Women’s Health Physiotherapy and Rural Practice

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(as awarded by the Australian College of Physiotherapists in 2010)

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Learning objectives

- Scope of practice for WH physio
- Scope of practice for generalist physio, who and when to refer
- Clinical practice guidelines pertinent to WH physio
- Screening tools available
- Mentoring support

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What does WH physio do?

We cover

- continence – bladder and bowel
- ante and post natal MSK care
- pelvic pain
- breast health
- post cancer support, exercise, including lymphoedema care
- exercise throughout the lifespan of women
- bone health
- sexual health

Men's health

Children's continence

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Today's content

- Overview of Pelvic Floor Dysfunctions
  - Urinary incontinence
  - Pelvic organ prolapse
  - Faecal incontinence
  - Persistent pelvic pain
- Primary care management
- Screening tools and clinical practice guidelines
- Not covered today –
  - Pregnancy, other than guidelines
  - Men's or children's continence

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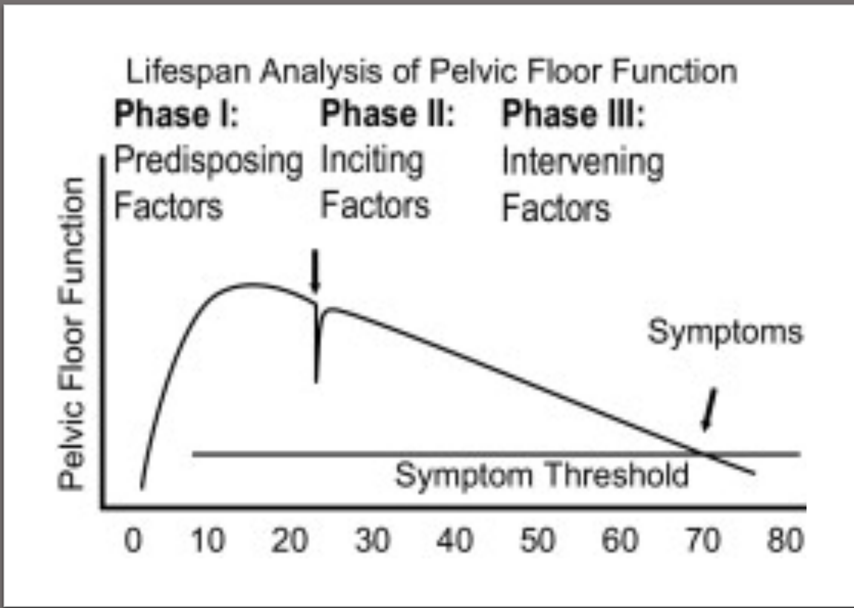

DeLancey 'Lifespan model for pelvic floor dysfunctions'

-Predisposing factors (Growth and development)

-Inciting factors (Pregnancy and Childbirth)

-Intervening factors (Age related changes)

Delancey J, Low L, Miller J, Patel D, Tumbarello J 2008 'Graphic Integration Of Causal Factors Of Pelvic Floor Dysfunction: An Integrated Lifespan Model' *American Journal Of Obstetric And Gynecology* 199 (6) 610e1-610e5

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Prevalence

- Females
  - Urinary incontinence - 35%
  - Faecal incontinence - 11% flatus
    - 4% faecal
  - Vaginal prolapse - 9% symptoms
    - 10% surgery
      - **22% with two problems**
      - **9% with three**
  - 46% of women have some major PF dysfunction*
  - 50% of women have some degree of POP **
    - *(MacLennan A, Taylor, A, Wilson D (200) The Prevalence of Pelvic Floor Disorders and Their Relationship to Gender, Age, Parity and Mode of Delivery. BJOG 107:1460-1470)
    - **(Thakar and Stanton (2002) Management of genital prolapse. *British Medical Journal*. 324(7348): 1258-1262)

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More than…

- Diabetes (6.2%)
- Asthma (12.7%)
- Arthritis (21.2%)
- Osteoporosis (4.8%)

- In South Australia (Avery et al 2004. 'The impact of incontinence on health-related quality of life in a South Australian population sample' ANZJPH 28:173-179)

