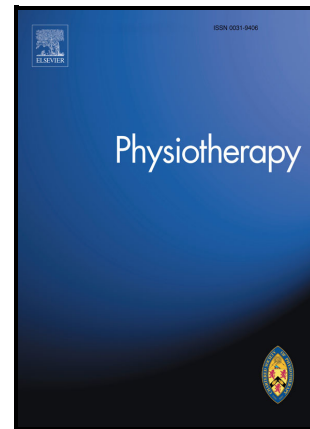


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Exercise referrals in primary care

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Understanding exercise referrals in primary care: a qualitative study of General Practitioners and Physiotherapists

Running title: Exercise referrals in primary care

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Abstract

Background: Physical inactivity is estimated to cost the UK National Health Service over £7.4 billion per year. Healthcare practitioners have a key role in supporting increases in physical activity (PA) levels, including referring to exercise referral schemes. To date, there has been little research into practitioner perspectives on referrals to exercise schemes.

Objectives: To explore the views and experiences of General Practitioners (GPs) and physiotherapists in relation to factors which influence referral and adherence to exercise referral schemes.

Design, setting & participants: Qualitative study of primary care-based practitioners in Glasgow, UK.

Methods: Semi-structured interviews were conducted with 14 practitioners (seven GPs and seven physiotherapists). Interviews were recorded and analysed thematically.

Results: Four themes are presented. Firstly, all people, including healthcare practitioners, bring inherent biases which are influenced by their background, experiences and worldviews to a consultation which impact their approach to PA promotion. Secondly, clinical time pressures are a major barrier to effective PA promotion. Thirdly, patient-led, compassionate care which seeks to fully understand a patient is the most vital component of behaviour change, with suggestions that promoting peer support and the use of personal anecdotes to normalise vulnerabilities might be helpful. Lastly, providing ongoing support for change was felt to be beneficial to PA promotion. This is often accessed through exercise referral schemes and improved by better collaboration between exercise providers and referring practitioners.

Conclusion: Practitioners believed exercise referrals could be improved with more targeted training in behaviour change facilitation, support for multidisciplinary working, and enhanced communication between the programmes and referrers. Additionally, supporting behaviour

change requires time for compassionate care and fully understanding patients' motivations and beliefs. Lack of time was felt to be the greatest current barrier to effective PA promotion.

Contribution of the paper

- Previous physical activity promotion research has focussed on overcoming barriers to physical activity.
- Few studies have considered the effect of the therapeutic interaction on successful exercise referrals.
- In this qualitative study, primary care-based practitioners (GPs and physiotherapists) reported inherent biases which affected referrals, as well as time pressures.
- Targeted training, support for multidisciplinary working, and enhanced communication between the programmes and referrers, would improve referrals.

Key words: Primary care, Physical Activity, Physiotherapy, Exercise Referral, Qualitative

Introduction

Twenty million UK adults are insufficiently active (based on Physical Activity (PA) guidelines) [1] which is estimated to cost the NHS more than £7.4 billion annually [2]. National Institute for Health and Care Excellence guidelines recommend Exercise Referral Schemes (ERS) for inactive patients [3]. These schemes involve a referral by a primary care or allied health

professional to a physical activity specialist or service, having assessed that the person being referred is physically inactive [3]. However, these schemes vary significantly between regions making comparisons difficult [3, 4]. In the UK, the commonest ERS model is one-to-one supervised exercise in a gym environment [4].

Previous research has shown that healthcare professionals can directly influence patients' understanding of the benefits of PA, as well as their exercise expertise and associated self-efficacy [5]. The patient-therapist interaction is an important factor in facilitating behaviour change [6, 7], but is rarely considered in randomised trials to increase adherence to PA [8]. Furthermore, most research to date focusses on doctors or nurses, with few studies involving allied health professionals, such as physiotherapists [9]. There is a need, therefore, to revisit the patient-therapist interaction and its role in promoting physical activity in the increasingly multidisciplinary context of primary care, where new roles such as First Contact Physiotherapists (FCPs) work alongside GPs to support healthy behaviour change and "make every contact count" [10]. The aim of this study was to explore the views and experiences of GPs and primary care-based physiotherapists in relation to factors influencing referral and adherence to ERS.

