

Analysis

Pelvic floor exercises and female stress urinary incontinence

INTRODUCTION

It is quite staggering that stress urinary incontinence (SUI), a condition that affects about 1 in 3 women, and causes physical, emotional, and social distress, does not grab more attention. SUI is the most prevalent incontinence problem; others include urge, mixed (stress and urge) urinary incontinence, and/or faecal incontinence, as well as pelvic floor dysfunction, such as prolapse. Sufferers are often reluctant to mention their incontinence-related symptoms to clinicians.¹ Furthermore, when women do present to services with these symptoms, they may feel 'brushed aside'.²

Broadly speaking, SUI is not a diagnostic challenge. SUI has a straightforward definition of involuntary leakage of urine on physical effort or exercise, coughing, sneezing, or lifting. Sufferers (with normal cognition) will be able to notice and describe their urinary loss. This is important as subjective reporting is still regarded as the best way to diagnose and evaluate interventions around SUI.³ Hence, we cannot purport that SUI is an easily missed condition, that is, one with myriad or vague symptoms or signs. Therefore, to understand why SUI is often hidden, we need to explore further. Why are women concealing their SUI symptoms? Are healthcare professionals reluctant to explore or respond to symptoms because of feeling under-skilled in giving advice or lacking access to specialist services?

PATIENT PERSPECTIVE

From their teenage years or earlier, women are accustomed to containing their monthly blood loss. Menstruation begins at a stage of life when teenage self-identity is forming, self-consciousness is peaking, and self-presentation is paramount. Therefore, at a young age and on a regular basis, women get used to dealing with blood loss; leakage that if mismanaged could publicly be embarrassing. Could it be that some women who experience intermittent urine leakage (rather than blood loss) deem this as

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merely inconsequential — especially if SUI occurs as incontinence on laughing or on high-impact sport? Alternatively, do women simply tolerate SUI symptoms because of a family history of SUI (there is a complex, poorly understood genetic predisposition to incontinence) or a perception that effective treatments are non-existent, and hence opt for containment products? Next to sanitary towels, supermarket shelves now display a growing range of incontinence pads. With busy lifestyles, an acceptance of SUI, and a lack of knowledge about how to improve symptoms, it is perhaps an easy option to discreetly buy and regularly use incontinence pads. Pad usage has direct financial costs for patients and indirect costs of physical and leisure activity curtailment, which may have further implications for patient wellbeing, as well as contributing to global plastic consumption.

MULTIFACTORIAL CAUSATION

Trying to understand the cause of SUI is helpful. Research has found that, *'There appears to be much redundancy built onto the urinary continence mechanism in women.'*³ Defects, in one aspect of the body that ensures continence control, can be made up by other mechanisms, for example, a functioning striated urethral sphincter can compensate for proximal urethral damage. Therefore, insults (either a single event such as a vaginal delivery or recurrent events such as repeated Valsalva manoeuvres, for example, chronic coughing, constipation, and so on, or high BMI) may be needed, before symptoms of SUI occur. This multifactorial causation of SUI may explain why SUI prevalence rises around the childbearing years (about 20%

of 18–30-year-old women report leakage) and then again in the over-70s.

OPPORTUNITIES FOR HEALTHCARE INVENTION

The first experience of involuntary leakage for many women is during pregnancy or after labour, which is understandable as childbirth is a strong predictor for developing SUI. Frequent antenatal contact between healthcare professionals and pregnant women presents opportunities for enquiring about continence and education around pelvic floor muscle training (PFMT) (Table 1). There are myriad benefits of such action, for example, prevention of SUI and prolapse in late pregnancy and postpartum, improving sexual function, and labour and delivery outcomes.⁴ It is estimated that about 1 in 4 first-time mums who would have become incontinent would benefit postnatally if they did PFMT during pregnancy, thereby minimising or preventing pelvic floor dysfunction.⁴ Furthermore, group-based PFMT for all women has shown to be more cost-effective than postnatal training for women with urinary incontinence.⁵ Review evidence also confirms the effectiveness of PFMT for improving established SUI.⁶

New National Institute for Health and Care Excellence (NICE) guidance⁷ advises that women of all ages should be encouraged to do PFMT throughout their lives. Primary care teams (for example, GPs, advanced nurse practitioners, and primary care nurses) in several ways can support this intervention. First, they can discuss pelvic floor dysfunction at each maternity-related contact. Second, they can provide older women with information on pelvic floor dysfunction as part of general health assessments. Third, they can raise the topic when women ask for advice about perimenopause or menopause. Moreover, the NICE guidance goes further by recommending teaching of *'young women (between 12 and 17) in education settings about pelvic floor anatomy, pelvic*

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Table 1. Pelvic floor muscle training