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Risk factors for UI

- female gender, in particular pre and post natal women
- advanced age
- menopause
- obesity
- recurrent urinary tract infections
- reduced mobility
- some medications
- Gynae surgery - hysterectomy
- neurological diseases such as multiple sclerosis
- Familial tendencies – especially paediatric nocturnal enuresis, EDS
- Various medical disorders including diabetes mellitus and insipidus, COPD
- Dementia.
  - (AIHW Chronic diseases and associated risk factors in Australia, 2006)

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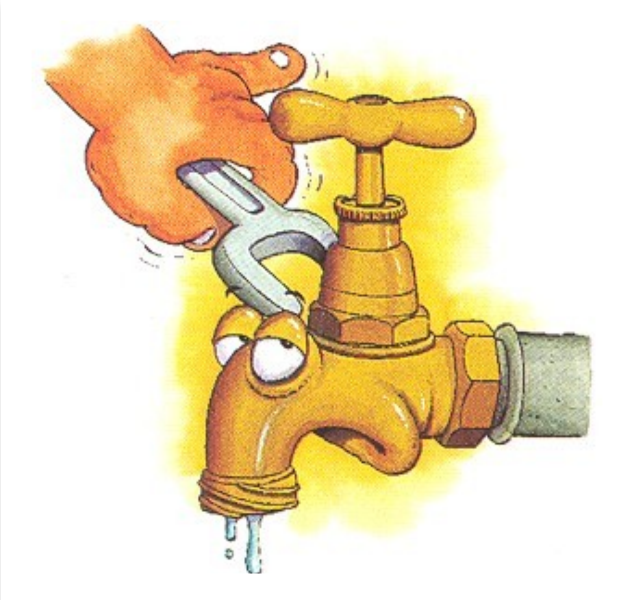
UI

Urine can leak for many reasons
- it's a plumbing problem
(water pressure or washer?)

It could be
- Stress incontinence
- Urge incontinence
- Overflow

Requires full assessment and not simply treating the symptoms



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Bladder Continence – Stress Urinary Incontinence (SUI)

- "the complaint of any involuntary loss of urine on effort or physical exertion or on sneezing or coughing".
- happens during physical movement or activity, conditions that elevate the abdominal pressure (stress) on the bladder.
- not related to psychological stress.
- Haylen BT et al. An International Urogynecological Association (IUGA)/International Continence Society (ICS) Joint Report on the Terminology for Female Pelvic Floor Dysfunction. Neurourol Urodyn 2010; 29:4–20

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SUI

- First line therapy for SUI is physio – this is Level 1A evidence
- Management should be evidence based to be effective - that it is assessed and treated by a trained women's health / pelvic health physio
- Leaking with exercise may not be due to "Stress incontinence"
- A loss of 5-10kg in body weight can improve stress incontinence by 70%, which could be a cure for many (Wing et al 2010)

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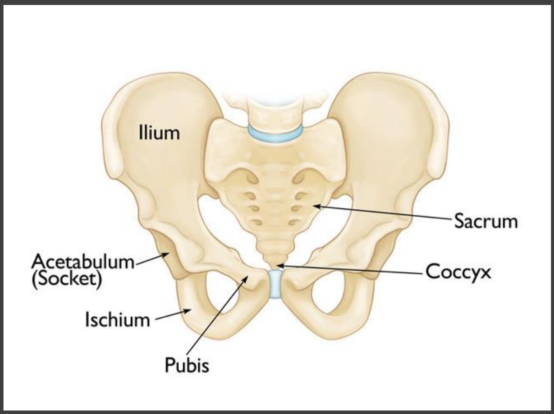
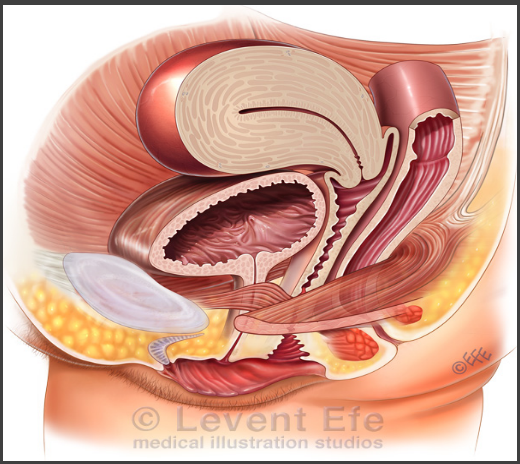
Landmarks