Methods

This was a qualitative study involving semi-structured interviews with primary care-based practitioners in Glasgow, UK. The research team comprised a first-contact physiotherapist (RD) and an academic GP with expertise in qualitative methods (DB). When approaching this research, they discussed their perspectives on the nature of knowledge (ontology), how this knowledge can be known (epistemology) and how particular theoretical perspectives might shape their research. Their position is one of critical realism, which sits between positivism and constructivism.

Participants:

GPs and primary care-based physiotherapists with over 5 years musculoskeletal experience, who were familiar with the local ERS scheme were purposively sampled. They were contacted by email inviting participation. Recruitment stopped when equal numbers of GPs and physiotherapists had been interviewed and the researchers felt that sufficient information power had been reached [11, 12].

Data collection:

Interviews took place in July 2022, using a pre-piloted topic guide (see **Supplementary file 1**). Practitioners were asked to reflect on positive and negative aspects of their patient interactions in behaviour-change consultations and ways that clinical interactions could be improved. Interviews lasted between 35-50 minutes (mean 40mins) and were conducted primarily via Microsoft Teams by the lead researcher RD.

Semi-structured interviews were used to allow the interviewer flexibility to clarify meaning and expand discussion points as appropriate. The interview questions were piloted with five hospital-based physiotherapists and GPs who referred to the local ERS but did not meet the inclusion criteria. Further information about the ERS is in **Supplementary file 2**.

Analysis:

The interviews were audio recorded, transcribed and anonymised by RD. Analysis of interview data took an inductive thematic approach [13] and was led by RD in collaboration with DB, with coding discussed and consensus reached over several meetings. Interview transcripts were read carefully, and a coding frame was formulated and systematically applied to each transcript using the NVivo (version 12) coding software. Familiarisation with interview transcripts enabled themes to be generated.

The study was conducted and reported in accordance with the consolidated criteria for reporting qualitative research (COREQ) (See **Supplementary file 3**) [14].

Results

Fourteen primary care-based healthcare practitioners were interviewed, seven physiotherapists and seven GPs. All physiotherapists worked at senior or advanced level in the musculoskeletal service or as FCPs. Of the seven GPs, five worked in split posts with both clinical and academic commitments – see **Table 1** for participant characteristics.

Four main themes are presented: *'personal and professional influences on PA discussions'*, *'time to care'*, *'patient-centred compassionate care'* and *'suggestions for change'*. Illustrative quotes are provided, with participants identified by profession.

Theme 1: Personal and professional influences on PA discussions

Professional role

When considering differences in professional role (e.g. training, experience), most participants noted the respect given to GPs by the public, which may help influence how PA advice is received. It was felt that the opinions of GPs carried more weight than other healthcare providers and so if a GP said that PA was beneficial, it was more likely that a patient would follow the advice given. On the other hand, practitioners felt it was easier for physiotherapists to talk about PA as patients were attending about a physical issue and were expecting PA advice.

"they're expecting to go away with exercises and... be encouraged to be, em, more active. So, they almost go with that pre-conceived idea." **Participant 5**

(GP)

Additionally, physiotherapists were perceived universally to have more expertise in activity prescription than GPs. Lack of confidence on the part of GPs was suggested to be due to less

exposure to PA consultations and less specific knowledge. GPs reported that they encourage patients to 'become more active' but are less likely to explain 'how' to achieve this.

Practitioners' own PA levels

Practitioners were asked to reflect on their own PA in relation to the guidelines. These guidelines were not well known, with only two practitioners commenting on the strength aspects of the guidance (**see Table 1**). Of note, whilst not all practitioners met the guidelines consistently, all practitioners described themselves as being regularly active, and all felt that their own relationship with PA would influence their PA promotion and how it was received. This could be positive (e.g. patients more likely to 'buy in' to recommendations for exercise if they perceived a practitioner to have some PA expertise) or negative (e.g. patients less likely to accept advice if they perceived the practitioner to be overweight or inactive).

"Patients didn't like that [staff being overweight] because they thought, 'well, who the hell are you to be telling me to lose weight and tell me how to do that when you've obviously not been successful yourself?'"

Participant 14 (Physiotherapist)

The effect PA had on practitioners' mental health was also felt to impact day-to-day practice, with exercise reported to be helpful in coping with the stress of workload demands.

Past experiences of PA promotion

Practitioners were also asked to reflect on the ways past exercise-experience influenced practice. Whilst all practitioners reported trying to be patient-led, all shared stories of exercise preferences. Practitioners reported that there were specific exercises that they tended to promote and some they avoided.

