

CLINICAL PAPER

Management practices for urinary incontinence in women in the primary care setting: healthcare professionals' perspectives

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Abstract

Urinary incontinence (UI) is a debilitating condition that affects up to 40% of women in the UK. The National Institute for Health and Care Excellence guidelines and the National Health Service Long Term Plan recommend involving multidisciplinary teams in the management of pelvic floor disorders, and also the adoption of a clear management strategy. The aim of this study was to provide a snapshot of healthcare professionals' (HCPs') current knowledge of UI, and the provisions made for the management of the condition in primary care, where women with UI may routinely present. The authors conducted semi-structured interviews with general practitioners, practice nurses and physiotherapists. An interview guide was prepared in advance. The transcripts were analysed using the framework method of analysis in order to identify key themes associated with the management of UI. The findings suggest that it is unusual for women to present with UI as their primary condition, but rather, that this is often mentioned as a side issue. The HCPs interviewed were not aware of any clearly defined local strategies for onward management. It was further suggested that only younger women would benefit from pelvic floor rehabilitation, and there was an overarching belief that physiotherapy was only relevant for this group. Older women were referred for continence advice in the expectation that this would result in pharmaceutical treatment, and/or pads for protection rather than rehabilitation. The recent Independent Medicines and Medical Devices Safety Review highlights the need for all women presenting with UI to be initially offered conservative treatment. The results of this study suggest that important factors in providing this will be ensuring that robust local management strategies exist, and that HCPs working in primary care receive better education about appropriate treatment protocols.

Keywords: management practices, pelvic floor muscle training, physiotherapy, primary care, urinary incontinence.

Introduction

Background

Urinary incontinence (UI) is defined as the involuntary loss of urine (Haylen *et al.* 2010). This common problem has been reported to affect as many as 40% of the adult population of women in the UK (Cooper *et al.* 2015). The condition can include: stress UI (SUI), which is associated with an impact or increased abdominal/

pelvic pressure; urgency UI (UUI), which is associated with increased urgency or desire to void; and mixed UI (MUI), which is a combination of SUI and UUI (Haylen *et al.* 2010). Both embarrassing and debilitating, it can have an impact on all aspects of life, including: employment as a result of absence from the workplace (Fultz *et al.* 2005); personal relationships (Nilsson *et al.* 2009); and participation in sports and exercise (Nygaard *et al.* 2005; Menezes *et al.* 2015). Traditionally, UI has been associated with childbirth, obesity and the ageing process (Danforth *et al.* 2006), but levels of UI

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in young, nulliparous athletes are high, ranging from 23% to 41% (Carls 2007; Bø *et al.* 2011; Jácome *et al.* 2011; Alves *et al.* 2017). Indeed, UI in athletic women has been reported to be almost double that in a matched group of sedentary women (Carvalhais *et al.* 2018).

Despite the high prevalence of UI, fewer than half of those affected present to healthcare professionals (HCPs) for help (Cooper *et al.* 2015). This is potentially an even bigger issue in young athletes: 90% of those who reported symptoms via questionnaires had never mentioned the issue to either a coach or member of the medical team (Carls 2007). It has been suggested that low levels of help-seeking behaviour may be the result of a number of factors: lack of awareness regarding the condition and potential treatments; embarrassment; fear that the symptoms are too trivial to mention; and a belief that it is a normal consequence of having children or ageing (Shaw *et al.* 2001; Tinetti *et al.* 2018). The education of both women and HCPs regarding pelvic floor disorders and potential treatments has been recommended in order to encourage more women to seek help (Shaw *et al.* 2007; Chen *et al.* 2019).

There is robust evidence to support pelvic floor muscle (PFM) training (PFMT) for UI (Cacciari *et al.* 2017). A minimum of 3 months of supervised PMFT is recommended by the National Institute for Health and Care Excellence (NICE) as the first-line treatment for SUI (NICE 2019). In reality, management strategies for pelvic floor disorders can vary widely between professional disciplines, and it has been suggested that prioritizing key areas may provide a more consistent strategy: improved access to specialist services; improved collaboration between professions; increased education and research around pelvic floor dysfunction; improved public and professional awareness of pelvic health; and increased funding (Davis *et al.* 2010). This is also reflected in the National Health Service (NHS) Long Term Plan, under provision for maternity and neonatal services, where it is proposed that collaboration between primary and secondary care should be improved, and that women should have access to multidisciplinary pelvic health clinics throughout England (NHS 2019). Moreover, this plan also reflects the NICE (2019) guidelines, which state that the first-line treatment of UI should include a 3-month trial of supervised PFMT:

“Physiotherapy is by far the most cost-effective intervention for preventing and

treating mild to moderate incontinence and prolapse.” (NHS 2019, p. 49)

Therefore, it is important to explore whether current services for the management of UI in the primary care setting reflect these recommendations. Thus, the aim of the present study was to provide a snapshot of current knowledge of UI and management practice for women with this condition in primary care. Primary care settings were chosen because these are where women with UI are likely to present in the first instance.

Aims

The specific objectives of the study were to:

- (1) identify the current knowledge of HCPs regarding the management of UI in women;
- (2) identify treatment strategies and referral pathways offered to women with UI; and in particular,
- (3) explore any variation in the management of athletic women with UI in comparison to all women.

