Strengthen Your Inside!
Young Women and the Importance of the Pelvic Floor

A report of a health promotion pilot project aimed at developing and evaluating strategies for raising awareness and preventing the development of continence problems in young women who attend gymnasiums

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Acknowledgements

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Chapter 1 – Introduction

Background

This is a report of the *Strengthen Your Inside!* project for which Women’s Health Victoria was funded by the Federal Government’s Department of Health and Aged Care as part of the National Continence Management Strategy (NCMS). The NCMS is in the process of developing a national framework to co-ordinate services and programs which address gaps in continence management and will recommend consistent approaches to continence management across Australia.

Women’s Health Victoria’s *Strengthen Your Inside!* pilot project arose out of a literature review which identified that young women are often unaware that repeated stress on the pelvic floor muscle can contribute to incontinence, even in young women, and that exercise can be a contributing factor to this phenomenon. We responded to this need to raise awareness of the issue by piloting a project with a women-only gymnasium, thus taking the realm of continence into the female fitness arena. This innovative approach aimed to target a young audience and to develop and evaluate health promoting strategies for raising awareness and preventing the development of continence problems. This issue had not been addressed in a systematic way with young women before.¹ ²

Our project was concerned with raising awareness of continence-related issues and preventing ‘stress incontinence’ in young women by promoting regular use of pelvic floor exercises (PFE). We named our project ‘Strengthen Your Inside!’ following a successful campaign in the United Kingdom where their National Continence Day focused on the message ‘get fit on the inside as well as outside’. This generated a lot of attention because it introduced the topic of continence in an educational and more acceptable way to women.³

An Innovative Project

An ‘innovative grant’ was provided to Women’s Health Victoria to undertake the project because it:

- set out to challenge current thinking and practice
- proposed a new method of collaboration - working with privately operated gymnasiums
- proposed and piloted a new education and prevention model for a group which had previously received little attention
- had the capacity to provide information about an at-risk population
- addressed the education and information needs of the target group and non-health professionals
- included a method to gauge the effectiveness of the interventions.

Challenging current thinking and practice
In terms of challenging current thinking and practice about continence, the project sought to provide information to young women who generally do not acknowledge that incontinence can affect younger people. The model also developed health promotion strategies for this group as this had not previously been done in a systematic way to a targeted young audience.

A new method of collaboration - working with privately operated gymnasiums
The program was designed to work in an innovative service delivery area, namely that of women-only gymnasiums, by providing education and information on continence issues to a targeted group that in the past has not been well covered. Fitness instructors generally receive only minimal training on how to educate clients about the risk of developing continence problems if regular performance of pelvic floor exercises is not undertaken. They are not necessarily aware that women who have not been pregnant are also at risk of incontinence and that exercises such as aerobics can be a contributing factor. Fitness classes and assessments do not always broach the topic of bladder control issues and how to prevent them, even in women-only gymnasiums. Our project sought to devise ways of having this information provided and incorporating pelvic floor exercises into all aspects of the gymnasium environment.

We chose to work with Fernwood Female Fitness Centres because they are ‘women only’ gymnasiums and at the start of the project they had 32 gymnasiums across Australia with about 40,000 women members (there are now 36 centres). Fernwood gave an undertaking to implement the program across its network if the pilot was deemed successful. Fernwood was particularly keen to participate in the project because they believed that they had a role to break down the associated taboos and empower their members to take control of their bodies.

Developing and piloting a new education and prevention model for a group which had previously received little attention
Our project specifically targeted young women (aged under 30 years) gymnasium members but had the potential to reach women aged between 16 and 80 years.

Learning about an at-risk population
The dearth of information about the risk of young women developing continence problems provided the impetus for the project to work with this group, particularly as health promotion tools had not been developed to address young women.

Addressing the education and information needs of the target group and non-health professionals
The project’s approach was designed to address continence issues with fitness professionals and their clients. It was innovative because it used information from a variety of sources.

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4 Bennett, op.cit.
6 Herbert, op.cit.
9 Cutler, Friedmann et al, op.cit.
10 ibid.
11 Bennett, op.cit.
of practitioners (Feldenkrais, physiotherapists and women’s health practitioners) as the initial training source.

**Gauging the effectiveness of the interventions**
The project used evaluation techniques that are highly regarded in health promotion as tools for measuring outcomes.

**What Outcomes Did We Anticipate?**

The project aimed to raise awareness of continence issues and provide motivation specifically for women aged under 30 years to regularly perform pelvic floor exercises. The project also had the capacity to reach women aged between 16 and 80 years, this being the full age range of members at the Fernwood Centre where we ran the pilot program.

Women, particularly young women (the major users of Fernwood Female Fitness Centres), were to be informed that incontinence can affect all women, including young women, and assisted to learn about preventative measures in a healthy environment with continuous encouragement from instructors. The program sought to ‘normalise’ continence issues. In other words, we wanted to destigmatise and demystify continence so that it could be brought into the realm of ordinary conversations.

We wanted the program to be sustainable. Dependent upon the project’s final evaluation it was envisaged that Fernwood Female Fitness Centres, which operate 36 women’s gymnasiums in all states and territories with the exception of Western Australia and Northern Territory, would introduce the program at their Annual National Conference. It would subsequently be incorporated into their Operations Manual which gymnasium operators must comply with. The Fernwood Operations Manual is available on their private Intranet site hence training modules, systems and information are easily accessible to all Fernwood staff. Fernwood staff are fully qualified in resistance exercise prescription, anatomy and physiology. In addition, Fernwood offers an ongoing internal training program which would incorporate the continence program in order to ensure consistency across Fernwood centres. In particular, the training would focus on communication strategies for staff to be able to ask questions about sensitive issues such as continence, without being intrusive. Quality assurance is monitored by Fernwood’s National Quality Services/Training Manager. It was envisaged that continence nurses servicing the catchment areas for Fernwood locations would provide local support for Fernwood staff and that any costs would be borne by individual franchisees. In addition, information about statewide referral points, for example women’s health services, National Continence Resource Centre and Continence Foundation of Australia state bodies would be provided by the project for each of the states in which Fernwood operates.

**How We Did The Project**

In partnership with Fernwood Female Fitness Centres nationwide, Women’s Health Victoria piloted the project in the Fernwood Centre in Mitcham, which is located in Melbourne’s Eastern suburbs. Members were surveyed about their knowledge of continence and pelvic floor exercises prior to the commencement of the program. A continence consultant trained aerobics and gymnasium instructors about the benefits of, and how to do, pelvic floor exercises. The program was then promoted by Fernwood as “we look after all the muscles in your body and take a holistic view of women’s health seriously”. The project developed innovative ways for staff to incorporate awareness of continence issues in their every-day work. Instructors then incorporated continence awareness and prevention into classes, work-outs and individual program prescriptions. Gymnasium members were re-surveyed
about their awareness of the issue throughout the program. The fitness instructors were also surveyed in order to ascertain if they needed further support.

Women’s Health Victoria provided ongoing support in the form of referrals and information. Whilst the program was in operation, we worked with a group of young women who attended gymnasiums in order to develop an information pamphlet and poster that other young women could relate to. These were intended for display in gymnasiums and other young women’s settings.

More detailed information about how the project was carried out appears in Chapter 3.
Chapter 2 - What Did We Know Before We Started The Project?

Prior to commencement of the project, an extensive literature search was carried out on stress incontinence and young women. Key findings from the review are presented in this Chapter, along with our analysis of issues in preparation for project commencement.

What Does The Literature Reveal?

Young women can, and do, experience bladder leakage!

Women of all ages can experience involuntary loss of urine when stress or pressure is placed on the pelvic floor if their pelvic floor muscles are not strong. However, urinary incontinence is usually regarded as a problem affecting older women, either during or after pregnancy. That young fit and healthy women who have not given birth may also experience urinary incontinence is often met with surprise, even though in certain medical circles this has long been acknowledged. Many myths also abound. There is an assumption that people who exercise have a strong pelvic floor and that it is only women who have had children who experience leakage.

Almost 50 years ago, two doctors in the United States decided to investigate why a significant number of nulliparous young women were seeking medical advice because of involuntary loss of urine during physical exertion. Until the early 1950s, this condition, known as ‘stress incontinence’ had been solely attributed to childbearing. However, Nemir and Middleton found that just over half (52 per cent) of the 1,327 young, nulliparous women they went on to survey had experienced stress incontinence, 35 per cent of whom described this as frequent. Most of the women in the survey were aged between 17 and 21 years.