"I've often found yoga hurts my joints, because I'm slightly hyperflexible, so I tend to promote Pilates, em, for back pain" **Participant 5 (GP)**

Interestingly, these preferences may be related to enthusiasm which is perceived to be a factor in helping patients engage with behaviour change, with several practitioners commenting on their perception that the more enthusiastically they 'sold' exercise, the more likely a patient was to follow the advice.

Theme 2: Time to care

Clinical time pressures influencing care and education

The pressures of large workloads were reported to influence decisions to approach complex conversations, which can be time consuming. Some practitioners described this as a choice between finishing on time or staying in work beyond contracted hours.

*"I'm thinking I can have this conversation and, you know, run over and be late to get my daughter at nursery or, you know, I can curtail this...then 100% that's probably what would happen." **Participant 9 (Physiotherapist)***

Practitioners noted that patients attend consultations with ideas about the cause of their musculoskeletal condition and expectations as to what can and should be done to improve their symptoms, which rarely involve PA. It is therefore important to help a patient understand how PA can improve their condition before discussing referral to ERS. With practitioners typically having between 10- and 20-minute consultations to assess, diagnose and make a management plan, this can be challenging. Several practitioners discussed the use of leaflets and signposting to further reading as being helpful when short of time but cautioned that this could be perceived as being dismissive and not as effective as really listening to what is going on in that patient's life.

Time for continued support

Several practitioners felt the most important factor in helping patients increase their PA levels and sustain change was ongoing support. This was one of the main reasons for referring to ERS and was considered something practitioners could do better to improve exercise adherence.

“I think continued support will make a difference. You know... someone who actually sees them again in a month or two and says ‘let's see how you're doing and has this helped?’ and, em, if it hasn't helped, ‘what can we change?’” **Participant 12 (GP)**

One practitioner also noted that PA promotion is more effective in patients who receive regular follow-up, such as those with diabetes.

Theme 3: Patient-centred, compassionate care

Interviewees all recognised the importance of fully listening and understanding patients in a non-judgemental, compassionate way. Only by first understanding the complexity of a patient's situation, beliefs and motivations can behaviour change be supported. Each patient, with their unique barriers and facilitators, will need differing support and encouragement from a healthcare practitioner.

Understanding barriers and giving time for contemplation

Practitioners noted that patients often have mixed understandings of the concept of ‘being active’. Some patients perceive themselves to be active because they seldom sit, or because their job involves activity, but they would not meet PA recommendations. Exploring the difference between being sedentary and inactive was considered helpful, as well as identifying fears and barriers to PA, with reinforcement often necessary.

“I think often these consultations probably do need multiple goes at it... someone has to trust you before they believe you, that when they're sore, they should be doing more exercise.” **Participant 11 (GP)**

Practitioners noted that the process of promoting PA is partially about introducing a thought process which might induce future change.

“And then reality might be that... I might be the person that plants the seed, but I don't get to see the flower grow.” **Participant 9 (Physiotherapist)**

Promotion of peer support

All practitioners recognised the benefits of peer support, with a few noting that some patients rely on peer support and may not be able to fully engage in PA without it. Several practitioners cited personal beneficial experiences of peer support.

“From my own personal experience, I run and I certainly think I only run because my husband runs with me, em, because there would be days that I just don't want to. And... I feel great afterwards and I'm glad that he's made me, but I didn't want to in the first place.” **Participant 10 (GP)**

However, most practitioners reported that promoting peer support was not part of their usual practice.

Use of personal anecdotes

Practitioners were asked their perception of the effectiveness of personal anecdotes in PA promotion. Opinions and usual practice varied significantly, with many practitioners believing that personal anecdotes were helpful in building rapport with patients.

“So I use it all the time... I think that it makes us more real. I think that as a patient, when you come in and you have, like, this health professional in front of you... who is, em, robotic or very clinical, then I think they're less likely to

engage with you. So, I personally use anecdotes all the time for every part of my clinical practice.” **Participant 10 (GP)**

However, several practitioners, including those who reported regularly using personal anecdotes, noted that they must be used with caution as patients may not be able to relate to the stories shared. Some practitioners suggested that using personal anecdotes only to share vulnerabilities may be helpful, reducing the likelihood of being perceived to be ‘preachy’ **Participant 14 (Physiotherapist)**.

For some patients, it seemed that being able to identify with the stories of the healthcare practitioner helped with the motivation to change their PA behaviours, knowing when and how to use these anecdotes is key. Empathetic rapport building may facilitate this and prevent the perception of judgement.