Participants and methods

Ethical approval for the study was given by the Faculty of Medicine and Health Sciences Research Ethics Committee of the University of Nottingham (Reference: 280-1904).

Recruitment

The present authors planned to recruit between six and eight local HCPs from within the Derbyshire and Nottinghamshire areas for interviews. The number of participants was intended to provide a snapshot of the key issues, but was also partly dictated by the time and resources that were available. The use of “information power” as opposed to “saturation” has been proposed by Malterud *et al.* (2016), i.e. when the aim is narrow and the sample specificity is dense, then the quality of the dialogue will be strong, so smaller sample sizes may be justified. Furthermore, when studying a subject that has previously been investigated in other studies, a smaller sample size can be justified. The HCPs selected included general practitioners (GPs), nurses and physiotherapists, since these professionals are likely to be the first point of contact for many women with UI in the community. The aim was to recruit similar numbers from each professional group.

The participants were recruited by e-mail and word of mouth from primary care centres

and physiotherapy clinics within Derbyshire and Nottinghamshire. All of them provided informed, written consent before any data were collected.

Interviews

Individual, face-to-face interviews were conducted at an appropriate time and place for the participant; for example, during breaks at their place of work. All interviews were semi-structured, and followed a topic guide that was designed for the study (Table 1). This was devised after the available literature, and anecdotal reports from patients regarding their clinical experiences, were taken into consideration. The guide covered six broad topics: the types of patient who most commonly present to these HCPs; management strategies for urinary incontinence; understanding of the policies and guidelines for the management of UI, both locally and nationally; management of UI in athletic women in particular; access to pelvic health physiotherapy; and any locally recommended referral strategies for the management of UI that the HCPs could follow. The interviews were piloted with two researchers from within the wider rehabilitation research team (F.N. and J.A.). They are

both experienced qualitative researchers within the field, and in this case, acted as study participants in order to pilot the interview schedule. They commented on the style and format of the questions, and the guide was modified accordingly. These data were not included in the findings of the study.

All the interviews were conducted by a specialist pelvic health physiotherapist researcher who had some understanding of the available local services (K.G.C.). The interviews were digitally recorded and stored in a secure, password-protected file on a dedicated web server at the University of Nottingham. Personal identifiers were removed, and the anonymized files were sent electronically to an approved transcribing service. Transcripts were checked by the researcher who had conducted the interviews (K.G.C.), and were then uploaded into a qualitative software package for line-by-line coding.

Analysis

The data were analysed thematically using the framework method (Gale *et al.* 2013). The initial coding structure was developed by three researchers (K.G.C., C.C. and J.A.), but was refined

Table 1. Topics and prompts for interviews with healthcare professionals: (UI) urinary incontinence; (NICE) National Institute for Health and Care Excellence; (PFMs) pelvic floor muscles; and (PFMT) PFM training

Topic	Prompt
Current area of practice	What type of patients do you see? Do they mention UI? Do they come to you with UI as their primary concern? If you don't see any women with UI, why do you think that might be? Do you specifically ask about these symptoms?
Current management strategy for UI	How would you manage UI if a woman presents with it? Do you examine their PFMs? Do you have time? What would you advise?
Policy and guidelines	Are you aware of any specific local or practice policies or guidelines on the management of UI? If so, are these based on NICE guidelines? If not, are you aware of the key points within the NICE guidelines regarding the management of UI? Do you feel that your patients would comply with the guidelines? What is your understanding of "supervised" PFMT? Do you think that a specialist is required for supervision?
Urinary incontinence in athletic women	Are you aware that this is a particular problem in athletes? How would you manage an athletic woman with UI? Do you feel that this population should be treated any differently to the general population? What advice would you give an athlete regarding her sport?
Pelvic health physiotherapy	Are you aware of this as a specialty? Would you distinguish pelvic health physiotherapists from continence advisors? If so, how would you decide whom to refer to?
Local referral for specialist supervision	Are you aware that not all people with pelvic floor issues have weak pelvic floors? If you wished to refer for specialist care for UI management, where would you send your patient? If there is a clear pathway, is there adequate provision?

continuously as the interviews were conducted. A qualitative data package (NVivo 12, QSR International, Melbourne, Australia) was used to systematically code each transcript. Matrices were developed within NVivo to develop a working analytical framework, and chunks of data were transferred to the matrix. Potential themes and subthemes were identified and reviewed by the researchers (K.G.C., C.C. and J.A.).

Results

Seven participants were recruited; the sample comprised of two GPs, three practice nurses and two physiotherapists. All but one physiotherapist worked solely within the primary care setting. The exception was the lead physiotherapist for an elite group of athletes who ranged from members of youth teams to professionals. Her responsibility was to oversee these athletes' medical care, and to ensure that they were directed to the correct treatment pathway for each presenting condition. This involved private healthcare in the case of the professional athletes, and NHS provision for those not yet at that level. One further physiotherapist agreed to be interviewed, but then was not available during the study period.

For each interview, the researcher (K.G.C.) attended the participant's place of work, and recorded the interview in a private office at a time that was made available between patient appointments. The interviews lasted for 16–33 min, with an average duration of 21 min. This short duration reflects the difficulty in engaging with busy professionals in primary care settings.