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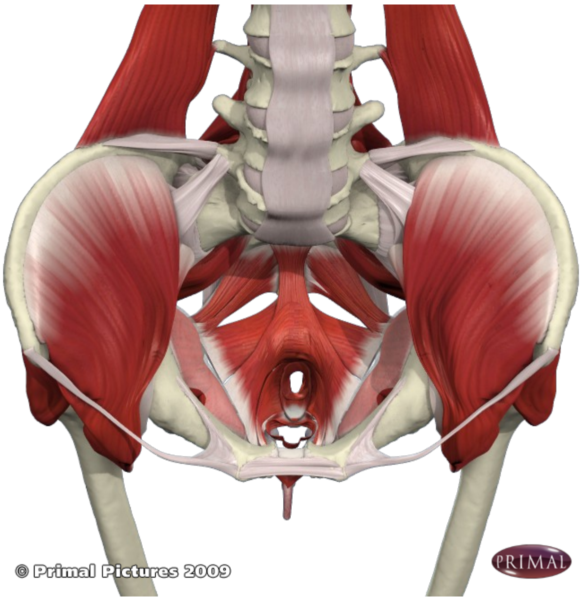

What cues for a PFMC?

“Close the back passage, close the vagina, close the front passage and draw up to just over your pubic bone”

The “feeling of stopping a wee”, “of holding in wind”

In tall sitting on a firm chair

Hold for 10 seconds, then relax.

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Knack

- “a learned voluntary pelvic floor muscle contraction to increase urethral closure pressure to counter a rise in intra-abdominal pressure (for example, with a cough)” (Miller 1998)
- taught to most as a risk management strategy (cough, lifting)
- around 30% of women do not correctly contract their PFM (Bo et al 1988, Bump et al 1991, Henderson et al 2013)
- teaching the Knack as a routine and encouraging further assessment from a WMPH PT if it isn’t working is a pragmatic approach. (Bo ICS online lecture 2020)

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The Knack

- Squeeze and lift the pelvic floor
- Small cough
- Breathe out (relax abdominal wall)
- Relax the pelvic floor

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Bladder Continence – Urge Urinary Incontinence

- ICS "The complaint of involuntary loss of urine associated with urgency."
- Urgency: A compelling need to urinate which is difficult to defer (pain, pressure, discomfort)
  - ICS Glossary

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Urge Urinary Incontinence

- The feeling of being “busting” - loss on the way to the toilet, often has a behavioural component - “key in door”, running water
  - “just in case” voiding, cold temperature
  - Worse with limited access to loo (toilet map app from CFA / AusGov)
  - can also be related to total fluid intake
  - can be related to atrophy post menopause
  - can be related to constipation, IBS – irritated neighbours
  - can be related to stress / anxiety – an upregulated nervous system
  - Can be a sign of MS, PD, CVA – ref to Dr for further investigation

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Basic advice for UUI

- Stop and calm
- Don’t rush
- Drink a moderate amount of fluids, avoiding bladder irritants – coffee, caffeine, artificial sweetener, carbonated drinks
- Full assessment by WMPH PT will include red flags, bladder diary, medication list, bowels, contribution from mixed UI.
- It is far more complex than “just hold on”, timed voiding, or restricting fluids

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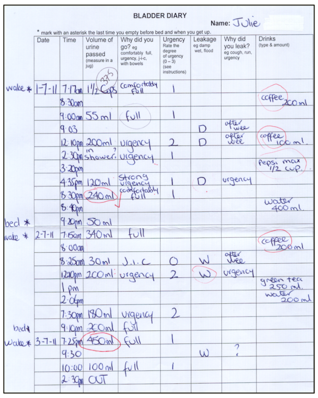
Fluids



BLADDER DIARY

Name: Julie

* mark with an asterisk the last time you empty before bed and when you get up.