Theme 4: Suggestions for change

As well as finding ways to follow-up patients who are trying to change their behaviour, practitioners felt several areas of PA promotion could be improved.

Behaviour change techniques

When practitioners were asked about behaviour change techniques, Motivational Interviewing (MI) was frequently mentioned. Interestingly, despite familiarity with the concept of MI, only one practitioner had been on a formal course, two had undertaken in-service training and one an online module. On discussion of MI use in practice, time was considered the greatest barrier to its effective use, particularly for patients who have never considered their PA levels and barriers. Practitioners felt that it was easier to address behaviour change with patients who were already contemplating change.

“Em, so I probably do a kind of hybrid of motivational interviewing... trying to get them to find the barriers and what do you think you could fit in... that’s actually very effective and you can do that in quite a truncated period”

Participant 5 (GP)

All practitioners felt that additional behaviour change training, such as MI, would help their practice, believing that patients have to come to their own realisation about the benefits of PA for them to adhere to behaviour change. However, it was noted that these techniques are complex skills and building competence in any skill takes sustained effort and time.

Adapting clinical practice

Several practitioners noted that when patients were not ready to engage with PA, they utilised stepping-stones. GPs discussed using musculoskeletal physiotherapy or free resources accessible at home dependant on the main exercise barrier. Physiotherapists reported using 1:1 support in gym environments or physiotherapy-led exercise classes before referring to ERS to build confidence and familiarity with the gym environment.

Working as a team

Many practitioners acknowledged struggling to keep up-to-date with local services, with several suggesting that closer working with link workers (who link patients with local services) would aid PA promotion. Additionally, all practitioners felt that closer team-working with the ERS team would aid the quality of referrals.

“it’ll be useful for me to...get feedback on how they’ve got on... in terms of patient selection” **Participant 14 (Physiotherapist)**

ERS marketing

In discussing the local ERS, it emerged that many practitioners were unclear about the support it offered, with a common misconception that the local ERS was a free service. Whilst this is the case in some areas, it was not the case with the local ERS (**see Supplementary file 2**).

Several practitioners felt that receiving information about patient success stories would help with their promotion of the service.

“I think it would just feel natural to use that... ‘this was a patient that had similar difficulties to you and they managed to engage and... you know, that’s why I believe this is the right thing to refer you on and this is the right level of support to give you.” **Participant 14 (Physiotherapist)**

Several practitioners also praised the ERS move to electronic referrals, making referral easier.

Discussion

Summary of main findings

This study identified components of the therapeutic interaction perceived to affect PA promotion and the success of ERS referrals. Firstly, practitioners’ biases influence their practice; professional roles, past experiences, and practitioners’ own PA levels all play a role.

Secondly, time pressures in the NHS were perceived as constraining support for behaviour change. It takes time to build rapport, explore concerns, and provide support.

Thirdly, experienced practitioners felt the most effective way to support patient adherence to exercise was providing external accountability. This can be done with follow-up in primary care, or through peer support, but also through ERS.

Finally, participants believed that ERS referral and attendance rates could be improved with better communication between ERS and referring practitioners as well as improved marketing strategies such as the use of patient success stories. Opportunities for training in behaviour change techniques such as MI, were felt to be limited, but practitioners believed that these techniques could be helpful.

Strengths and limitations

Participants included both GPs and physiotherapists, working across a geographical and socioeconomic spread of patient populations and covering a range of practitioner backgrounds. All reported regularly referring to the local ERS. Findings may differ, therefore, for practitioners who are less familiar with making referrals or less confident in PA promotion.

The high proportion of GPs who also had academic commitments may be viewed as a limitation as these GPs may have experiences which make them less representative of full-time GPs. The interviewer, an experienced physiotherapist, was known to many study participants and all participants were made aware of the interviewer's clinical background, this may have introduced some insider-outsider influences [15, 16]. We reflected on these potential influences over the course of the interviews and analysis.

Comparison with existing literature

Many of the findings resonate with previous research. All interviewees felt that their own PA levels had an impact on the effectiveness of their PA promotion consultations, supporting previous suggestions that active practitioners were more likely to raise PA with patients [17-20]. Many practitioners commented on the perception that patients were more inclined to adhere to recommendations made by GPs than other healthcare providers, aligning with previous reviews of social prescribing [21].