Themes

Five main themes with subthemes were identified from the data:

- (1) reasons why women present with UI;
- (2) beliefs regarding the management of UI in the community;
- (3) conservative management of UI in primary care;
 - (a) supervised PFMT; and
 - (b) education for HCPs regarding pelvic floor assessment and exercises;
- (4) management of athletic women with UI; and
- (5) pelvic health physiotherapy as a specialty;
 - (a) the role of pelvic health physiotherapy; and
 - (b) pelvic health physiotherapy versus continence advice.

1. Reasons why women present with urinary incontinence

The HCPs reported that women usually mentioned that they suffered from UI as an aside, having attended the clinic for another reason. As one might expect, the primary presenting condition was largely dependent on the profession of the HCP; for example, women presented to nurses when attending for cervical screening, or for pessary advice and fitting:

“It's probably, like, a few times women have talked to me when they've come in for their smear, so it's like stress incontinence, which women do think is normal. And I would then inform them that, actually, it isn't normal, although a lot of us suffer from it, and there are things that they can do.” (Nurse C)

Similarly, if they presented to GPs with symptoms of pelvic organ prolapse, they might also comment that UI is an issue:

“[. . .] Sometimes it's complicated, in that they're talking about a prolapse and incontinence at the same time.” (GP A)

At a physiotherapy consultation, it was more likely that women might refer to symptoms of UI during a musculoskeletal assessment when routine screening questions for cauda equina syndrome were asked:

“If they've come in with back pain, because of the special questions, then I think that's probably when it happens most often. [. . .] So, once I've asked about bowel or bladder, they then may say, 'Ooh, I've got a few issues since I had the children.' So yes, they would, they sometimes inadvertently mention it.” (Physiotherapist B)

All of the HCPs interviewed reported that, although they had experience of women reporting symptoms of UI, this was not a condition that women would regularly present with as their primary complaint.

Although all of the HCPs were aware of the high prevalence of UI in women, none knew of any specific screening policies for UI within their own practices. The physiotherapist who managed the healthcare of elite youth to adult sportswomen noted that only one of the athletes under her care had reported UI. She suggested that it might be useful to screen for potential pelvic floor issues as part of future annual athlete health checks. However, she also raised concerns

that this may lead to anxiety for the athlete if UI was suggested to be a significant problem:

“[. . .A]nxiety is quite prevalent too [in elite athletes], and the last thing you want to do with people that are maybe prone to [being] slightly anxious is make them paranoid about something that potentially they’re managing OK, so that’s the other flipside of it, I suppose.” (Physiotherapist A)

2. Beliefs regarding the management of urinary incontinence in the community

None of the HCPs spontaneously referred directly to the NICE (2019) guidelines, or indeed, any local or practice policy, when questioned about their routine management of UI. When prompted regarding national guidelines, and specifically, the recommendation to offer a trial of supervised PFMT of at least 3 months in duration, most were not aware of this particular guidance. It was noted by one interviewee that, as a practitioner dealing with multiple issues, it can be hard to be aware of every guideline, particularly when this is not one’s specific area of expertise:

“[. . .T]o highlight the guidelines, and really, so you know the correct pathway and the NICE guidelines, it’s really difficult in a world where you’re treating lots of different conditions to be able to keep on top of all those different groups of patients.” (Physiotherapist B)

It was suggested by some that not all women would be appropriate for PFMT, and that this approach would only be of benefit for younger women:

“[. . .P]ersonally, I don’t think that referring them for pelvic floor exercises[,] a 70- or 80-year-old lady, is the right thing to do. We’d talk about a ring pessary or something like that, so yeah, it’s the age and that context.” (GP A)

It was further suggested that younger women with no other morbidities, such as low oestrogen levels, would be the most appropriate patients for PFMT:

“The younger, fitter cohort of patients, where it’s probably not oestrogen-level-dependent, where some significant pelvic floor improvement may well give a significant improvement in symptoms.” (GP B)

None of the interviewees were aware of any structured local strategies regarding the onward

management of UI. They knew of the nurse-led continence advice service, and that pelvic health physiotherapy could be an option, but were not aware of how to access the latter. In general, their management plan was based on their own professional area of expertise. Some described educational talks and conversations with pelvic health physiotherapists as informing and shaping their practice, and referred to this when considering PFMT as a treatment option:

“We did have a physiotherapist come in once who specializes in these sorts of areas, so we had a talk. And she gave some cards out. So I guess I have some understanding of what might be the first line in terms of if you think someone has got pelvic floor issues, that the first line isn’t referral for surgery, it might be to see a physiotherapist.” (GP A)

Those who were aware of the NICE (2019) recommendations believed that, because they were not aware of any specific local recommended protocol, it was sometimes difficult for them to follow the national guidelines. One of the GPs went on to suggest that having a multidisciplinary team that could be accessed easily for all treatment—from physiotherapy rehabilitation or medical management through to surgery, if required—would be the optimum way of organizing the service:

“[. . .S]o yes, we can refer people into the urogynae clinics, but there isn’t that urogynae–physio pathway accessibly easily[. . .] It seems to be, yes, OK, at this point, I’ve got to go, ‘I think it can be managed in the community, let’s get you seen by incontinence nurses,’ or ‘No, I’ve got to get you seen by a urogynaecologist.’ And there isn’t that initial pathway. And I hate to use the one-stop shop approach, but a pathway which goes, ‘This is the way in, they’ll be seen by an expert. We can arrange pelvic floor exercises, we can do bladder training. . .’ We can then go, ‘Yes, that’s worked,’ or ‘No, it hasn’t, let’s get you onto Bulkamid or whatever.’ There isn’t that one-path entry, which would be really useful, that’d be good.” (GP B)

The same GP went on to describe how, in the absence of a clearly defined structure for appropriate referral locally, he often chose to manage the majority of cases himself without referring onward to specialist care. It was again also believed that PFMT was only appropriate for the management of UI in younger women, and in

the majority of patients, the most appropriate route would be a trial of anticholinergics or hormone replacement therapy.