It is important to note here that the condition of urinary incontinence as defined by the International Continence Society refers to ‘involuntary loss of urine which is objectively demonstrable and a social or hygienic problem’ whereas the symptom is involuntary loss of urine. The symptom is therefore more common than the condition. This is why there are large variances in prevalence studies which use different methodologies and often do not distinguish between symptoms and the condition.

Despite this problem having long been acknowledged, a review of the literature shows that health promoting activities have not been targeted at young women. There is therefore an identified need to raise awareness of the potential for young women to develop stress incontinence, particularly in physically active, nulliparous women, and for pelvic floor exercises, as prevention and treatment, to be targeted at this group.

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12 When we refer to ‘young’ women, we generally mean women who are aged under 30 years.

13 ‘Nulliparous’ is the term used to describe women who may never have been pregnant or have not given birth to an infant past a certain gestation period, currently 20 weeks in Australia and up to 28 weeks in some countries.


A significant body of research on urinary incontinence in middle-aged and older women and the possible associations between urinary incontinence and increasing age, childbirth, and menopause exists. Our aim in reviewing the literature was to focus on continence promotion and prevention and treatment of urinary stress incontinence in young women. We did not deal with other types of urinary incontinence, such as urge incontinence or bed-wetting. These may also affect young women but are often associated with neurological disorders which may require interventions other than those which can be self-managed or learned in non-clinical settings. We wanted to know about young women, particularly those who had not been pregnant, because it was this group who were least likely to have had exposure to continence promotion and management of stress urinary incontinence.16

How many young women experience bladder leakage/urinary incontinence?

As previously mentioned, even though little attention has been paid to awareness and prevention of urinary incontinence in young women, several studies similar to that conducted in 1954 have concluded that young women have a high prevalence of stress incontinence symptoms.17 Not all of the studies that we have examined here were disaggregated by age but we are including results of those that address nulliparous women as it is probable that a significant proportion of the women in these studies were likely to be aged under 30 years.18

Prevalence rates for young women experiencing urinary incontinence vary between three per cent and 51 per cent.19 20 21 22 23 24 25 Other studies of young women have specifically looked at nulliparous women where prevalence rates range from 12 to 51 per cent.26 27 28 The Women’s Health Australia Longitudinal Study reported the rate of leakage in women aged 18-23 years as 13 per cent, 12 per cent of whom did not have children. The rate of leakage in women in this age group who had had children was as high as that among the mid-age and older women cohorts in the study who did not have children.29

In studies of physically active women, prevalence rates are quite high.30 31 32 Thirty-five per cent of female physical education students aged 18-27 years33 and 28 per cent of nulliparous women who exercise may experience some degree of incontinence.34

17 O’Connell, MacGregor et al, op.cit.
18 Whilst there is now a trend for a significant number of women to defer childbearing until their thirties or not at all, this pattern of late childbearing was less evident pre-1990 when most of the studies considered here were conducted.
24 Bennett G, op.cit.
28 Wolin, op.cit.
29 Chiarelli, Brown, op.cit.
Women with cystic fibrosis also experience higher prevalence rates. For example, 64 per cent of women aged 16-20 years with cystic fibrosis reported urinary incontinence.35

**Risk factors for urinary incontinence in young women**

There are a number of conventional risk factors for women's continence, such as parity36 or postmenopausal status, which are well covered in the literature. Here we look at additional factors that may predispose young women to stress incontinence because of activities which are associated with lifestyle.

**Exercise**

Participation in sport and exercise has been shown as an independent risk factor for incontinence.37 The potential for young women to experience symptoms of stress incontinence may be higher because of their increased participation rates in sport (young Australian women are more likely than older women to participate in physical activities.38 For instance, one study of urinary incontinence in elite nulliparous athletes found that 40 per cent of the women first noted incontinence at high school, and 17 per cent in junior high school.39

It is speculated that the main cause of urine loss in women participating in sport is most likely to be repeated and excessive pressure on the pelvic floor which certain forms of exercise and sport are more likely to cause. When the pelvic floor muscle is unable to sufficiently counter this increase, urinary leakage occurs.40 41 However, it cannot be conclusively shown whether exercise itself causes pelvic floor damage.42 43 Long term increases in intra-abdominal pressure may cause changes in collagen concentration and weaken connective tissue that may play a role in the higher prevalence of incontinence seen in gymnasts. A 1990 study of 299 women who were regular participants in exercise or sport found 47 per cent experienced some degree of incontinence. Nygaard and colleagues found that many of the women in their study reported urine loss only during gymnastics and never during activities of daily life.44

High-risk activities are those forms of exercise and sport that mostly involve substantial jumping and running that generate repeated and excessive increases in intra-abdominal

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32 Elia, op.cit.
34 Nygaard, op.cit.
36 'Parity' means having given birth to one or more offspring past a certain gestation period; currently twenty weeks in Australia, and up to twenty-eight weeks in some countries.
37 Kron, op.cit.
39 Nygaard, op.cit.
40 ibid.
41 Kron, op.cit.
42 Nygaard, op.cit.
43 O'Connell HE. Urinary incontinence in women: exploring new ground. Thesis submitted for the qualification of master of medicine in women’s health in the Department of Public Health and Community Medicine, University of Melbourne, 1996.
44 Nygaard, op.cit.
pressure that are transmitted to the bladder. Low-risk activities that minimise this increase include swimming, bicycling, walking, Tai Chi and certain forms of Yoga.\textsuperscript{45}

**Being over a comfortable and healthy weight**

Weight and body image issues are strongly associated with young women. Women who are more than 20 per cent above the average weight for height and age may be significantly at risk for urinary incontinence because of increased intra-abdominal pressure, although this is not supported by scientific evidence. As it is often difficult to exercise when incontinence is a severe problem, the inactivity that may include pelvic floor inactivity readily leads to increasing weight gain and a vicious circle effect.\textsuperscript{46}

**Constipation**

The pelvic floor muscles are weakened by the repetitive straining caused by chronic constipation\textsuperscript{47} which can be a by-product of eating disorders that are, as noted above, strongly associated with young women. Given that many young women also eat ‘junk food’ diets\textsuperscript{48} and may subsequently experience repetitive straining, these women may go on to develop continence problems in later life if the problem of constipation and weak pelvic floor is not addressed at an early age.

**Caffeine and alcohol**

Consuming caffeine and alcohol can affect control of the bladder. Caffeine can irritate the bladder neck causing involuntary loss of urine\textsuperscript{49} and the new ‘energy’ drinks that are high in caffeine are particularly popular with young people.\textsuperscript{50} Alcohol is a diuretic and also tends to decrease the ability to control the bladder and young women are more likely than older women to be hazardous or harmful drinkers.\textsuperscript{51} Consuming either caffeine or alcohol therefore increases the risk of bladder leakage in young women. The combined effect of consuming caffeine and alcohol within a short space of time heightens this risk.

**Smoking and coughing**

More young women are taking up smoking than in the past\textsuperscript{52} placing them more at risk of repetitive coughing which in turn places pressure on the pelvic floor. Therefore, women who experience chronic coughing need to have strong pelvic floor muscles to counteract this effect.\textsuperscript{53}

**Impacts of stress incontinence in young women**

As demonstrated in the prevalence rates, incontinence is a common issue for young women. Yet, women say it is a socially unacceptable and embarrassing topic which is associated with a lack of control, low self-esteem and self worth.\textsuperscript{54} Because individual attitudes arise from cultural beliefs and stereotypes, a lack of information and inappropriate vocabulary about incontinence often results in mismatched understandings between the public and

\begin{flushright}
45 Kron, op.cit.
46 O’Connell 1996, op.cit.
49 Bennett, op.cit.
51 Lee, op.cit.
53 Chiarello, op.cit.
54 Bennett, op.cit.
\end{flushright}
health professionals and perpetuating the myth that incontinence affects only older people can compound this.

Subsequently, women experiencing stress incontinence may withdraw totally from physical activity or at least change the type of exercise they undertake. They may also reduce fluid intake as a way of countering incontinence thus increasing the risk of dehydration or they may wear pads during exercise. If women stop exercising they may gain weight which in turn may increase the risk for stress incontinence. Therefore the impacts are self-perpetuating, notwithstanding the other health impacts of not exercising (even when they are not associated with weight gain).

Preventing and treating the problem
There is substantial evidence supporting pelvic floor exercises, which involve the voluntary contraction of the pelvic floor muscles, as a preventive intervention for stress incontinence in women of all ages. The exercises have also been used successfully as a treatment for incontinence since 1948 and being young is a good prognostic factor for this treatment.