	Date	Time	Volume of urine passed (measure in a jug)	Why did you go? eg comfortably full, urgency, j-i-c, with bowels	Urgency Rate the degree of urgency (0 – 3) (see instructions)	Leakage eg damp wet, flood	Why did you leak? eg cough, run, urgency	Drinks (type & amount)
wake *	1-7-11	7:17am	1½ Cups 375	comfortably full	1			
		8:30am						coffee 200ml
		9:00am	55ml	full	1			
		9:03				D	after wee	
		12:10pm	200ml	urgency	2	D	after wee	coffee 100ml
		2:30pm	in shower?	urgency	1			
		3:20pm						Pepsi max 1/2 cup
		4:35pm	120ml	strong urgency	1	D	urgency	
		8:30pm	240ml	comfortably full	1			
		8:40pm						water 400ml
bed *		9:20pm	50ml					
wake *	2-7-11	7:15am	340ml	full				
		8:00am						coffee 200ml
		8:25am	30ml	J.I.C	0	W	after wee	
		12:10pm	200ml	urgency	2	W	urgency	
		1pm						green tea 250ml
		2:06pm						water 200ml
		7:30pm	180ml	urgency	2			
bed*		9:10pm	200ml	full				
wake*	3-7-11	7:25pm	450ml	full	1			
		9:30				W	?	
		10:00	100ml	full	1			
		2:30pm	OUT					

- 1.5 – 2L pd <u>output</u> covers normal range, habits.
- Much more could be diabetes, could be habit
- Importantly for bowel health / constipation management – more is not better.
- 24ml/kg/day is ideal (ICI – International Consultation on Incontinence)
- >40ml/kg/day is polyuria, loss of electrolytes and water soluble vitamins

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Mixed Urinary Incontinence

- Mixed Urinary Incontinence : “the complaint of involuntary leakage associated with urgency and also with physical exertion, effort sneezing or coughing” ICS
- About 30% of the women with incontinence have Mixed Urinary Incontinence (MUI), higher degree of than in SUI

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Impact of UI in women

- can cause embarrassment, isolation, fear of leaving house
- fear of an accident
- affect friendships and intimate relationships
- cause her to stop sport (and further health risks w that, loss of social inclusion)
- #2 reason for admission to a nursing home (after mobility issues)

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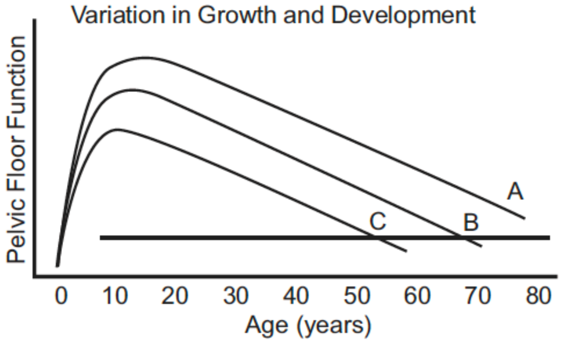
Importance of exercise and nutrition

DeLancey et al 2008

Peak strength - activity in adolescence, overall fitness, overall health, good habits

Delancey J, Low L, Miller J, Patel D, Tumbarello J 2008 'Graphic Integration Of Causal Factors Of Pelvic Floor Dysfunction: An Integrated Lifespan Model' *American Journal Of Obstetric And Gynecology* 199 (6) 610e1-610e5

FIGURE 2
Phase I variation in growth and development



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Women in sport

- high numbers report UI
  - ? very high loads experienced
  - ? coordination difficulties
- Typical age ranges playing netball and tennis locally?
- Working on properties with lifting, jumping, repeated heavy work?
- Coughing and sneezing > most sports, stopping the sport is not usually an adequate management strategy.

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Deloitte Access Economics

The economic impact of incontinence in Australia

Continence Foundation of Australia

2011

Screenshot

What is the cost to her in terms of QoL, cost of pads, personal cost, social cost?

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Deloitte findings, 2011

- In 2010, 4.6m people or 21% of the community population have urinary or faecal incontinence, or both.
- In nursing homes, 70.9%
- more than half of people with UI are aged 50 years and above.
- 80% of those with UI are women. >50% of women in the community with UI are <50 years old 1.7m women.
- Projected rise to 5.6m in 2030 (UI) and 1.8m with faecal incontinence (6.2m with any incontinence).
- NH residents with incontinence is expected to rise to over 250,000.