1. Rationale to give to patients⁸

- PFMT is very effective for helping stress incontinence (no need to strengthen tummy muscles)
- Most women can learn how to do them
- With practice, your pelvic floor muscles may contract automatically when you need them to stop leakage
- After initial strengthening training, you can move to maintenance exercises

2. Instructions for learning the correct pelvic floor muscle contraction⁸

- Your pelvic floor muscles go from the base of spine to the front pubic bone and act as a sling to support your pelvic organs
- To contract these muscles you need to squeeze your vagina and then lift up inside
- Hold the squeeze and lift for as long as you can, count in seconds, then let go
- Do not hold your breath and do not squeeze your buttocks
- Stopping your urine mid-flow is not advised for pelvic floor training, though this can be helpful to check you have learnt how to contract your pelvic floor

3. Clinical examination of pelvic floor contraction⁹

- Obtain consent to perform a vaginal examination and offer chaperone
- Assess evidence of pelvic organ prolapse or pelvic mass
- Assess pelvic floor strength by asking patient to contract pelvic floor muscles during digital vaginal examination
- Assess using modified Oxford grading scheme⁹

| Grading | Muscle response |
|---------|-----------------|
| 0 | Nil |
| 1 | Flicker |
| 2 | Weak |
| 3 | Moderate |
| 4 | Good with lift |
| 5 | Strong |

4. Pelvic floor exercises

- Ask how many squeeze, lift, and holds a woman can do in a row and for how long
- She may need to build up this strength and hold time, aiming to reach at least two sets of eight maximal contractions with 8-second hold two or three times a day
- It may take 12–16 weeks of exercising to see an improvement in symptoms

Maintenance: Two sets of eight maximal contractions with 8-second hold daily or at least 3 days per week

5. The Knack (or counterbracing) technique¹⁰

- Women can also practise performing a single 'quick' squeeze and lift for use before and during any activities, for example, coughing, sneezing, or lifting, that triggers their stress urinary incontinence (SUI)

6. Online resource for healthcare professionals and patients

- The Continence Foundation of Australia (<https://www.continence.org.au/>) has a useful YouTube clip: https://www.youtube.com/watch?v=q0_JAoaM6pU&list=PLdpC0SZfU20j72fBJBpvBRHw_92PBvYQb

PFMT = pelvic floor muscle training.

sense of stigma, shame, and guilt in sufferers who have lost urinary control.¹ These factors, as well as supposing that incontinence is not considered an illness but a normal part of ageing, have been found to add doubt to patients' decisions around seeking medical help.¹ Women have made it clear that they do not feel able to raise the topic in consultations, despite wanting to talk, and are hugely relieved when healthcare professionals proactively do so.¹¹ Hence, asking women, sensitively (with an appreciation that there may be cultural sensitivities) and specifically, about SUI symptoms would help lessen taboo, open the door to symptom discussions, and allow for facilitation of patient education, within environments that strive for understanding and learning.^{7,11}

PELVIC FLOOR MUSCLE TRAINING

Talking does help, though giving advice on conservative management needs to be constructive with professionals who feel confident and knowledgeable in this area.¹² Communication, using principles of shared decision making and change management, is also likely to be beneficial in enhancing engagement and adherence. Research has found that women find it difficult to understand and perform PFMT;¹³ however, for those who initially find it difficult, simple verbal instruction can help most women (84%) to contract their pelvic floor muscles (Table 1).⁸ We can be confident that we have evidence that PFMT training is effective for SUI and that women (with practice) can develop automatic contractions of their pelvic floor muscles at times when leakage may occur. In addition, women can learn to consciously perform a counter-brace contraction (the Knack technique) before activities that are known to precipitate urine loss (Table 1).¹⁰ If, after 12 weeks of pelvic floor muscle training, there is no indication of symptom improvement, or symptoms worsen, then referral to a community physiotherapist or community continence advisory services, depending on local provision, is indicated. From the involvement of these services, decisions can be made on the need for referral to secondary care specialists.⁷

floor muscle exercises and how to prevent pelvic floor dysfunction' and that women should be advised 'that physical activity and a healthy diet can help prevent pelvic floor dysfunction'.⁷ In addition, during consultations for contraception, cervical screening, and gynaecological symptoms, there are windows of opportunities for all healthcare professionals to teach and assess pelvic floor muscle contractions and give education on PFMT (Table 1 provides details for education and PFMT instructions including exercise frequency).

IMPACT OF SYMPTOMS

Downplaying incontinence symptoms has emotional roots. Research has found a culture of secrecy that fosters a profound

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So the message is perhaps more straightforward than we think. We need to talk, listen, and empathise with women who are living with incontinence. We need to build on our existing knowledge and hone our skills to offer PFMT advice. We need to find ways and time to put this into general practice consultations with women. Then we will ensure that we are getting a grip on this important issue: female stress urinary incontinence.

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