However, many women are unaware of treatment options, view minor urinary leakage as normal and have low expectations about treatment. They hope the problem will simply go away by itself or are too embarrassed to discuss it with a doctor. It is therefore not surprising that the majority of women who experience urinary incontinence do not seek help. The role of health professionals in continence promotion and incontinence management is therefore paramount, yet the information reviewed here which related to general practitioners focused almost exclusively on treatment rather than prevention. In one study, a quarter of the women involved waited five years from when their

56 Bennett, op.cit.
57 Bo, op.cit.
60 Kron, op.cit.
61 Potera, op.cit.
62 Elia, op.cit.
63 Bo, op.cit.
65 Jayasuriya P. How to treat urinary incontinence. Australian Doctor 2001;(11 May):I-VIII.
68 O’Connell 1996, op.cit.
70 Chiarelli, Brown, op.cit.
72 Jarvis, op.cit.
73 Jayasuriya, op.cit.
74 Norton, op.cit.
75 Chiarelli, Brown, op.cit.
symptoms first became troublesome before seeking advice from a doctor.\textsuperscript{76} The Women’s Health Australia Longitudinal Study found that of the 13 per cent of women aged 18-23 years who indicated that they had experienced leaking urine, 80 per cent had not sought help.\textsuperscript{77}

Even when women disclose to doctors, general practitioners may avoid dealing with urinary incontinence\textsuperscript{76}; they find it a difficult, chronic problem to treat and few doctors express enthusiasm for teaching pelvic floor exercises to women.\textsuperscript{79} Yet, doctors acknowledge the importance of providing training in pelvic floor exercises when treating the condition because if the wrong movements are performed, it may exacerbate the problem. Written instructions [alone] are therefore often inadequate.\textsuperscript{80} That doctors are reluctant to treat the problem, and they are almost certainly not being proactive in promoting preventive strategies, reinforces the need for interdisciplinary approaches to the promotion of continence in women generally, and particularly in young women. The literature shows that this group has not been targeted with health promoting interventions from any quarter. Young women therefore need to know that if left unaddressed, mild leakage of urine under physical stress can progress to total incontinence. As Chiarelli points out, it is important that young women, including those of school age, become aware of their pelvic floor muscles in high school. She suggests that emphasising the sexual function of these muscles is one way of generating young women’s interest. She also says that women need to be continually motivated to exercise their pelvic floor throughout their life and fitness trainers have an important role in ensuring this.\textsuperscript{81} Skoner has also suggested that tactful questions about continence be included in all health assessments of women of any age, along with information about how common the condition of incontinence is and that self-management, such as pelvic floor exercises, is possible.\textsuperscript{82}

\textbf{What does all of this mean?}

The aforementioned studies suggest that a high number of young women experience some involuntary loss of urine, therefore, absolute continence may not be the norm. It is evident that young women are at risk of developing symptoms of stress incontinence if they are not made aware of the potential risk factors of the importance of pelvic floor exercises in the prevention and management of stress urinary incontinence. The range of health professionals who come into contact with young women may also need to participate in education and awareness programs to achieve better promotion, detection and management of associated issues. It is therefore apt that health promotion activities also occur in non-health settings associated with young women.

\textbf{What Were The Implications For Our Project?}

\textbf{Exploring the health problem}

In order to design the project and evaluation mechanisms, it was necessary to be familiar with and understand the associated issues that we had learned about in the literature as they specifically related to our target group.\textsuperscript{83} In preparation for the commencement of the project, we therefore consulted with the target group and other key stakeholders to ensure

\begin{itemize}
\item \textsuperscript{76} Grealish, op.cit.
\item \textsuperscript{77} Chiarelli, Brown, op.cit.
\item \textsuperscript{78} Millard RJ. Moore KH. Urinary incontinence: the Cinderella subject: the general practitioner can do much to manage incontinence and to promote continence. Medical Journal of Australia 1996;165:124-125.
\item \textsuperscript{79} Grealish, op.cit.
\item \textsuperscript{80} Jayasuriya, op.cit.
\item \textsuperscript{82} Skoner, op.cit.
\item \textsuperscript{83} Adapted from Hawe P, Degeling D, Hall J. Evaluating health promotion: a health worker’s guide, Sydney: MacLennan and Petty, 1990.
\end{itemize}
that our project would be relevant and useful. Accordingly, we needed to gauge the level of understanding and awareness of gymnasium and staff members in order to pitch the project at an appropriate level. The following activities were undertaken:

- The project worker spoke with young women at Fernwood about bladder control before completing the design of surveys. This confirmed that their issues and level of understanding was similar to that identified in the literature.

- The project worker spoke with fitness instructors to assess their level of understanding about the issue of urinary continence in young women. This process revealed that some instructors already incorporated pelvic floor exercises at the end of their classes but that others did not. The gymnasium’s form completed for health assessments was found to contain inappropriate language regarding the identification of incontinence. This was changed to ask ‘do you ever experience bladder leakage?’ and it was found that more women disclosed their experiences.

Factors contributing to continence and young women
After these preliminary consultations, we assessed that the following factors were associated with, or contributed to, continence issues for young women.

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Pathways
We also mapped out the pathways which we identified in the literature and from our preparatory consultations that may lead to stress incontinence in young women.
**HEALTH PROBLEM:** Stress urinary incontinence in young women

**RISK FACTORS:**
- Not doing pelvic floor exercises
- Engaging in physical exercise
- Placing repeated and increased pressure on the pelvic floor

**CONTRIBUTING RISK FACTORS**

1. **Predisposing**
   - Lack of knowledge about:
     - the association between stress incontinence, aerobics and other exercise
     - pelvic floor exercises
     - incontinence generally
   - Lack of incentive/motivation to do pelvic floor exercises
   - Belief that it only happens after child-birth/when you’re older

2. **Enabling**
   - Gymnasiums and exercise programs concentrate solely on outside appearance, fitness and strength
   - Continence training is aimed at midwives and nurses
   - Interventions focus on cure rather than prevention

3. **Reinforcing**
   - Immature attitudes to incontinence from both fitness staff and gymnasium members
   - Embarrassment
   - Stigma
   - Shame

**Information needs**

In preparing to conduct the pilot project, we discovered that available information about pelvic floor exercises was not age specific to women and it focused on the problem (incontinence) rather than promoting prevention (continence). We knew that young women want information that is relevant so we applied for additional funding, which the Federal Department of Health and Aged Care granted, in order to develop appropriate information products to support the project.

This enabled us to develop an information pamphlet and poster with a group of young women who attended gymnasiums. The pamphlet was based on one published by Women’s Health Statewide in South Australia which had been developed via rigorous consultation. We wanted to modify this so that it was specific to our target group. We used Women’s Health Victoria’s criteria for quality health information, the Victorian Department of Human Services’ Guidelines for Well-written Consumer Health Information and Guidelines for Producing Women’s Health Information in ‘Plain English’ Using Action Research to guide our information development process.

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85 ibid.
Chapter 3 – What Did We Want To Achieve And How Did We Do It?

This chapter provides an overview of our intended aims, how we achieved them and who participated in the project.

**Project Aims**

We wanted to target young women who attend gymnasiu ms, raise awareness and prevent development of continence problems through health promotion initiatives. We worked with the Mitcham Fernwood Female Fitness Centre where we trained instructors in continence issues and prevention strategies. Instructors then incorporated awareness of bladder control and pelvic floor muscle exercises in their teaching, fitness assessments and program prescriptions. Women gymnasiu m members were surveyed pre-program, mid-way and post-program in order to gauge their levels of awareness and to assess if behavioural changes were adopted and sustained throughout the program.

**Target group**

The project’s target group was specifically women aged under 30 years who attended the Mitcham Fernwood Female Fitness Centre. However, women members aged from 16 to 80 years old, being the full age range of members at the Centre, would also potentially benefit from the program.

**Goal**

To pilot a six month program aimed at prevention of urinary incontinence in women aged under 30 years who attend Fernwood Female Fitness Centres.

**Primary objectives**

- Increase awareness of continence issues by 75 per cent in women generally, and particularly those aged under 30 years, who attend the Mitcham Fernwood Female Fitness Centres.
- Increase the motivation of the target group to do pelvic floor exercises once or twice a week either in or outside Fernwood classes.