The nurses who were interviewed believed that they were in a position where women were more likely to mention symptoms of UI, often while attending for other intimate procedures, such as pessary fitting or cervical screening:

“I think they just feel a bit more comfortable with the nurse rather than the doctor as well, and obviously, ‘cause we’re seeing them regularly—we see them every sort of 3 to 6 months—they sort of get a bit of relationship with you, so they probably feel a bit more comfortable telling you things.” (Nurse A)

However, none of the nurses had the autonomy to refer women directly for specialist treatment, and had to refer their patients back to the GP for management instead. This then involved making another appointment, and perhaps, a further examination for the woman to negotiate when attempting to seek help for a sensitive issue. When asked specifically about local policies or guidelines on how these women might be managed, the nurses said that they had no specific pathway to manage the issues:

“No, if I’m honest. . . I see them here—they mention it as an issue, and I give them the encouragement to go and get it looked into.” (Nurse B)

The concern was raised that, having made the effort to come forward, a patient could then be lost within the system:

“[. . .]he chances are, they [the doctors] don’t follow it up, and I don’t check that they follow it up. So, I have the discussion with them, and make out that, actually, it isn’t normal and we shouldn’t be suffering like this as women, and that you can do something about it. . . I wouldn’t arrange any follow-up, so [. . .] I wouldn’t remember potentially.” (Nurse C)

The physiotherapists were aware that pelvic health physiotherapy could be beneficial in the treatment of UI, but were unsure where a specialist pelvic health service might be accessed locally.

The consensus from the GPs and nurses was that they believed that they needed more information regarding local services for the conservative management of UI. While they knew about the nurse-led continence advice service, they

were not aware of any specialist physiotherapy services that could be accessed via the NHS.

Those HCPs who had taken part in practice information sessions about pelvic health physiotherapy run by specialist physiotherapists were more aware of the extent to which a conservative approach to treating UI could be effective. The GPs reported managing UI with the therapies that were easily available to them (e.g. antimuscarinics or topical oestrogen, where appropriate), and remarked that PFMT might be a treatment option for some. However, they would only refer to a specialist for PFMT if they believed that the women were unsure of how to do these exercises:

“No, I think, if they need pelvic floor exercises and they give the impression that they’re not actually confident to do that themselves, then I would refer them.” (GP A)

In summary, although most of the HCPs knew that women with UI could potentially be referred for continence advice or for pelvic health physiotherapy, they were not always sure where they might be able to access specialist services in general and physiotherapy in particular. None had any awareness of formal pathways for the management of UI either within their own practices or, indeed, in the local area.

3. Conservative management of urinary incontinence in primary care

(a) *“Supervised” pelvic floor muscle training.* Given that the NICE (2019) guidelines recommend at least 3 months of supervised PFMT, the interviewees were asked what they understood by the term “supervised”. This was in order to ascertain whether they believed that this was something that required specialist referral, or whether they felt that managing PFMT was within their own scope of practice. All believed that this would involve teaching the exercises and monitoring progress rather than just providing information and/or a leaflet. The majority of participants did not feel that they had the knowledge or expertise to be able to assess or train women to perform their pelvic floor exercises adequately. There was concern that they could potentially be causing harm by prescribing a woman a programme of exercises:

“It’s all right sort of handing out a leaflet, but you might not be doing the exercises correctly and things. I don’t know if that might cause more harm than good if you. . . I mean, it

certainly wouldn't work, would it, I mean, if you're doing the wrong exercises?" (Nurse A)

One GP felt that, although he was comfortable to suggest PFMT, he was not confident to be able to assess the muscle function:

"No, I don't feel that confident. So, probably, I would look for prolapse. I will talk to them about whether coughing or straining will give rise to incontinence. And if they're not sure, I'll ask them if they're OK to try that, and just see if that results in [incontinence]. But in terms of an assessment of the pelvic floor, I'm not entirely sure what that means." (GP A)

Nor did he feel qualified to advise women about how to contract these muscles:

"OK, I have a concept of pelvic floor exercises, but being a male, I don't really understand what it means. I don't have a— it's a little bit like what would it be like to give birth? I don't know. Painful, distressing! So, you know, trying to explain to someone how to do pelvic floor exercises as a man just doesn't seem a sensible thing to do. So, I will ask about it: 'Are you doing pelvic floor exercises?' And ask them what they mean by that, but that's probably as far as it will go." (GP A)

Although the physiotherapists were more comfortable with basic advice regarding muscle recruitment and rehabilitation, they were unsure about when patients might require more specialist input:

"I think, because it's such a specialized area, I think the tendency might be to just back away completely from it. And there may be a lot more that we could do, but it's knowing how, knowing how far you should go with those patients, and how far, you know, and when it's appropriate. No, you need to be seen by a specialist physio." (Physiotherapist B)

(b) Education for HCPs regarding pelvic floor assessment and exercises. The majority of those interviewed expressed an interest in learning more about PFM assessment and training, and suggested that it would be appropriate to be able to advise patients, even if only to start their treatment prior to specialist referral. They felt that their current lack of confidence regarding their knowledge would prevent them from doing so. Opinions regarding what form this education

should take varied between the professions. One GP expressed a need to have more patient-centred information that he could pass on:

"But maybe to have some information about how you do it, or access to YouTube videos or whatever explaining it, that would be quite useful." (GP A)

However, the nurses all expressed an interest in learning how to assess the muscles and teach their patients how to contract these. Nurses believed that, with the correct training, they were in a prime position to be able to do this because women who mention having UI often do so during an intimate examination. Therefore, it was felt that any potential barrier had already been overcome:

"I'd be interested in . . . yeah, definitely. Because very often it's quite a personal thing coming for a smear, and you're chatting about things down there anyway . . . to assess the pelvic floor. Yeah, yeah, I'd like to know how to do that." (Nurse B)

"So, I think it is important that we raise awareness, and I would like more training or education in it really." (Nurse C)

The physiotherapists were more confident about where they might access reliable information:

"I'm always quite careful in terms of the information I give them, so I'd go to the special interest group [POGP] and get that because I know that that's going to be the latest kind of . . . because thinking changes [. . .], doesn't it?" (Physiotherapist B)

Overall, the consensus was that it was appropriate to refer women with UI to a pelvic health specialist, but that this was not easy to do. Therefore, more training or access to reliable information would be helpful. The GPs suggested that this could be in the form of self-help videos on YouTube, or in the case of the nurses, access to courses to learn more about basic PFM assessment in order to ensure that patients could safely embark on an exercise programme.

4. Management of athletic women with urinary incontinence

The interviewees were asked whether they knew that there was a higher prevalence of UI in athletic women than in their sedentary counterparts since this was a particular focus within the present study. There was a mixed reaction to this, and some participants expressed surprise:

“You’d think the opposite. I mean, they’re fit they’re healthy, they’re younger, um . . . you just think the opposite, don’t you?” (Nurse A)

However, others suggested that, when one takes into account the extra stress that running and other high-impact activities might have on the PFMs, then the increased prevalence of UI could be related to that:

“Does it surprise? I suppose the answer is, ‘No,’ because, inevitably, it’s leading to raised abdominal pressure. Hence, someone who, not doing any exercise, can just about cope, the moment they try and do something, they will have that issue.” (GP B)

When asked if they thought that athletic women should alter their sporting activity in order to manage their UI, the HCPs all felt strongly that these individuals should be encouraged to continue with their sport despite the symptoms. It was believed that taking part in sport had multiple health benefits that would outweigh the risk of harm to the PFMs:

“My view on exercise is that, if I don’t know if it’s doing any harm, then I would normally say, ‘Carry on exercising, and we’ll try and find out how to manage your issue.’” (GP A)

Where an elite athlete was experiencing UI, it was considered that continuing training was particularly important because of the detrimental effects of pausing training on performance and mental well-being:

“Absolutely, yes, absolutely! I would be very much encouraging them to continue with it and not to stop it. But I think, based on those quite serious systems that could be catastrophic to their training and to their sport, then I’d be much more proactive in terms of, you know, we need to be much more responsive to it and get something done.” (Physiotherapist A)

This was also reflected by those who treated recreational athletes:

“They’d rather put up with the symptoms than miss out on a couple of weeks training, basically.” (Physiotherapist B)

In order to ensure that the women’s urinary symptoms did not preclude them from their athletic activities, it was strongly suggested that treatment should be more proactive in this group than it might be for sedentary women:

“I think, in an athlete, I would tend to be more – aggressive is the word – more proactive in getting them help.” (GP A)

5. Pelvic health physiotherapy as a specialty

The participants were asked what knowledge they had about pelvic health as a physiotherapy specialty, and which patients they would choose to refer to physiotherapy, as opposed to continence advice.

(a) The role of pelvic health physiotherapy.

Although one interviewee said that she had not been aware of pelvic health physiotherapy at all prior to the interview, the majority of HCPs had come across the specialty or had worked with those involved professionally. Because physiotherapists are traditionally involved in muscle rehabilitation, trunk strengthening and control, the consensus was that it was expected that they would work in this field:

“[. . .] I would say [it was] to do with the pelvic floor, core strengthening, so, yeah, I can see where it would have a part.” (Nurse B)

However, it was noted that there may only be small numbers of physiotherapists working in this area:

“[. . .] It is quite a niche area, I think, as far as I’m aware.” (Nurse A)

The comments suggested that physiotherapy would be more relevant for younger and athletic women with UI than for sedentary patients:

“I guess, if it was a sports-related thing, I would probably [be] more likely to get to a physio than I would do if it was a non-sport-related one.” (GP A)

(b) Pelvic health physiotherapy versus continence advice.