A recent study investigating behaviour change consultations suggested that behaviour change took on average 35% of a consultation [22]. This explains why a previous review of ERS suggested that if GPs had more time, they would refer more patients, consequently, electronic referrals were advised [18], matching comments made by GPs interviewed in this project and a cross-sectional study of GPs [19]. Improved collaboration between GPs and exercise providers has been reported to improve both referral rates and patients' positive experiences [18], in keeping with our findings.

Interestingly, despite the intermittent use of peer support, the literature reinforces practitioners' views that this is likely to be a positive factor in the success of sustained behaviour change, with benefits suggested by studies into weight loss [23] and PA [21].

There is considerable evidence supporting the use of MI as a useful technique for behaviour change [6, 24], but it is not routinely employed in clinical practice. Few practitioners in this study had a clear understanding of MI or other behaviour change techniques, and fewer still had undertaken formal training. Additionally, it seems that those who do utilise some form of behaviour change techniques in their practice use it primarily to support patients who are already contemplating behaviour change, rather than the primary aim of helping patients who are ambivalent about change to notice their cognitive dissonance [25].

Implications for research and practice

The NHS is under considerable resource strain in terms of workforce and finances. To cope with this, it must improve on the delivery of preventative healthcare – '*do(ing) better*' rather than '*do(ing) more*' [26]. This study suggests that there are simple and cost-effective ways that practitioners can be supported to improve the effectiveness of their PA promotion interactions. Improvements in communication between the health service and local PA services and enhancing practitioner MI skills to effectively explore patients' health behaviours are likely to improve outcomes.

Practitioners need time to effectively promote and support behaviour change, and barriers to change are greatest in the most deprived areas, where practitioner time is under greatest pressure [25]. Few participants discussed inequalities in exercise referrals based on socioeconomic status, or characteristics such as ethnicity or gender. It was, however, beyond the scope of this study to consider the challenges of supporting behaviour change in different population groups. Further research is, therefore, needed to monitor inequalities in processes and outcomes related to exercise referrals in primary care.

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Conflict of Interest: There are no conflicts of interest to declare.

Table 1: Participant characteristics

Participant ID	Profession	Age	Years in practice	Workplace deprivation status (SIMD quintile)	Own Physical Activity levels	ERS Referral frequency
P01	Physiotherapist	30-34	5-9	1	<i>"I'd say mine were quite decent"</i>	Once per month
P02	Physiotherapist	35-39	15-19	1	<i>"more than the government guidelines"</i>	Every couple of months
P03	GP	45-49	15-19	3	<i>"yeah, probably do more than that"</i>	Every few months
P04	Physiotherapist	30-34	5-9	1	<i>"variable, I think on a week to week basis I could say yes, I'm hitting those markers"</i>	Episodic – a few at a time and then none for a few weeks

P05	GP	45-49	20+	5	<i>"moderate to high level of exercise I would expect- I do a good few hours of exercise a week."</i>	A few times per year
P06	Physiotherapist	35-39	10-14	1	<i>"Yeah, I'd be hitting government guidelines."</i>	Once or twice per month
P07	GP	30-34	5-9	1	<i>"Em, yeah I'm pretty active"</i>	One a week
P08	GP	30-34	5-9	2	<i>"Variable, I would say it's probably in the in-between"</i>	Once every few weeks
P09	Physiotherapist	30-34	5-9	1	<i>"Yeah, would hit the guidelines."</i>	Once or twice per month
P10	GP	40-44	20+	5	<i>"Run x 3 a week. Maybe 1 x 10k and 2 x 7k Hot yoga x 1 a week. 1 hour. Then perhaps 2-3 walks a week... for at least an hour."</i>	Two referrals per week
P11	GP	40-44	10-14	5	<i>"I would describe [my PA level] as kind of moderate."</i>	Gets practice nurse to discuss ERS referrals

						once or twice per month
P12	GP	40-44	15-19	1	<i>"So, I think I'll be OK on the 150 minute one. Don't know about this two strength (sessions)... I don't think I'd be doing that."</i>	Once or twice per month
P13	Physiotherapist	25-29	5-9	1	<i>"Em, I would say I'm just average."</i>	4-6 per month
P14	Physiotherapist	40-44	15-19	4	<i>"I would say I would meet the higher level of the physical activity guidelines most weeks, if not all weeks."</i>	Once or twice per month

ERS: Exercise Referral Scheme; SIMD: Scottish Index of Multiple Deprivation (1 = most deprived, 5 = least deprived)

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