**Secondary objectives**

- Increase knowledge of stress incontinence in young women attending Mitcham Fernwood by 75 per cent.
- Increase knowledge of stress incontinence in women of all ages attending Fernwood by 75 per cent.
- Increase knowledge of pelvic floor exercises in prevention of stress incontinence in women of all ages by 75 per cent.
- Increase number of women aged under 30 years who are doing pelvic floor exercises at least once a week at the end of the program.
- Ensure that pelvic floor exercises are maintained at this level at the end of the program.
- Incorporation of pelvic floor exercises into all Fernwood activities:
  - in program prescriptions
  - in aerobics classes
  - fitness assessments
- Increase opportunities for women attending Fernwood to learn about pelvic floor exercises and urinary continence issues.
Strategies

- Train Fernwood staff to incorporate pelvic floor exercises and continence awareness into classes and programs.
- Train Fernwood staff how to respond to women affected by continence issues and to make appropriate referrals.
- Provide Fernwood staff with referral information for continence issues.
- Develop a poster and pamphlet on pelvic floor exercises aimed at women aged under 30 years for display in gymnasiums and appropriate health outlets.
- Gauge the level of awareness of pelvic floor exercises, urinary incontinence issues in women of all ages at Fernwood, particularly those aged under 30 years, prior to the program, and at three and six months after inception of the program.

How Did We Evaluate The Project Outcomes?

In order to ensure that the program was designed in a way that facilitated the proposed evaluation processes, the following pre-conditions were met:

- It was agreed with the Independent Evaluation Assessor\(^{89}\) that there was a rational fit between the pilot project activities and goals.
- There was agreement on the evaluation questions with the Independent Evaluation Assessor at the University of Western Sydney.
- There was agreement with the Independent Evaluation Assessor about how the evaluation should be conducted and what should be measured.
- A mid-point survey was designed and administered in order to assess if the program was being implemented as intended.

This process identified that the primary users of the evaluation information were:

- Department of Health and Aged Care – National Continence Management Strategy
- University of Western Sydney, Independent Evaluation Assessor
- Fernwood Mitcham – management and fitness staff
- Fernwood Head Office
- Fernwood National Training & Quality Assurance Manager
- Pelvic Floor Training Consultant employed by the Project
- Women’s Health Victoria

Process evaluation

We wanted to make sure that the project was being implemented as intended whilst it was still in operation so that we could make any necessary changes. We therefore needed to gauge if the project was reaching the target group, the degree to which the activities were being implemented and the quality of the program. Hence we undertook a survey half way through the pilot that explored if:

- **Interpersonal Issues**
  - participants felt comfortable with the program i.e. the incorporation of bladder control awareness and pelvic floor exercises
  - participants felt listened to and understood when discussing urinary incontinence

\(^{89}\) Appointed by the funding body, the Commonwealth Department of Health and Aged Care.
- staff were approachable, interested and sincere.

- **Service Issues**
  - participants felt that the way in which instructions were given was appropriate
  - the Fernwood Centre was the correct vehicle for reaching the target group.

- **Content Issues**
  - the promotion of continence was relevant and of interest to young women
  - the concept of continence issues for young women was easy to grasp
  - the pelvic floor exercises being taught were too complex or easy
  - some things were being left out or not being covered in sufficient depth.

We also wanted to ensure that the fitness instructors felt adequately trained to provide the necessary information. They had evaluated the training initially provided to them but we also surveyed them at the mid-point in order to identify if we needed to make amendments to the program or provide additional support. We also assessed if they were incorporating pelvic floor and bladder control awareness into the various types of fitness classes, program prescriptions and periodical fitness assessments. The survey provided respondents with the opportunity to highlight successful strategies and exercises and those that were not useful.

**Measuring program effects - impact evaluation**

We also wanted to measure the immediate effects of the project, as stated in our objectives. As there were no established measurement tools that could be used for this program, we assessed it by adapting performance indicators from DGR Consulting’s ‘Results Hierarchy Model’ (1998) which covered the broad spectrum of results to be achieved in a balanced way. These are shown in detail in Chapter 4.

**Who Participated In The Project?**

Three surveys were conducted during the project; the first gauged the level of awareness of bladder control issues and pelvic floor exercises. In the middle of the project, we surveyed women gym members again in order to assess if the program was working as intended so that it be could be modified if need be. At the end of project, we again surveyed members in order to determine changes in attitudes and behaviour.

Figure 3-1 shows that the majority of women surveyed were aged over 30 years. However, we made concerted efforts to attract more young women in the final survey. Most of the women were Australian-born and all women had been members of the gym for at least three months. A total of 304 women were surveyed, with 58 being surveyed more than once.
Selection of participants

Women participating in the project surveys self-selected. In order to promote the project, project staff spent at least one day distributing individual questionnaires for each of the surveys to women attending the gym. Additional surveys were then left at the gym for completion by members for a two week period at each data collection phase. Participants were provided with the opportunity to participate in all of the surveys. It was intended that 10 of the fitness instructors participating in the training would request four of their one-on-one clients aged under 30 years to complete all three of the surveys to ensure a consistent cohort throughout the program. Due to staff changes this did not occur. However, a cohort of 34 women participated in the first and second surveys and 24 women participated in all three of the project’s surveys. As most of these women were aged over 30, we have not presented a separate analysis for them in this report.
Chapter 4 – What Were The Project Outcomes?

This Chapter provides an analysis of the findings of the pilot project outcomes as they relate specifically to the target group, namely women aged under 30 years who were members of Fernwood Mitcham. These are then measured against the performance indicators set for the project. A comprehensive presentation and analysis of other research findings is provided in Chapter 5.

What Did We Learn About The Target Group?

Forty-three young women participated in the first survey and 63 in the final survey. It is the results of these two independent surveys that we compare in order to measure our project’s objectives.

Young women’s beliefs

We asked women about their beliefs about bladder control. Fourteen per cent more women reported accurate beliefs in the final survey. The most significant change in beliefs related to the understanding that bladder control issues can occur at any age (Figure 4-1).

![Figure 4-1 Young women's reported beliefs about bladder control issues](image)

In terms of beliefs about pelvic floor exercises overall, 14 per cent held accurate beliefs in the first survey compared with 47 per cent overall in the final survey. Thus, 33 per cent more women held accurate beliefs at the project’s conclusion (Figure 4-2).
Figure 4-2 Young women's reported beliefs about pelvic floor exercises

- Can assist with better bladder and bowel control
- Improves muscle tone during pregnancy & childbirth
- Strengthens vaginal tone/improves sexual experience
- Another name for Kegel Exercises
- Can prevent prolapse
- Should be performed after childbirth
- Should be performed before childbirth

Figure 4-3 shows the percentage of young women in each of the surveys who reported having experienced:

- leakage of urine when coughing, laughing or during exercise
- just making it to the toilet in time
- a feeling of something pushing down into the vagina.

Figure 4-3 Young women's reported experience of symptoms associated with a weak pelvic floor

Vaginal pushing
Just making it to toilet
 Experienced Leakage

Percentage

Final Survey
First Survey
A significant number of young women in both surveys reported having experienced some type of symptom associated with a weak pelvic floor. The same proportion of women who experienced leakage also performed pelvic floor exercises regularly in the final survey. However, in the first survey, 10 per cent more women experienced leakage than were performing pelvic floor exercises regularly (Figures 4-3 and 4-4).

![Figure 4-4 Young women's reported regular performance of pelvic floor exercises](chart)

The final survey attempted to elicit more information about performance of pelvic floor exercises since the inception of the program. At the project’s conclusion, 49 per cent of young women were performing pelvic floor exercises at both Fernwood and elsewhere and two thirds of these women reported that they had learned to do the exercises during the project. Figure 4-5 shows details of where women are performing pelvic floor exercises and if they learned them during the project. Thirteen per cent of women reported that they were never performing the exercises and all of these women stated that they had not learnt how to do pelvic floor exercises during the six months that the project operated. In terms of frequency, more women reported that they performed pelvic floor exercises occasionally rather than regularly when they were at Fernwood. However, women were more likely to perform them regularly (once or twice per week) when they performed them elsewhere. Twelve per cent and 11 per cent of women in the first and final surveys respectively had specifically performed pelvic floor exercises to control leakage.
Figure 4-5: Young women's reported performance of pelvic floor exercises at project conclusion

- Never Performing PFE
- Performing PFE at Fernwood
- Performing PFE not at Fernwood

n=63

Figure 4-6 shows the frequency reported by women with which instructors talked about bladder control issues and pelvic floor exercises either during classes or fitness assessments and new program prescriptions. The low figure reported for information being provided during fitness assessments and new program prescriptions may be because of their periodic nature and many women may not have participated in an assessment or new program during the course of the project.