All the HCPs interviewed were aware of nurse-led continence advice clinics, and believed that this was a different type of service to pelvic health physiotherapy. The age of the patient was a significant factor when deciding where to refer women. The suggestion was that continence advice was generally for those for whom rehabilitation was inappropriate, and referral was for pharmaceutical management or even for protective pads alone. It should be noted that, for most interviewees, those who were aged ≥ 50 years were referred to as being older women, and therefore, were less likely to need proactive treatment:

“Well, just from my experience with the continence nurse, different information. So, sometimes it can be hormonal treatment, which she can initiate, and then also [incontinence] products to use . . . and then [physiotherapy] working on those core muscles.” (Nurse B)

“Yeah, for older people, and it would be—we would refer to a continence nurse for that reason because then they can get pads on the NHS, can’t they? But that would be older people rather than younger women . . . so, if it’s a younger female, I would say physio probably . . . helping to improve pelvic floor to reduce risk of incontinence. Whereas the incontinence nurse, I’d say, is when you’re just accepting that you’re incontinent and we need to manage it.” (Nurse C)

Thus, the other suggestions that PFMT was only relevant for younger women were reiterated.

Discussion

Although UI is a common condition, the participants reported that it was rare for women to present specifically for this issue alone. Instead, patients usually mentioned their UI as an aside when attending an appointment for another condition. This reflects the findings of a previous study that found that patients may perceive UI to be too trivial to report (Shaw *et al.* 2001). It has been suggested that a reluctance to seek help may be a result of embarrassment, or because it is not perceived to be a medical issue and women will not seek help for issues that they perceive as normal (Tinetti *et al.* 2018). Although there have been recommendations that annual screening for UI should be performed (O’Reilly *et al.* 2018), this was not reported to be usual practice by any of the HCPs interviewed.

The NICE (2019) guidelines on the conservative management of UI recommend supervised PFMT for a minimum of 3 months prior to embarking on other treatment strategies. Within the group of HCPs interviewed in the present study, most were not aware of the specifics of these guidelines, and those who were well-informed were unsure of where they might access pelvic health physiotherapy within the locality. None reported any knowledge of local protocols for the management of UI, but all wanted more information regarding both local services and in-house management strategies. Interestingly, this region currently does have the facility both for GP referral and self-referral to pelvic health physiotherapy services, although the interviewees did

not seem to be aware of this. It is not known why this might be, but again, this suggests that better education and/or advertising is required. Future investigations should investigate which primary care centres actually use these existing sites, and why some HCPs are aware of such facilities when others are clearly not. Furthermore, it would be important to explore the experiences of women with UI, and investigate whether they have attempted to seek treatment and what their thoughts about this might have been.

All the HCPs agreed that “supervised” PFMT should mean specialist assessment, prescription of exercises and monitoring of the programme, as opposed to providing generic leaflets or advice sheets. Other authors have documented a lack of confidence among GPs regarding both their ability to teach PFMT and the likelihood of those exercises leading to successful treatment (Grealish & O’Dowd 1998). Similarly, none of the interviewees in the present study felt confident about either assessing or monitoring a programme of PFMT. However, all the nurses interviewed expressed an interest in acquiring further knowledge. Furthermore, since they were already performing intimate examinations, the nurses believed that they would be in a prime position to initiate a PFMT programme, even if this was just to initiate treatment prior to specialist referral. Others have previously argued that practice nurses should be involved in the provision of PFMT (Shaw *et al.* 2007; Waterfield 2011; Child *et al.* 2013). However, in the wider context, there may be barriers to such a scheme because of the limited time available in the primary care setting, as has been found when exploring similar provision of PFMT via midwifery-led care (Salmon *et al.* 2020).

There was a mixed reaction to the high prevalence rates of UI in athletic women. Some participants felt that this was to be expected given the high-impact nature of some athletic activities, while others were surprised that these women should suffer from a condition that they more often associated with age and poor health. All agreed that it was a priority for athletic women to continue with their sport as the benefits of exercise would outweigh any risks to their pelvic floors. They further believed that these women should be a higher priority for help in order that they could continue with exercise. It was further suggested that younger athletic women were more likely to benefit from PFMT programmes, and that physiotherapists would be better placed to provide this.

When questioned regarding their understanding of pelvic health physiotherapy, most were aware of this as a specialty, but did not know where this service might be available locally. However, they were all aware of the local nurse-led continence advice service, and knew how to refer to this. It was surprising that the general belief was that this service would only treat pharmaceutically, provide protective pads and teach management strategies rather than offering PFMT as the first-line treatment. In reality, this is not the case. It was further suggested that only older women should be referred to the continence advice service since they were unlikely to improve, and therefore, should learn to manage the condition. This highlights two misconceptions: first, that PFMT is only suitable for younger women and that physiotherapy is the only route to provide this service; and secondly, that continence advisors only manage UI with medication or with protection, such as pads. This raises the potential question, are “younger” women being referred directly to secondary care for surgery or bulking injections without being offered PFMT at all?

