

# Conference poster digest

## Introduction

We are pleased to present summaries of poster presentations made at the 2015 Annual Conference. These are accompanied by thumbnail images of the actual posters. The full-size versions can be viewed on the POGP microsite (<http://pogp.csp.org.uk/>).

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Managing Editor


## Limited effects from limited adherence: using behavioural theory to underpin pelvic floor muscle training programmes and outcomes

Pelvic floor muscle training (PFMT) is widely advocated for women with urinary incontinence, but both short- and long-term adherence are essential to its effectiveness (Fig. 1). Adherence


is defined as the extent to which a patient's behaviour matches agreed recommendations/instructions from the prescriber: "The term, adherence, is intended to be non-judgmental, a statement of fact, rather than of blame of the patient, prescriber, or treatment" (Haynes *et al.* 2008, p. 2). Health professionals need to understand the behavioural change required to promote adherence, and interventions to promote it should be based on theoretical models that provide an explanation of that behaviour.

The aim of this study was to identify theoretical models used in PFMT research in order to better understand how these are used, and provide clinicians with a theory-driven model to promote adherence.

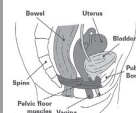
An electronic literature search of the MEDLINE, CINAHL and Embase databases for



### Limited effects from limited adherence: using behavioural theory to underpin pelvic floor muscle training (PFMT) programs and outcomes



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**Introduction**

PFMT is both effective and cost-effective in treating patients with various dysfunctions of the pelvic floor.

Adherence to the recommended training programme is key to effectiveness, however only 64% of patients adhere to PFMT regimens in the short term and 23% in the long term.

Interventions to promote adherence should be based on theoretical models that provide an explanation of that behaviour.

**Purpose**

To identify theoretical models that have already been used in PFMT in order to facilitate adherence

**Adherence**

Adherence is 'the extent to which a patient's behaviour matches agreed recommendations/instructions from the prescriber; it is intended to be non-judgmental, a statement of fact, rather than to ascribe blame (to patient, prescriber, or treatment method)'. Successful exercise adherence requires a change in behaviour, is often complex and is influenced by over 200 variables e.g. patient information, goal setting, technique efficacy; but few theoretical models/theories describe all the processes involved with translating variables into strategies to improve adherence.

**Methods**

Electronic literature searching (Medline, Cinahl, Embase; 1995 to 2012) and hand searching (reference lists of PFMT systematic reviews) was undertaken to identify English language publications reporting the use of a health behaviour theory to underpin the planning and/or delivery of a PFMT programme with the intent of promoting PFMT adherence.

**Results**

30 articles identified with PFMT as an intervention and adherence mentioned

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18 excluded as either addressing the recording of adherence e.g. training diaries or attendance, or reporting the use of adherence strategies or variable but not underpinned by a theoretical concept

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12 articles identified that used PFMT and discussed adherence intervention strategies underpinned by health behaviour theories or models

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These findings were discussed and critiqued by an expert panel which met at the International Continence Society's Annual Conference in Glasgow in 2011.

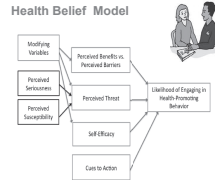
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6 psychosocial models/theories used to inform PFMT were thus identified

**Results**

Psychosocial model/theory	Papers with PFMT and adherence strategies underpinned by psychosocial models
<b>Health Belief Model</b> (Rosenstock & Becker, 1988; 1974)	Chiarelli and Cockburn (1999) Gillard and Shamley (2010) Dollman & Chase (1996) Sacconi et al (2012)
<b>Theory of Planned Behaviour</b> (Ajze N, 1991)	Whitford & Jones (2011)
<b>Social Cognitive Theory : Self-Efficacy Beliefs</b> (Bandura, 1986)	Chen (2004); Lai (2008) Hallam (2012) Hay-Smith, Ryan and Dean (2007) Alewinjse et al. (2003) Messer et al. (2007)
<b>Transtheoretical Model</b> (Prochaska & DiClemente, 1983)	Alewinjse (2002; 2003)
<b>Self-Regulatory Model</b> (Leventhal, Meyer & Nerenz; 1980)	Alewinjse (2002; 2003)

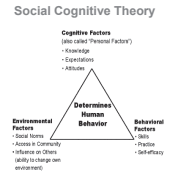
**Health Belief Model**



Three key motivating factors included:

1. Experience of urinary or faecal incontinence
2. Fear of experiencing urinary or faecal incontinence
3. Perceived level of self-efficacy

**Social Cognitive Theory**



Self-efficacy was identified as being important in all 6 studies. 3 studies included women in the per-partum period.