Figure 4-6: Frequency of information provided about bladder control and pelvic floor exercises

- No response
- Never
- Occasionally
- Often

n=63

Chapter 4 – What were the project outcomes?
Seventy-six per cent of young women indicated that they are comfortable when staff talk about bladder control and pelvic floor exercises and 67 per cent reported that they would feel comfortable to approach staff to talk about bladder control. The most common reasons for feeling comfortable were:

- Staff are women and can identify with the problem
- Staff are very understanding
- It’s an important issue
- It’s a common problem that must be discussed
- Staff are educated in this area
- It’s natural/normal.

The most common reasons for feeling uncomfortable were:

- It’s private/personal
- Distrust staff
- Embarrassment
- Prefer to discuss with GP or Physiotherapist
- Staff are not qualified enough.

Figure 4-7 shows the actions that young women reported having taken as a result of the bladder control information provided by staff during the project. None of the women had rung a women’s health service or the Continence Foundation.

![Figure 4-7 Actions reported by young women as a result of the project](image)

- Learned new information: 27%
- Taken pamphlets: 26%
- Sought medical assistance: 10%

n=63
Outcomes

In order to assess the project outcomes, the results of two independent survey samples are measured against the performance indicators. One survey was conducted prior to the commencement of the project and one upon its conclusion,

**Planned Result (1):** Target group is exposed to information on bladder control awareness and pelvic floor exercises

*Definition of Success:* Target group has seen and heard information provided at Fernwood.

*Performance Indicators:* Percentage of women who had accessed the information as a result of the project.

*Outcome:* Twenty-seven per cent of the women had taken away pamphlets that contained referral information. Thirty-five per cent of women indicated that bladder control information was provided either often or occasionally in individual consultations with staff either during assessments or gymnasium program prescriptions. Eighty-three per cent of women indicated that the issue of bladder control and pelvic floor exercises were relevant to them.

*Refer:* Figures 4-6 and 4-7.

**Planned Result (2):** Target group is aware of bladder control issues and pelvic floor exercises

*Definition of Success:* Target group is aware of the benefits of pelvic floor exercises and bladder control issues.

*Performance Indicators:* Per cent difference in awareness, behaviour and attitudes at beginning and end of project.

*Outcome:* In the final survey, 14 per cent and 33 per cent more women respectively held overall accurate beliefs about bladder control issues and the benefits of pelvic floor exercises in comparison with the first survey. The most significant changes related to improved understanding about the role of pelvic floor exercises in improving bladder and bowel control (58 per cent more women in the final survey) and acknowledgement that bladder control problems can occur at any age. One per cent fewer women were specifically performing pelvic floor exercises to control leakage in the final survey. Eighty-three per cent of the women acknowledged that bladder control issues and performing pelvic floor exercises were relevant to them.

*Refer:* Figures 4-1 and 4-6.

**Planned Result (3):** Bladder control awareness and pelvic floor exercises are appropriate to the needs of young women

*Definition of Success:* The program is based on existing literature and identified need.

*Performance Indicators:* Proportion of women who indicate their awareness about the relevance of the issues at the beginning and end of the project.

*Outcome:* Overall, the project’s relevance to the target group is evident in the improvements women reported on the various aspects of the project’s stated objectives. New information has been learned about the target group and the significant number of women who reported having experienced bladder leakage confirms the need
for this type of information to be promoted as a public health message.

**Planned Result (4):** Target group are motivated to do pelvic floor exercise regularly  
**Definition of Success:** Increased number of women doing pelvic floor exercises sustained regularly.  
**Performance Indicators:** Per cent difference in women performing exercises at beginning and end of project.  
**Outcome:** Seven per cent more women aged less than 30 years were performing pelvic floor exercises regularly at the end of the project.  
**Refer:** Figures 4-4 and 4-5.

**Planned Result (5):** Increased incorporation of pelvic floor exercises and bladder control awareness in all facets of services and programs at Fernwood Mitcham  
**Definition of Success:** Pelvic floor exercises and bladder control awareness are incorporated into all facets of services and programs at Fernwood Mitcham.  
**Performance Indicators:** Incorporation of exercises in all activities.  
**Outcome:** At the project conclusion, 51 per cent of women aged under 30 indicated that bladder control issues were raised occasionally during classes and a further 16 per cent reported that this occurred often. Twenty-seven per cent of women reported that this information was given occasionally at assessment and eight per cent reported this was provided often. The lower numbers reported for the latter may be because assessments are only done periodically and many of the women may not have undertaken one during the course of the project.  
**Refer** Figure 4-6.

**Planned Result (6):** Fernwood staff are trained to make referrals  
**Definition of Success:** Fernwood staff are making referrals.  
**Performance Indicators:** Number of referrals to Continence Foundation and Women’s Health Victoria.  
**Outcome:** A training session and information session were provided to Fernwood staff at the start of the project. This included training of Fernwood’s National Training Manager and the Mitcham Fernwood’s Training Co-ordinator. None of the target group indicated that they had needed referrals to the Continence Foundation or Women’s Health Victoria, nor had any of the fitness instructors provided referrals. However, three per cent indicated that they had sought medical assistance and 27 per cent had taken information provided by the project that contained referral information.  
**Refer** Figure 4-7.

**Planned Result (7):** Written information is appropriately packaged for stakeholders (target group: young women, fitness instructors)
Definition of Success: Fernwood members participate in the development of and understand the accompanying information resources (poster and pamphlets).

Performance Indicators: Development of resources with target group and Fernwood staff in accordance with Department of Human Services' consumer information guidelines and Women's Health Victoria's quality health information for women criteria.

Outcome: Two information products, a pamphlet and poster, were developed in consultation with a group of young women who attend gymnasiums. A neuro-urologist, continence physiotherapist and other health professionals also contributed to the process that followed several best practice initiatives in the development of health information for women. Training materials for fitness instructors were also developed to support the training and information sessions provided to staff. It was identified that fitness instructors need further resources such as photographs, diagrams and detailed descriptions of innovative pelvic floor exercises that can be used in gymnasium settings.

Planned Result (8): Fernwood staff are trained in bladder control issues and pelvic floor exercises.

Definition of Success: Fernwood staff understand issues and implement interventions.

Performance Indicators: Positive outcome of the evaluation of Fernwood staff participating in training session. Evaluation of implementation issues for staff at mid-point of project.

Outcome: A training session that aimed to increase Fernwood staff’s ability to raise women’s awareness of bladder control issues was held prior to the commencement of the program. The evaluation of this training demonstrated that different approaches to increase awareness of the importance of strengthening and conditioning the pelvic floor muscles were learned. Most of the participants indicated that they gained a better and clearer understanding of the size/location of the pelvic muscles and how to feel the pelvic muscles and distinguish them from the abdominal and buttock muscles. The mid-point survey of fitness instructors confirmed that they had been adequately supported and trained. See ‘What We Learned About Fitness Instructors and Teaching Pelvic Floor Awareness’ in Chapter 5.

Did We Achieve Our Goal?

The project can be said to have achieved what it set out to do: raise awareness of bladder control issues and pelvic floor exercises in young women who attend a women-only gymnasium. However, the project did not reach the number of women that it had envisaged and, in hindsight, we realised that our performance indicators were set too high. This is because there were no existing performance measures available for this type of work and we set a ‘guesstimate’ that could not be based on evidence and which was overly ambitious.

Chapter 5 – What Else Did We Learn?

This Chapter reports on what we learned about:

- women and continence (all of the women who participated in the project)
- fitness instructors and teaching pelvic floor awareness
- the way we did the project
- developing health promotion information for women.

Women And Continence

The findings as they relate specifically to our project’s objectives are reported in Chapter Four. Here, we present more general information learned about both the target group (women aged under 30 years) and older women (aged 30 and over) from the results of all three surveys combined. The data presented here are for young women from all three surveys and varies slightly with those reported in Chapter Four that focuses on the first and final survey only.

Beliefs and perceptions of young women

Overall, the majority of young women in all three surveys had accurate beliefs about bladder control issues with the exception that only 16 per cent of women held the accurate belief that certain exercises could aggravate bladder control issues. Figure 5-1 shows the statements about bladder control beliefs with which women agreed.

![Figure 5-1 Young women's beliefs about bladder control issues](image)

With regard to pelvic floor exercises (Figure 5-2), around half of the women understood the role of pelvic floor exercises with many more (71 per cent in total) correctly agreeing with the statement that pelvic floor exercises can assist in bladder and bowel control. However, only four per cent were aware that Kegel exercises are another name for pelvic floor exercises. Almost one quarter of the women (22 per cent) inaccurately believed that pelvic floor
exercises can strengthen stomach muscles. None of the women believed that pelvic floor exercises should only be done under medical supervision.