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2010 Costs

- Total cost $42.9 billion ($9014 pp w UI)
  - Health care
  - Lost productivity – employees and carers
  - formal care and aids - $1.96 billion.
  - Deadweight losses
- The monetary value of the burden of disease in 2010 is $23.8 billion. If this is added to the financial costs, the overall cost of incontinence is $66.7 billion in 2010, or approximately $14,014 per person with incontinence.

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Faecal Incontinence and Constipation

- FI - involuntary loss of faeces
- AI (anal incontinence) - involuntary loss of faeces or flatus.
- FI/AI – may be due to disordered gut function or sphincter weakness
- Straining to empty
  - a sign of constipation, rectocele, overactive pelvic floor, rectal prolapse, intussusception, bowel cancer, obstructed defaecation – there are lots of reasons – ref to GP for further investigation, but then know that WMPH physio can help
- Management by WMPH PT – diet, fibre, lifestyle, education, up or down training of PFM

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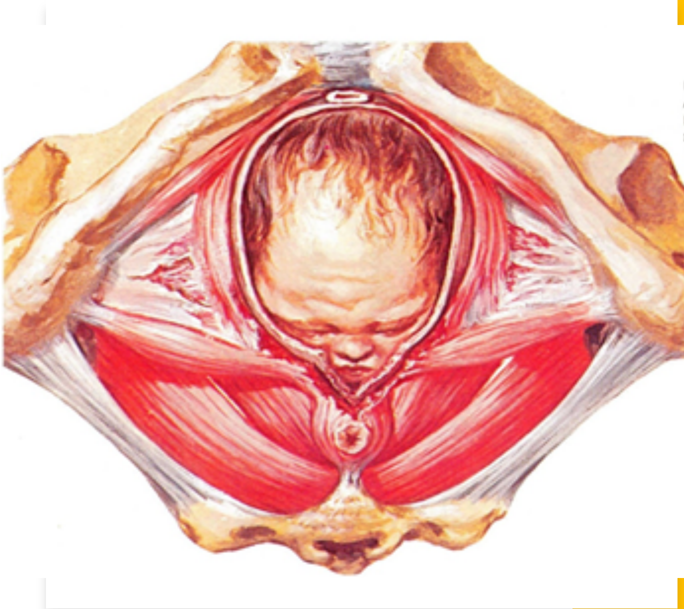
Bowel health

- Constipation and diarrhoea – signs that the gut isn't working optimally - many causes
- Can be a sign of bowel cancer - referral needed
- Post natal FI -3/4th degree tears
  - Covered more in the pregnancy / childbirth / post natal talk
  - Sphincter damage in childbirth
  - Multi disciplinary team support



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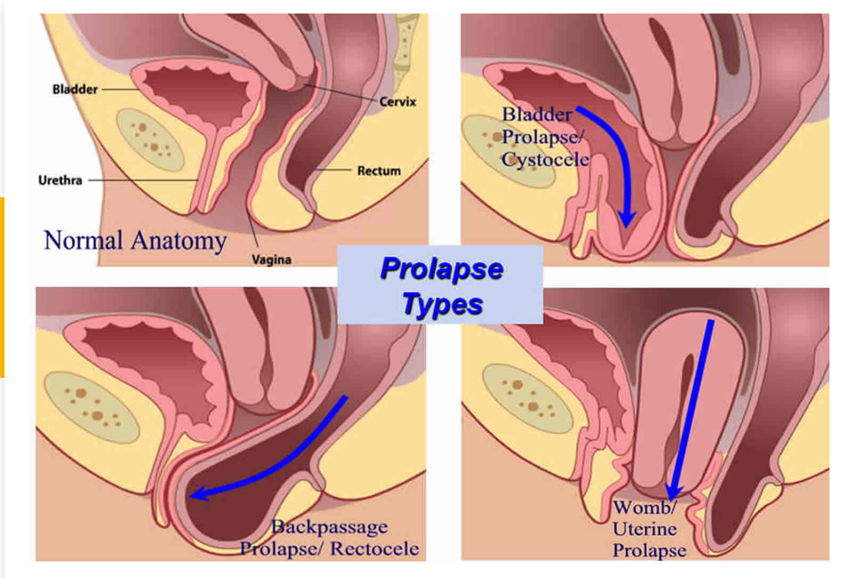

POP is defined as the "descent of one or more of the anterior vaginal wall, posterior vaginal wall, the uterus (cervix) or the apex of the vagina (vaginal vault or cuff scar after hysterectomy)", correlated with symptoms, assisted by any relevant imaging.

