to take the tests]/but then she [the assessor] said I shouldn’t have done that. But still I had increased my aerobic capacity and doubled my hand strength on both hands.”

PT 5: “Do you want to have a discussion on [this], because all of you have taken the tests now?”

PARTS 1 + 2: “Yeah.”

PT 5: “I haven’t got your results from the assessors.”

PART 2: “No.”

PART 1: “But you know what you have got and, yeah, what are your thoughts?”

PART 1: “Yeah, no, I don’t really believe in it. The aerobic capacity was better, but the grip strength was a little bit worse than last time. And still, no. What I am feeling is the strength, which I have gained here. And additionally for the hands I have a ball and a rubber ring, and am sitting with them when I watch TV. It has to be more than it was before.”

PT 5: “More than it said in the results, mm.”

**Example 2**

PART 1: “The only thing that happened to me was that I had lost weight and my waist had decreased significantly. That was pretty much the only positive with the whole test.”

PART 3: “Same weight for me, but two centimetres less.”

PT 5: “It’s also strange, because I kind of feel . . .”

PART 1: “I had lost just over eight kilograms and ten centimetres in waist circumference.”

Part ARTS: “[respond positively and encouragingly to PART1’s statement]”

PART 1: “What do you say about that?”

PART 5: “Yeah, that was sort of what I had at the back of my mind, of course. It was an ulterior motive that I should change that [lose weight].”

PART 1: “That’s nothing to complain about; that was good—one effect that I had strived for.”

PT 5: “Yeah, more thoughts on the results?”

PART 2: “No, but I hadn’t lost that much weight, but I had lost three centimetres in my waist, and for me//I see it on my clothes. It is so much fun to buy clothes.”

**Discussion**

This study adds new knowledge to the field of patient–provider communication by providing detailed descriptions of PTs’ clinical behavior, based on video-recorded observations, when guiding people with RA toward HEPA behavior in a group setting. We found that PTs managed different challenging situations by alternating between traditional information-giving and organizing participation in order to utilize available resources among group participants.

The first challenge described in the present study referred to intervention participants reporting barriers to physical activity, which the PTs managed by inviting the group to discussions. Since RA is characterized by pain and fatigue, it must be expected in clinical practice that patients with this condition report barriers to physical activity. However, it has been found that
patients with RA who exercise regularly report similar barriers as those who do not exercise, but interestingly, coping strategies differ between the two groups (Veldhuijzen Van Zanten et al, 2015). Exercising patients have apparently learned how to adjust their activity when experiencing a disease flare (Der Ananian et al, 2006; Wilcox et al, 2006) and feel more self-efficient to overcome physical activity barriers (Gyurcsik, Brawley, Spink, and Sessford, 2013). Thus, responding adequately to patients’ reports of barriers in a group setting requires HPs skilled not only to provide information but also to explore patients’ coping strategies, boost self-efficacy, and use group resources by involving other patients in problem-solving and support.

The second challenge occurred when the intervention participants questioned the meaning of physical activity plans and the PTs used traditional information-giving and organized participation by involving group peers in discussions. Planning of own activity is an important self-regulatory skill, constituting a link between cognition and action (Maes and Karoly, 2005). However, its specific value in physical activity intervention studies has not been demonstrated in RA populations (Cramp et al, 2013), although other reviews highlight the importance of planning, goal-setting, and other self-regulatory techniques as means to support physical activity in general populations (Michie et al, 2009; Williams and French, 2011) and in populations with various long-term conditions (Conn, Hafsdahl, Brown, and Brown, 2008). However, recurrent weekly planning and goal-setting may be perceived as too repetitive by patients (Demmelmaier, Lindkvist, Nordgren, and Opava, 2014) and should be adapted according to individual preferences. Some patients may plan their activity in their heads, others in hand-written exercise diaries and yet others in mobile Internet applications (Revenäs et al, 2016). Guiding patients to individualized goal-setting and planning may require specific training of PTs who may feel uncertain in such a role (Alexanders, Anderson, and Henderson, 2015; Briggs et al, 2012).