**Figure 5-2 - Young women’s beliefs about pelvic floor exercises**

<table>
<thead>
<tr>
<th>Belief</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFE strengthen stomach muscles</td>
<td>20%</td>
</tr>
<tr>
<td>Can assist bladder &amp; bowel control</td>
<td>70%</td>
</tr>
<tr>
<td>Can improve muscle during pregnancy &amp; childbirth</td>
<td>50%</td>
</tr>
<tr>
<td>Can strengthen vaginal tone/improve sexual feelings</td>
<td>40%</td>
</tr>
<tr>
<td>Can prevent prolapse</td>
<td>30%</td>
</tr>
<tr>
<td>Should be done after childbirth</td>
<td>10%</td>
</tr>
<tr>
<td>Should be done before childbirth</td>
<td>5%</td>
</tr>
<tr>
<td>Are name for Kegel exercises</td>
<td>1%</td>
</tr>
</tbody>
</table>

n=112

**Experiences of young women**
Figure 5-3 provides an overview of the young women’s continence-related experiences. Overall, 46 per cent of the women had experienced some symptoms associated with a weak pelvic floor.

**Figure 5-3 Proportion of young women reporting 'yes' to key variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leakage</td>
<td>30%</td>
</tr>
<tr>
<td>Other Symptoms*</td>
<td>25%</td>
</tr>
<tr>
<td>Regular PFE</td>
<td>20%</td>
</tr>
<tr>
<td>At least 1 birth</td>
<td>10%</td>
</tr>
</tbody>
</table>

n=1

* ‘Other symptoms’ associated with a weak pelvic floor in Figure 5-3 include:
  - just making it to the toilet in time
  - feeling something pushing down in the vagina
  - a deep vaginal ache, particularly late in the day.
Figure 5-4 shows that of the 52 young women (46 per cent) who experienced symptoms of a weak pelvic floor, few experienced adverse lifestyle impacts. This suggests that the severity of the symptoms experienced by these women was minimal.

![Figure 5-4 Young women's reported impacts of a weak pelvic floor](image)

Young women’s health seeking behaviours were affected by their attitudes to symptomatic experiences (Figure 5-5). Over one third of women who had experienced symptoms associated with a weak pelvic floor reported that they had not consulted a health professional because they viewed the symptoms as ‘normal’ and only six per cent had sought professional assistance. That women do not seek assistance in relation to their symptoms may be correlated with the low number of women who have had to compromise lifestyle activities perhaps because, as suggested above, their symptoms were not severe. Further, one quarter of the women who had experienced symptoms associated with a weak pelvic floor had performed pelvic floor exercises to control leakage and may not have felt the need to seek professional help because they were self-managing the symptoms.
Our project acknowledged that women who have given birth are more likely to have had exposure to continence promotion and management of stress urinary incontinence. We were therefore interested to learn about the experiences of young women who had not given birth. We examined the association between giving birth (either vaginally or by Caesarean), the experience of bladder leakage or other symptoms associated with a weak pelvic floor (‘just making it to the toilet in time’, ‘feeling something pushing down in the vagina’, ‘a deep vaginal ache, particularly late in the day’) and the regular performance of pelvic floor exercises. Figure 5-6 shows these associations revealing that birth is positively correlated with a weak bladder as we expected based on the literature. The small number of women in this age group who had given birth, however, makes detailed analysis of this difficult. Of note is that almost the same proportion of women in both birth status and age groups experienced symptoms (other than bladder leakage) associated with a weak pelvic floor.
Young women and older women – beliefs and experiences
In comparing the results of young women's beliefs with those of the older group of women, little variance was evident. The notable exceptions were that twice as many of the older women believed that bladder control could be aggravated by certain exercises and more older women understood the connections between performing pelvic floor exercises during and after childbirth and that these exercises can prevent prolapse.

In terms of the comparative experiences of the two age groups, twice as many of the older women had experienced bladder leakage compared with young women. There was little difference between younger and older nulliparous women in the prevalence of other symptoms associated with a weak pelvic floor. In fact, the variation across both age groups and birth status was minimal. These data must be viewed with some caution, however, due to the small number of young parous women. Surprisingly, 10 per cent more of the younger women who had given birth experienced leakage in comparison with older parous women. Also, none of the older nulliparous women reported regular performance of pelvic floor exercises in comparison with 23 per cent of young nulliparous women.

The disparities in beliefs and experiences may largely be due to the differential birth status between the groups. Seventy-five per cent of the older women had given birth at least once, compared with only 12 per cent of the young women. We know that women who have been pregnant are more likely to have had exposure to information about pelvic floor exercises and are more likely to have experienced bladder leakage than nulliparous women. It is unclear as to why more older women have an accurate understanding about the links between exercise and bladder control.
Fitness Instructors and Teaching Pelvic Floor Awareness in A Gymnasium Setting

The knowledge and skills’ levels of the fitness instructors who took part in our project about teaching pelvic floor exercises and raising bladder control issues varied. Not all of them knew that bladder control issues can affect young women and those who have not had children, yet they acknowledged that as fitness instructors they had a role to play in these issues. Our training provided them with a better understanding of the size of the pelvic floor muscles, how to locate them and distinguish them from the abdominal and buttock muscles. One participant was unaware that incontinence was also associated with the muscles in the rectum. Of particular use was the exploration of new ways of incorporating pelvic floor exercises into the established routines of gymnasium members. The workshop enhanced the confidence of participants to be able to communicate the importance of performing pelvic floor exercises. However, it should be noted that it was felt that these issues could be raised because they were in a women-only environment.

Instructors indicated a need for written material, photographs, diagrams and descriptions on specific exercises other than those provided in our workbook. This was a need also identified by the training consultant of a Pelvic Floor Awareness one-day workshop whose clients also requested this type of information.

Strategies that they identified in the mid-point survey that worked well for women included:

- Reinforcing good posture which contributes to the strength of the pelvic floor.
- Exercises which draw the muscles of the anus, perineum and vagina together, then the vaginal muscles.
- Fitness ball exercises which assisted women to locate the pelvic floor muscles. This included performing pelvic floor exercises concurrently with pelvic raises with feet on the ball or pelvic tilts whilst sitting on the ball.
- Performing pelvic floor exercises prior to or during abdominal exercises.
- Inhaling to contract pelvic floor muscles then exhaling, whilst relaxing the facial muscles and the pelvic floor muscles simultaneously.
- Lying down and focusing completely on different muscle groups, including those in the pelvic floor, to isolate muscle groups that women often are not conscious of.

The instructors also reinforced that women need to:

- Be constantly reminded to perform pelvic floor exercises.
- Be made aware that the pelvic floor is no different to any other muscle in the body in that it has to be worked regularly to be in good working order.
- Learn about linking certain situations with the performance of pelvic floor exercises. Good cues for this are at traffic lights; whilst watching television commercials or washing hands.

In relation to mixed-gender gymnasiums, a clear message from both the women and instructors was that a women-only environment was imperative in order to be able to promote continence. However, given that men may also experience stress urinary incontinence (at lower rates), we believe the National Continence Management Strategy should consider utilising gender-specific approaches similar to those used in the United Kingdom National Continence Day (refer Chapter 2). Such approaches would normalise continence promotion even more and make the information more accessible for everyone in mixed-gender settings.
As a result of the project, Fernwood Mitcham also changed their member information form. Previously, the form asked if the member had at present, or in the past, a history of stress incontinence. We discovered that women did not understand this term, hence the question was changed to ask if the member had ever experienced difficulty with bladder control.

The Way We Did The Project

In hindsight, we realised that our projected changes in young women’s and fitness instructors’ behaviour were unrealistic! It would also have been beneficial to have had the involvement of a statistician at the project outset to facilitate data collection and analysis.

As the project progressed we learned more about the fitness industry; that it is characterised by a high turnover in staff; that the structure of classes is tight because they are usually conducted for only one hour, leaving little time to focus ‘on the inside’. We couldn’t be prescriptive in our expectations of fitness staff because their willingness to participate in the project was voluntary and the incorporation of our program across other gymnasiums needed to be simple. As we consulted with our pelvic floor-training expert, we realised that gymnasiums are not the ideal setting for all women to learn pelvic floor awareness because of the quiet focus needed by some. Often, pelvic floor exercises were taught at the end of energetic fitness classes as part of the ‘cool down’ when participants were usually exhausted and wanted the class to finish.