**Discussion**

Despite there being Level 1 evidence of effect for PFMT for pelvic floor dysfunction there has been little research in the area of health behaviour theories/models or behaviour change techniques and PFMT adherence. Those theories identified may have potential in PFMT as they may be predictive, identify more effective ways to deliver the intervention and even create greater empathy with the clinicians during patient interactions but no theory was identified as being more effective than the others. This finding is similar to that identified by a review of MSK physiotherapy (McClean et al 2010) which concluded that due to the multifactorial nature of non-adherence any single approach strategy is unlikely to be effective for facilitating adherence.

**Recommendations**

Short and long term adherence to PFMT needs to be improved. Clinicians require training and support in using behavioural change determinants which are underpinned by psychological theories that have been robustly trialled in various populations.

Reference: A full list of references are available [McClurg D et al 2015 Scoping Review of Adherence Promotion Theories in Pelvic Floor Muscle Training Neuro Urodyn On Line](#)

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**Figure 1.** "Limited effects from limited adherence: using behavioural theory to underpin pelvic floor muscle training programmes and outcomes" poster.

material published between 1995 and 2012, and a hand search of the reference lists of systematic reviews of PFMT were undertaken in order to identify English-language publications reporting the use of a health behaviour theory to underpin the planning and/or delivery of a programme with the intent of promoting adherence to PFMT.

Fourteen studies reported the use of health behaviour theory to promote or understand PFMT adherence. Six models were identified: the Health Belief Model (Rosenstock *et al.* 1988; four studies); the Theory of Planned Behaviour (Ajzen 2011; one study); social cognitive theory (Bandura 1986; six studies); the Transtheoretical Model (Prochaska & DiClemente 1984) and the Self-Regulatory Model (Leventhal *et al.* 1980), which were used conjointly in two studies by the same author; and the Health Action Process Approach (Schwarzer 1992; one study).

Self-efficacy, which is a major component of social cognitive theory, was the most-studied determinant of adherence. This was found to be important in the prediction of adherence, and in the short- and long-term behavioural changes that are required to undertake PFMT. The Health Belief Model primarily focused on the person's ability to assess the benefits and disadvantages of undertaking the exercises. The Theory of Planned Behaviour described an intention to behave in a certain way in order to overcome a perceived threat; for example, a resolve to undertake PFMT before and after delivery in order to prevent urinary incontinence. One author used the Transtheoretical Model (Prochaska & DiClemente 1984) and the Self-Regulatory Model (Leventhal *et al.* 1980) to assess and develop a health education programme and protocol checklist for undertaking PFMT. The Health Action Process Approach (Schwarzer 1992) was used in a small study in which family support was shown to influence intention to exercise.

This is the first review of the use of behavioural theories to support interventions to improve adherence to PFMT. The work on self-efficacy has led to the development of two PFMT-specific self-efficacy scales that may have the potential to be used by clinicians as well as in PFMT research. Secondary analysis to establish the association of self-efficacy with short- and long-term PFMT outcome is also required.

Existing health behaviour theories show some promise in planning the content and delivery of PFMT programmes. Clinicians should be encouraged to use their skills to enhance self-efficacy for PFMT. Researchers need to pay more attention

to reporting the theoretical underpinning of interventions that are intended to promote adherence.

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## Promoting and developing a physiotherapy-led continence service in NHS Highland

The aim of this study was to deliver a quality service to women with incontinence and pelvic organ prolapse (POP) that was within easy travelling distance of their homes, and without significant cost to National Health Service (NHS) Highland (Fig. 2).

Historically, physiotherapy continence services in NHS Highland depended on practitioner interest rather than service planning. This led to an extremely patchy service, and many women had to travel long distances (involving up to 3–4 h travel in some cases) to access continence physiotherapy.

A service redesign that was undertaken in 2009 identified a need for appropriately educated generalist staff and physiotherapists with a special interest (PWSI) with in-depth knowledge of female urinary incontinence and pelvic organ prolapse (POP). Existing clinical specialists would: act as a resource; provide support for generalists and PWSIs; and continue to assess and treat complex cases, bowel problems, men, children, neurological problems, pelvic pain, and sexual and psychosexual dysfunctions. Several obstacles and difficulties were identified. An education and training programme was developed by the specialists for all musculoskeletal, generalist and community staff. From this, 12 geographically appropriate staff with an interest were encouraged to take on a PWSI role. A 2-day training



Figure 2. “Promoting and developing a physiotherapy-led continence service in NHS Highland” poster.

course run by an external tutor, and funded by Astellas Pharma UK Ltd, Staines-upon-Thames, Surrey, UK, was provided for them in 2014.

A quality service, within easy travelling distance, is now being delivered to women with urinary incontinence and POP across NHS Highland. Waiting times for accessing the service have reduced in some areas. Surgical interventions have also reduced. Staff who have taken on the PWSI role feel supported in the position. This model has proved successful in generating interest in a subject that most NHS Highland staff had not had been trained in as undergraduates, and it could be adopted in other areas.

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