The recent review chaired by Baroness Cumberlege, which included an investigation into the use of mesh implants for the treatment of SUI and pelvic organ prolapse, has underlined that women must be offered conservative treatment for UI prior to being referred for surgery (Cumberlege 2020). This only serves to emphasize the importance of offering all women supervised PFMT as the first-line treatment of UI. This was first recommended in the 2006 NICE guideline (NCCWCH 2006), and confirmed in the later revisions (NCCWCH 2013; NICE 2019). Furthermore, the NHS Long Term Plan proposes that women should have “access to multidisciplinary pelvic health clinics and pathways across England via referral” (NHS 2019, p. 49).

Despite these recommendations, the present findings confirm those of previous research, which found that the strategy for implementing the management of UI in the primary care setting appears to be fragmented and variable (Davis *et al.* 2010).

Improvements in the conservative management of UI require not only clear guidelines and planning, but also the capacity for that policy to be applied within primary care. Enhancing the care of women with UI would require consultation between the relevant professional bodies to establish the most practical ways in which to implement the guidelines and NHS policy.

Physiotherapy as a profession should be integral to this strategic planning. The recent collaboration between the Chartered Society of Physiotherapy, and in particular, POGP and the Royal College of Midwives to improve access to women’s health specialists in the perinatal period should act as a template for future consultations. There is a need to establish clear pathways that enable women to be referred for specialist conservative management. Furthermore, it is vital to establish expert multidisciplinary teams of specialist physiotherapists, continence advisors and urogynaecologists to facilitate the referral of patients and the appropriate management of UI by primary care practitioners. Although this suggestion was previously referred to in the NHS Long Term Plan, this was specifically with regard to women in the child-bearing year (NHS 2019). Women of all ages should be able to access such a service.

Limitations of the study

The potential limitations of the present study are that it was restricted to a small locality and a small group. Nevertheless, the findings provide a snapshot of current practice in primary care with regard to the management of UI, and moreover, confirm those of previous research.

A single researcher who had a good knowledge of local services, such as pelvic health physiotherapy and the nurse-led continence advice service, conducted all the interviews (K.G.C.). This was a potential limitation, but it could also be argued that it was a strength. A good working knowledge of the existing referral pathways could ensure that the right questions were asked to reveal whether the interviewees were aware of such services, and the available methods of accessing these.

It might have been interesting to include other professions (e.g. midwives or health visitors) within the sample in order to gain an insight into any variability in management strategies, particularly around the perinatal period. However, this has already been done in a very recent comprehensive qualitative investigation into the challenges and opportunities faced by midwives, other HCPs, and indeed, women themselves in the antenatal period (Terry *et al.* 2020). This showed that there is lack of confidence about teaching PFMT and managing UI within the antenatal care pathway. It also underlined that policies and guidelines were inconsistent at both the local and national levels (Terry *et al.* 2020).

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Author contributions

K.G.C. and A.D. conceived the protocol, and were involved in all parts of the analysis and the writing of the manuscript.

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Ethics approval and consent to participate

This study has been reviewed and approved by the University of Nottingham's Faculty of Medicine and Health Sciences Research Ethics Committee (ethics reference number: 280-1904). All the participants provided written, informed consent prior to any data collection.

Consent for publication

All the participants provided written, informed consent for the use of anonymized direct quotations from the interviews in written reports prior to taking part.

Conflict of interest

The authors declare that they have no competing interests. K.G.C. is the current clinical editor of the *Journal of Pelvic, Obstetric and Gynaecological Physiotherapy*, and in order to maintain full anonymity during both parts of the double-blind peer review process, all editorial decisions and functions were carried out by Biljana Kennaway, the current assistant editor.

References

Alves J. O., da Luz S. T., Brandão S., *et al.* (2017) Urinary incontinence in physically active young women: prevalence and related factors. *International Journal of Sports Medicine* **38** (12), 937–941.

- Bø K., Bratland-Sanda S. & Sundgot-Borgen J. (2011) Urinary incontinence among group fitness instructors including yoga and Pilates teachers. *Neurourology and Urodynamics* **30** (3), 370–373.
- Carls C. (2007) The prevalence of stress urinary incontinence in high school and college-age female athletes in the Midwest: implications for education and prevention. *Urologic Nursing* **27** (1), 21–24, 39.
- Carvalho A., Natal Jorge R. & Bø K. (2018) Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *British Journal of Sports Medicine* **52** (24), 1586–1590.
- Chen C. C. G., Cox J. T., Yuan C., Thomaier L. & Dutta S. (2019) Knowledge of pelvic floor disorders in women seeking primary care: a cross-sectional study. *BMC Family Practice* **20** (1): 70. DOI: 10.1186/s12875-019-0958-z.
- Child S., Bateman A., Shuttleworth J., Gericke C. & Freeman R. (2013) Can primary care nurse administered pelvic floor muscle training (PFMT) be implemented for the prevention and treatment of urinary incontinence? A study protocol. *F1000Research* **2**: 47. DOI: 10.12688/f1000research.2-47.v1.
- Cooper J., Annappa M., Quigley A., *et al.* (2015) Prevalence of female urinary incontinence and its impact on quality of life in a cluster population in the United Kingdom (UK): a community survey. *Primary Health Care Research and Development* **16** (4), 377–382.
- Cumberlege J. (2020) *First Do No Harm – The Report of the Independent Medicines and Medical Devices Safety Review*. [WWW document.] URL https://www.immndsreview.org.uk/downloads/IMMDSReview_Web.pdf
- Danforth K. N., Townsend M. K., Lifford K., *et al.* (2006) Risk factors for urinary incontinence among middle-aged women. *American Journal of Obstetrics and Gynecology* **194** (2), 339–345.
- Davis K. J., Kumar D. & Wake M. C. (2010) Pelvic floor dysfunction: a scoping study exploring current service provision in the UK, interprofessional collaboration and future management priorities. *International Journal of Clinical Practice* **64** (12), 1661–1670.
- Dumoulin C., Cacciari L. P. & Hay-Smith E. J. C. (2018) Pelvic floor muscle training versus no treatment, or inactive control treatments, for urinary incontinence in women. *Cochrane Database of Systematic Reviews*, Issue 10. Art. No.: CD005654. DOI: 10.1002/14651858.CD005654.pub4.
- Fultz N., Girts T., Kinchen K., *et al.* (2005) Prevalence, management and impact of urinary incontinence in the workplace. *Occupational Medicine* **55** (2), 552–557.
- Gale N. K., Heath G., Cameron E., Rashid S. & Redwood S. (2013) Using the Framework Method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology* **13**: 117. DOI: 10.1186/1471-2288-13-117.
- Grealish M. & O'Dowd T. C. (1998) General practitioners and women with urinary incontinence. *British Journal of General Practice* **48** (427), 975–977.
- Haylen B. T., de Ridder D., Freeman R. M., *et al.* (2010) An International Urogynecological Association (IUGA)/International Continence Society (ICS) joint report on the terminology for female pelvic floor dysfunction. *International Urogynecology Journal* **21** (1), 5–26.