Nonetheless, our project was effective in raising the awareness of the issues associated with a weak pelvic floor with young women, older women and fitness instructors. Given this outcome, we think it is possible for Fernwood Fitness Centres to instil the same messages in its centres across Australia.

Developing Health Promotion Information For Women

After developing resources for our project, we began to wonder if best practice is actually practical practice for the not-for-profit health sector. Our project’s process of developing resources specifically for our target group demonstrated this point.

Some years ago, Women’s Health Victoria made a strategic decision not to continue to develop health information for women because of the resource intensity; we are now an information provider only. Our project, however, dictated that we develop two information products, namely a pamphlet and poster, because of the needs of our target group. We used the following best practice guidelines:

- Loddon Campaspe Women’s Health Service’s 90 ‘Guidelines for Producing Women’s Health Information in ‘Plain English’ Using Action Research’.
- Women’s Health Victoria’s ‘Quality Health Information for Women Criteria’.

We were surprised at the resource intensity of the process because we already had an excellent base for the information resource that we simply wanted to modify to be relevant to young women.

90 This service is now incorporated as Loddon Mallee Women’s Health Service Inc.
Our pamphlet was based on Women’s Health Statewide’s Pelvic Floor Exercises for Women pamphlet, developed by them in 1995 using rigorous processes. These involved consultations with relevant workers such as continence advisors and physiotherapists who specialised in pelvic floor exercises. Ten drafts were sent to Women’s Health Centres for onward consultation with women. This was a good process and we wanted to build on this in re-orienting this information to be specific to young women who attend gymnasiums.

In order to produce an eight-page standard size pamphlet, we started to modify the existing pamphlet according to the best practice guidelines. We further consulted with a range of health professionals who gave of their time at no cost and then surveyed eight young women who attended gymnasiums on the resultant draft. A focus group was also held with our recruited women for additional feedback. None of the guidelines we followed raised the issue of payment for services provided by consumers in the development of health information. However, we valued the time (about two hours) and input of the women involved in our health information development and we paid them $50 for their contribution to the project. Refreshments were also provided to the focus group participants. In addition, two project staff worked a total of 193 hours on getting the information products drafted, amended and ready for printing. In all, ten drafts were produced. Therefore, the cost of the process of developing a pamphlet and poster (not including graphic design, illustrations and printing costs) was $5,570.

We believe that our process was a good one for developing health information that involves consumer participation, thus ensuring relevance for the target audience. However, the resource practicalities led us to doubt if many not-for-profit health services are in a position to put this amount of resources into developing a short pamphlet and poster. We therefore draw attention to this issue because none of the best practice guidelines for developing health information that we followed provided estimated costings for the process.

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91 Pamphlet was ‘DL’ size.
Chapter 6 – What Are The Implications Of Our Project?

This chapter analyses the project findings in terms of their implications for:

- young women
- older women
- fitness instructors and practitioners
- Fernwood Female Fitness Centres to implement the program across all of its gymnasiums.

What Are The Implications For Young Women?

Overall, young women’s understanding of the role of the pelvic floor and bladder control is good. One issue of concern is that young women are not familiar with the term ‘Kegel’ exercises (Kegel refers to the name of the person who devised the exercises) and older women are only marginally more so. The evaluation data show that 11 per cent more women understood the term in the final survey than in the first but the aggregate number of young women who understood this term averaged out across the three surveys was only four per cent. Therefore, those who are in the position of awareness raising need to be mindful of this.

Thirty per cent of young women had experienced bladder leakage and this is similar to the prevalence rates identified in other studies of physically active young women (refer Chapter 2). Thirty per cent of the young women in our study also performed pelvic floor exercises and one quarter of them had specifically done so to control leakage, suggesting that women are self-managing symptoms of a weak bladder. We therefore need to reinforce health-promoting messages to young women that the regular performance of pelvic floor exercises is a preventive measure. Further, approximately one half of the young women had learned how to perform pelvic floor exercises as a result of the project which demonstrates that women are receptive to such health promoting activities in this setting. A further 17 per cent performed the exercises but did not learn them during the project duration. It is possible that these women learned them as a result of being in a women-only gymnasium because we knew that some fitness instructors taught pelvic floor exercises before the project commenced.

We also learned from both the women and fitness instructors that a women-only environment was seen as an important factor for learning pelvic floor exercises, particularly because continence promotion is of a delicate nature and one that our project sought to normalise. It should not be assumed, however, that all women who attend gymnasiums will necessarily be receptive to the health promoting messages used in our project, nor should we rely on women becoming pregnant to be able to access this information, especially given the current decline in birth rates. Further, whether the women in our project continue to perform pelvic floor exercises throughout all stages of their life cannot be determined. However, we did learn from fitness instructors that pelvic floor awareness has to be continually reinforced to women.

As the same proportion of nulliparous women in both age groups experienced symptoms associated with a weak pelvic floor (other than leakage) it seems that factors other than having given birth contribute to weakening of the pelvic floor. Given that our sample involved women who were physically active, it also supports the need to further explore the
hypotheses purported in the literature that there may be causal links between exercise and the development of these symptoms.

What Are The Implications For Older Women?
While our project was specifically targeted at young women, it also identified that older nulliparous women are at risk of developing symptoms associated with a weak pelvic floor. Hence an additional concern identified by our project was that none of the older women were performing pelvic floor exercises. Therefore, all women, including older nulliparous women, need to receive reinforcements about the preventive need for a toned pelvic floor throughout life. Strategies which target all women therefore need to be devised, particularly because not all women will be pregnant or give birth so we cannot rely on this circumstance as the only means of providing health promotion messages.

What Are The Implications For Fitness Instructors And Practitioners?
Young women, and some older women, are not familiar with pelvic floor exercises being described as ‘Kegel exercises’. It is therefore important that accessible language is used when raising awareness about the prevention of a weak pelvic floor and associated symptoms.

School nurses, health practitioners and fitness instructors are in a prime position to introduce health-promoting messages in all non-clinical settings and health and fitness assessments. However, information and ongoing support is needed for this to occur. Fitness industry bodies (such as VicFit), the Department of Human Services' School Nurses Program and health-related educational settings need to incorporate continence promotion into their curriculum and practice. Those coming into contact with women in appropriate settings need to be aware of services, such as the Continence Foundation and women's health services, to whom they can refer women. Pelvic floor exercises and continence promotion therefore need to be reinforced to all women, at all ages, in a variety of settings. We strongly agree with Chiarelli (2001) and Skoner (1994) that women need to have access to this information starting at school and that pelvic floor awareness as a preventive measure needs to be raised as a matter of course in all interactions with health practitioners throughout all women's life stages.

It is therefore important that accessible language is used when delivering the continence promotion message and strategies for prevention of symptoms associated with a weak pelvic floor.

What Are The Implications For Fernwood Female Fitness Centres In Implementing Such A Program Across All Of Its Gymnasiums?
We have learned that women members and fitness instructors place great importance on women-only gymnasiums as an appropriate environment for continence promotion to women. This fits with Fernwood’s philosophy of looking after all muscles in the body, breaking down taboos and taking a holistic view of women's health. Fernwood is therefore a great vehicle for this health promotion program.

How could Fernwood implement the program?
As part of its national training program, Fernwood could develop a training module for its Staff Training Intranet Site by modifying the Fitness Instructor Training Workbook published by the project and expanding on the ideas contained in Chapter 5 of this report. In
particular, the training should focus on communication strategies for staff to be able to ask questions about sensitive issues such as continence, without being intrusive (for example, Fernwood has already incorporated thyroid and breast cancer questions into its screening process for new members). Continence Advisers and women’s health services in each State and Territory could provide practical support to individual Centres. It is already a pre-requisite that Fernwood staff be fully qualified in resistance exercise prescription, anatomy and physiology.

All Centres should modify their Member Assessment Forms to raise ‘bladder control’ rather than ‘stress incontinence’ with members. Pelvic floor exercises should be taught as a matter of course in all types of fitness classes and taught on a one-to-one basis at each new individual program prescription. The latter mode is preferable because it is important for women to learn to perform the exercises correctly. However, class instruction is also very important as group instructors could act as prompts/reminders for the women to perform them regularly.

A range of quality assurance mechanisms could be developed by the National Quality Services/Training Manager to ensure sustainability, support and quality of the program. This would be communicated to all Centres via the Operations Manual which must be complied with.