Image https://healthjade.net/pelvic-organ-prolapse/

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Pelvic Organ Prolapse

- ref to GP to exclude pathology
- Conservative management: PFMT, managing loads, length of time on feet, pessaries (with gynae / GP support and additional training)
- According to the ACQSHC and APA, POP management is within WHPT scope of practice and doesn't need specific training, only 'interest'.
- Risks and benefits to pessaries - thorough assessment, looking at her life, her goals, her roles and what is the best solution for her, which may include surgery – work with gynae team.

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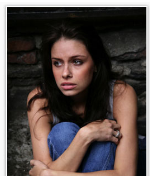
Chronic Pelvic Pain Syndrome

- Not visible
- Embarrassing to discuss sexual pain
- Not validated by a bandage or splint
- Relevance
  - Present with various pains not just pelvic/vaginal
  - Sensitisation
  - FM, CFS, LBP* (>90%) – ask re CPPS
- 15-25% women
  - *Dufour et al 2018





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Chronic Pelvic Pain Syndrome

- Review with a GP / gynae as pain is not normal
- Common in endometriosis, even in teens – excessive pain with period, pain with using a tampon, intercourse
- Complex area – pelvicpain.org.au
- Can be associated with trauma
- Combination of pain education, utilising Explain Pain principles, questionnaires, and a full psychosocial approach. Graded exposure and activity, a lot of sexual counselling and often support with a psychologist, with an expectation of full return of function

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How can you start the conversation..?

- If you don't ask, they won't tell
- Is UI or POP a driver of non-compliance with your exercise program?
- Screening tools help

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Pelvic Floor Bother Questionnaire

Screening tool

Peterson et al (2010) Validation of a global pelvic floor symptom bother questionnaire. Int Urogynaecol J 21:1129-1135

1.	Do you experience urine leakage (incontinence) related to physical activity, such as coughing, sneezing, laughing, lifting or changing positions? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
2..	Do you experience frequent urination (nneding to urinate more than usual, including the need to get up two or more times during the night because of a need to urinate?) Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
3.	Do you experience an abnormally strong feeling of urgency to urinate (sudden, compelling urge to void)? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
4.	Do you experience urine leakage associated with the feeling of urgency (involuntary loss of urine occurring while suddenly having a strong urge to urinate)? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
5.	Do you experience difficulty or discomfort in passing your urine? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
6.	Do you experience the feeling of a bulge in the vagina (either the bladder, uterus, vagina or rectum)? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
7.	Do you experience difficulty in completely emptying your bowels, such as needing to press near your vagina or rectum, with your fingers to complete a bowel movement? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
8.	Do you experience accidental leakage of faecal matter or gas? Yes No If yes, how much does it both you? Not at all Only a little bit Somewhat A moderate amount A lot
9.	Are you sexually active? Yes No If yes, does pain or discomfort curtail your ability to enjoy sex? Not at all Only a little bit Somewhat A moderate amount A lot

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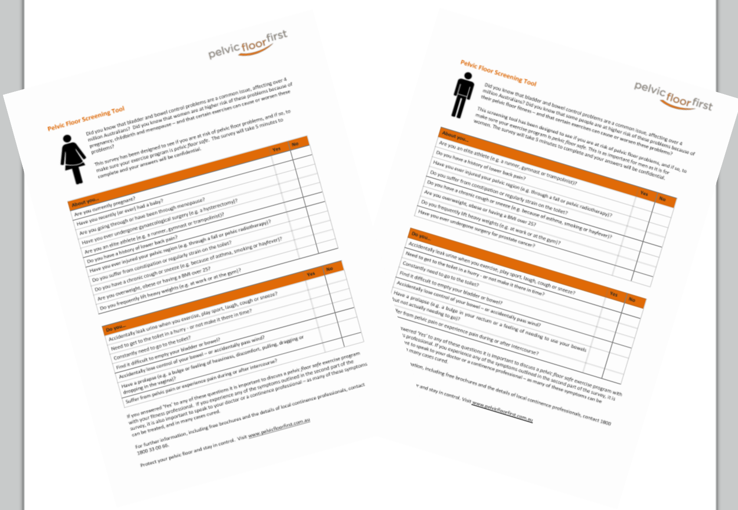
PelvicFloorFirst.org.au