The third challenge occurred when the PTs had to deal with patients’ disappointment when they, after a long period of physical activity, received negative results from physical capacity tests. The examples demonstrate how PTs explained the results and invited the participants to reflection and discussion in a pedagogically skilled way. It has been reported that patients with RA are aware of the benefits of physical exercise (Law et al, 2013; Mäkeläinen, Vehviläinen-Julkunen, and Pietilä, 2009), but they cannot be expected to be experts on exercise physiology and they may need explanations from PTs and other HPs. Effective management in such situations may thus ideally include both providing information, confirming patients’ emotional reactions and using group resources by inviting to participation and share experiences.

The present study was not an evaluation of the PT education per se, but our sample constituted a group of PTs who were educated and trained to meet intervention participants in a group setting. Other studies that did evaluate education of HPs in clinical encounters have reported good outcomes in terms of improved skills to clarify patients’ concerns and to communicate about treatment options (Dwamena et al, 2012). Accordingly, video-based studies of HPs’ communication skills report increased patient focus after interventions with 1 week of daily feedback on clinical sessions (Mozzoni and Bailey, 1996) and more comprehensive video-based programs using role-plays and feedback on performance (Carvalho et al, 2014; Ducharme and Spencer, 2001). In rheumatology, clinicians of mixed professions have described how they were able to apply new approaches to support patients’ self-management after attending a brief training course using cognitive behavioral techniques, shared agenda, and goal-setting (Dures et al, 2014). We cannot claim that the strategies used by the PTs in the present study were caused by our preparatory course only, but rather influenced by previous education and many years of clinical experience. However, our qualitative analysis of the PTs’ experiences from the course and the delivery of the HEPA intervention in the PARA 2010 study revealed how they developed a broader perspective on their professional role, integrating a clinical expert role with a role as a guide using patient resources to promote physical activity (Nessen, Opava, Martin, and Demmelmaier, 2014). The PTs used different strategies in different situations in line with Rollnick et al. (2005), indicating that they adapted their approaches to manage the challenges during group sessions.

There are limitations to consider in the present study. We used video recordings to explore PTs’ observed behavior. However, only audio material was used in the analysis as the intervention participants were not captured on video. As a consequence, non-verbal cues and details of social interaction have not been included. However, the purpose of the analysis was not to cover all material and aspects, but rather to extract findings that are especially interesting from a health professional perspective when guiding people with RA toward HEPA behavior.
The PTs in this study were self-selected and highly motivated to deliver a HEPA intervention. The majority had previous education in behavioral science and experience in dealing with patients with RA, which distinguishes them from health professionals in general. Hence, generalizability was not the purpose of this study, and neither did it aim to show strategies representing best practices or gold standards. Instead, the results illustrate how PTs manage challenging situations by adapting their communication style to different circumstances and could favorably inspire health professionals in similar situations and with similar backgrounds. Furthermore, it should be pointed out that the strategies presented in this study involve group settings and may not be transferrable to individual patient consultations.

The second and last authors were responsible for developing and setting up the PARA 2010 intervention, as well as the education and training. Consequently, they had preconceptions regarding what might be of interest to investigate; this could have influenced their analysis. However, the first and third authors had no such preconceptions and were equally involved in the analytical process. Furthermore, investigator triangulation involving multiple authors was used throughout the review and analysis process to increase the credibility of the results.

Conclusions and implications

This study provides examples of strategies used by PTs to deal with challenges when guiding people with RA toward HEPA behavior in a group setting. The results indicate that PTs can learn to use a variety of strategies, altering between traditional information-giving and utilizing group resources by organizing participation and inviting group peers to interaction and discussion. Skills training for PTs, using role-plays, home assignments in clinical practice and feedback on performance in coaching situations, seems promising to promote flexible communication and use of patient resources in group settings. Such skills are of importance not only in promotion of physical activity in RA, but in other health behaviors and other conditions, all in line with behavioral science and its emphasis on patients’ self-regulation and autonomous motivation (Maes and Karoly, 2005). It is recommended that future studies define and classify PT strategies for specific situations, defining the mediating mechanisms and relating them to patient outcomes, subsequently aiming to provide recommendations for best practices.

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Declaration of interest

The authors declare they have no conflict of interest with respect to the authorship and/or publication of this article.

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References


Demmelmaier I, Lindkvist Å, Nordgren B, Opava CH 2014 “A gift from heaven” or “This was not for me”. A mixed methods approach to describe experiences of participation in an outsourced physical activity program for persons...


Williams SL, French DP 2011 What are the most effective intervention techniques for changing physical activity self-efficacy and physical activity behaviour—and are they the same? Health Education Research 26: 308–322.