- Jácome C., Oliveira D., Marques A. & Sá-Couto P. (2011) Prevalence and impact of urinary incontinence among female athletes. *International Journal of Gynaecology and Obstetrics* **114** (1), 60–63.
- Malterud K., Siersma V. D. & Guassora A. D. (2016) Sample size in qualitative interview studies: guided by information power. *Qualitative Health Research* **26** (13), 1753–1760.
- Menezes E. C., Virtuoso J. F. & Mazo G. Z. (2015) Mulheres idosas com incontinência urinária apresentam menor nível de atividade física habitual. [Older women with urinary incontinence present less physical activity level than usual.] *Revista Brasileira de Cineantropometria e Desempenho Humano* **17** (5), 612–620. [In Portuguese.]
- National Collaborating Centre for Women's and Children's Health (NCCWCH) (2006) *Urinary Incontinence: The Management of Urinary Incontinence in Women*. NICE Clinical Guideline 40. RCOG Press, London.
- National Collaborating Centre for Women's and Children's Health (NCCWCH) (2013) *Urinary Incontinence in Women: The Management of Urinary Incontinence in Women*. NICE Clinical Guideline 171. Royal College of Obstetricians and Gynaecologists, London.
- National Health Service (NHS) (2019) *The NHS Long Term Plan*. [WWW document.] URL <https://www.longtermplan.nhs.uk/>
- National Institute for Health and Care Excellence (NICE) (2019) *Urinary Incontinence and Pelvic Organ Prolapse in Women: Management*. NICE Clinical Guideline 123. National Institute for Health and Care Excellence, London.
- Nilsson M., Lalos A. & Lalos O. (2009) The impact of female urinary incontinence and urgency on quality of life and partner relationship. *Neurourology and Urodynamics* **28** (8), 976–981.
- Nygaard I., Girts T., Fultz N. H., *et al.* (2005) Is urinary incontinence a barrier to exercise in women? *Obstetrics and Gynecology* **106** (2), 307–314.
- O'Reilly N., Nelson H. D., Conry J. M., *et al.* (2018) Screening for urinary incontinence in women: a recommendation from the Women's Preventive Services Initiative. *Annals of Internal Medicine* **169** (5), 320–328.
- Salmon V. E., Hay-Smith E. J. C., Jarvie R., *et al.* (2020) Implementing pelvic floor muscle training in women's childbearing years: a critical interpretive synthesis of individual, professional, and service issues. *Neurourology and Urodynamics* **39** (2), 863–870.
- Shaw C., Tansey R., Jackson C., Hyde C. & Allan R. (2001) Barriers to help seeking in people with urinary symptoms. *Family Practice* **18** (1), 48–52.
- Shaw C., Atwell C., Wood F., Brittain K. & Williams K. (2007) A qualitative study of the assessment and treatment of incontinence in primary care. *Family Practice* **24** (5), 461–467.
- Terry R., Jarvie R., Hay-Smith J., *et al.* (2020) "Are you doing your pelvic floor?" An ethnographic exploration of the interaction between women and midwives about pelvic floor muscle exercises (PFME) during pregnancy. *Midwifery* **83**: 102647. DOI: 10.1016/j.midw.2020.102647.
- Tinetti A., Weir N., Tangyotkajohn U., *et al.* (2018) Help-seeking behaviour for pelvic floor dysfunction in women over 55: drivers and barriers. *International Urogynecology Journal* **29** (11), 1645–1653.
- Waterfield A. E. (2011) *A Community Study of Pelvic Floor Muscle Function in Women*. PhD Thesis, Peninsula Medical School, Universities of Exeter and Plymouth, Exeter and Plymouth.

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