Use a Pelvic Floor First screening tool to identify at-risk clients



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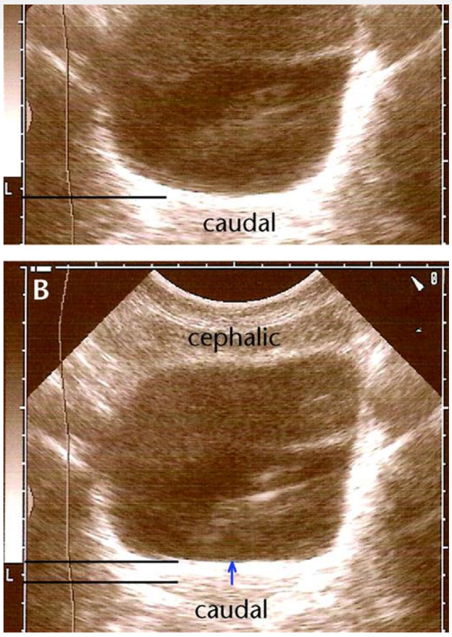
Considerations

- Strong vs weak
- PFMT - so much more than kegels
- Need for PFM assessment
  - Signs of weakness – SUI, dragging, heaviness
  - Signs of overactivity – pain, slow flow urine, feeling of incomplete empty, dragging, heaviness
- Could you be making her worse? Does she then feel that physio made her worse?
- Interpretation of Real Time Transabdominal ultrasound.



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Useful Resources

- Continence Foundation of Australia www.continence.org.au
- PelvicFloorFirst.org.au
- QENDO, Pelvic Pain Foundation

- ACOG Physical Activity in Pregnancy 2020
- Canadian Physical Activity in Pregnancy 2019 Mottola et al
- Pelvic Girdle Pain in Pregnancy European guidelines 2008 Vleeming et al
- RANZCOG Exercise in Pregnancy 2020
- Return to Running Postnatal Guidelines – Brockman, Donnelly and Goom 2019

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APA Career Pathway for WMPH - still being written

- Level 1 (Foundation) mostly online content
  - Choice of pathways – WH Through the Life Stages, Pelvic Health Physio
- Level 2 (Intermediate)
- Level 3 (Highly developed) = Current Titled Physio – Masters or Experiential pathway
- Level 4 (Expert) = Specialisation, 2 yr training program, Fellow of the Australian College of Physiotherapists

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University options in Women's Health

- Curtin Uni, Perth –Graduate Certificate and Master's degree
  - Masters of Clinical Physiotherapy in C+WH
- Melbourne Uni – Graduate Certificate in Physiotherapy and Master's Degree
  - Pelvic Floor Physiotherapy
  - Exercise and Women's Health
- UniSA - Professional Certificate
  - Conservative Management of POP

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Big messages

- Incontinence and Pelvic Floor Dysfunction is common – but under-reported & under treated
- Goal - keep people exercising and being physically active - PFD is a barrier
- Opportunity and duty of care to screen and identify problems - PFF, Peterson
- Managing PFD is complex, is not just about strengthening the PFM, requires a specifically trained practitioner as only around half of women will do a PFMC correctly. Half won't.
- Collaborate with Pelvic Floor Physio -there is great scope for all PTs and WMPH PTs to work together to optimise outcomes
- Knack – worth teaching, and if not helping, refer to WMPH PT for further assessment and management; co treating is often utilised

- Pregnancy and Post natal is the other significant field we work in – next time.

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Conclusion

- As a primary care practitioner in a rural or remote community, you have such an important role in connecting with women.
- Screen for PFD – with back pain, in older age, before pilates class or Cross Fit intake
  - Refer for expert help (GP, WMPH physio)
- You can create a safe space for her, empowering her by listening and sending her towards the help she needs.
- Your community needs you to advocate for them. Help is available.

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