Fernwood could launch the program at its annual conference and consider holding a Continence Awareness Week, as they regularly do for other health topics. Individual Fernwood Centres would have the option of using a local continence nurse educator to promote awareness and provide ongoing additional information.

All of these activities can be supported by the pamphlets and posters developed by the project specifically for young women who exercise and for display in gymnasiums. These products contain referral information to the National Continence Help-line and state-wide women’s health services.
Chapter 7 - Getting More Information

Professionals, such as physiotherapists and continence advisers, specialise in working with women to plan individualised pelvic floor exercise programs. The following services can provide further information.

WOMEN’S HEALTH SERVICES IN THE STATES AND TERRITORIES

Victoria
Women’s Health Victoria
GPO Box 1160K
MELBOURNE VIC 3001
(03) 9662 3755
Health Information Line: (03) 9662 3742 or freecall 1800 133 321 – staffed by a health professional. A well-resourced library is also available.
Website: www.whv.org.au
Email: whv@whv.org.au

Australian Capital Territory
Women’s Health Centre for Health Matters
P O Box 385
MAWSON ACT 2607
Ph: (02) 6290 2166
Fax: (02) 6286 4742
Email: adminenquiries@wchm.org.au

New South Wales
Women’s Health NSW
P O Box 341
(1 Marlborough Street)
LEICHHARDT NSW 2040
Ph: (02) 9560 0866
Mobile: 0416 223 394
Fax: (02) 9560 2887
Email: mslisa@ozemail.com.au

South Australia
Women’s Health Statewide
64 Pennington Terrace
NORTH ADELAIDE SA 5006
Ph: (08) 8239 9600
Fax: (08) 8239 9696
Email: info@whs.sa.gov.au

Queensland
Women’s Health Queensland Wide
P O Box 665
SPRING HILL QLD 4004
Ph: (07) 3839 9962
Fax: (07) 3831 7214
Email: whcb@womhealth.org.au

Western Australia
Women’s Health Care House
100 Aberdeen Street
NORTHBRIDGE WA 6003
Ph: (08) 9227 8122
Fax: (08) 9227 6615
Email: whch@womhealth.org.au
Website: www.women'shealth.wa.iinet.net.au

Tasmania
Hobart Women’s Health Centre
P O Box 248
NORTH HOBART   TAS   7002
Ph: (03) 6231 3212
Fax: (03) 6236 9449
Email: hwhc@trump.net.au

Northern Territory
Women’s Information Centre
P O Box 721
ALICE SPRINGS   NT   0871
Ph: (08) 8951 5880
Fax: (08) 8951 5884
Email: women.alice@net.gov.au

NATIONAL CONTINENCE HELPLINE (CONTINENCE FOUNDATION OF AUSTRALIA)
AMA House
293 Royal Parade
PARKVILLE   VIC   3052
Freecall 1800 33 00 66 (from anywhere in Australia)
8am-8pm, 7 days a week
Staffed by a registered nurse with specialist skills in providing information about bladder control, research data and local continence clinics and nurses.

AUSTRALIAN PHYSIOTHERAPY ASSOCIATION
National Office
Floor 3, 201 Fitzroy Street
ST KILDA   VIC   3182
Ph: (03) 9534 9400
For information about how physiotherapists can assist and how to contact them locally.

AUSTRALIAN FELDENKRAIS GUILD
P O Box 435
SOUTH MELBOURNE   DC   3205
Freecall 1800 001 550 or (03) 9636 3650.
Website: www.feldenkrais.org.au
Feldenkrais practitioners aim to assist people to become aware of their body through movement and can assist in improving women’s pelvic floor potential.
Chapter 8 - References


Jayasuriya P. How to treat urinary incontinence. Australian Doctor 2001;(11 May):I-VIII.


O'Connell HE. Urinary incontinence in women: exploring new ground. Thesis submitted for the qualification of master of medicine in women's health in the Department of Public Health and Community Medicine, University of Melbourne, 1996.


Rane A. Incontinence in women: don’t suffer it. Australian Family Physician 1999 (June);28(6):584-6.


Appendix

- Initial Survey
- Mid-Point Survey
- Final Survey
Women's Health Victoria, in partnership with Fernwood Female Fitness Centres, are undertaking a trial which aims to raise awareness of bladder control issues in younger women. The project is funded by the Commonwealth Department of Health and Aged Care's National Continence Management Strategy.

The Project Co-ordinator is Sarah Brown, who is located at Women's Health Victoria, 2/210 Lonsdale Street, Melbourne, 3000. You can contact her on (03) 9662 3755 if you have any questions about the project or this questionnaire.

Your completion of this survey is important, even if you feel that you are not able to answer all of the questions. You will be helping us to assist younger women prevent bladder problems. You will also be helping Fernwood to ensure that their programs meet the needs of all members.

This questionnaire will take **5 minutes to complete** and may be completed **anonymously**. Please place your completed questionnaire at the box at reception.

We appreciate your assistance. **THANK YOU.**

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<td>1) <strong>Age</strong>: please tick one or more answers</td>
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<td>2) <strong>How long have you been a member of Fernwood?</strong> ______ months / years</td>
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<td>3) <strong>Were you born in Australia</strong></td>
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<td>Yes</td>
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**If No, where were you born?**

**How long have you been in Australia** ______ months / years

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<td>4) <strong>Have you given birth vaginally?</strong></td>
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<td>Yes – how many times?</td>
<td>No</td>
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<td>5) <strong>Have you given birth by caesarean?</strong></td>
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<tr>
<td>Yes – how many times?</td>
<td>No</td>
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PLEASE TURN OVER

Appendix
6) **Bladder control issues** : please tick one or more answers

- Do not affect younger women
- Affect only older women
- Affect only older men
- Affect only older women
- Affect women only after child-birth
- Affect only older men
- Can occur at any age
- Can be aggravated by certain types of exercise

7) **Pelvic floor exercises** : please tick one or more answers

- Are another name for Kegel exercises
- Strengthen stomach muscles
- Should be done before child-birth
- Strengthen vaginal tone can improve sexual feeling/experience
- Should be done after child-birth
- Improve muscle tone during pregnancy and child-birth
- Can help prevent/correct prolapse (dropping of bladder, uterus or bowel)
- Can assist with better bladder and bowel control
- Are something I do regularly
- Should only be done under medical supervision

8) **I have experienced** : please tick one or more answers

- Leakage of urine when coughing, laughing or during exercise
- Just making it to the toilet in time
- A feeling of something pushing down into the vagina
- A deep vaginal ache, particularly late in the day

If you have ticked one or more of the above, please tick any of the following statements which apply to you.

- I would consider consulting a health professional because of bladder problems
- I have consulted a health professional because of bladder control problems
- I have not consulted a health professional because this is normal
- I have not consulted a health professional about bladder control problems because of embarrassment
- I have stopped having sex because of uncontrolled leakage of urine
- I have occasionally limited or stopped exercising because of bladder problems
- I have avoided or limited beverages because of uncontrolled leakage of urine
- I have performed pelvic floor exercises in order to control leakage of urine
- Occasionally I have worn protective pads because of uncontrolled leakage of urine
- I have been experiencing uncontrolled leakage of urine for ______ months/years

9) **Would you be interested in completing a similar survey in 3 and/or 6 months time?** : This will help us to assess if our project is working. Women’s Health Victoria will mail a survey to your home address and provide a reply paid envelope so that you can return the survey anonymously. You need only provide your first name if you wish.

- Yes
- No

Name: __________________________________________

Address: _______________________________________

Thank you for taking the time to complete this survey.
Women’s Health Victoria, in partnership with Fernwood Female Fitness Centres, are undertaking a trial which aims to raise awareness of bladder control issues in younger women. The project is funded by the Commonwealth Department of Health and Aged Care’s National Continence Management Strategy.

We would appreciate your contribution. By completing this survey you will be helping us to raise awareness of the pelvic floor in order to prevent the development of bladder control problems in young women. You will also be helping Fernwood to ensure that their programs meet the needs of all members.

The Project Co-ordinator is Sarah Brown, who is located at Women’s Health Victoria, 2/210 Lonsdale Street, Melbourne, 3000. You can contact her on (03) 9662 3755 if you have any questions about the project or this survey.

Your completion of this survey is important, even if you feel that you are not able to answer all of the questions.

This questionnaire will take 5 minutes to complete and may be completed anonymously. Please place your completed questionnaire at the box on the reception desk.

THANK YOU.

Did you participate in an earlier survey about this program?  

| a. Yes | b. No |

If yes, you may note that some of the questions are the same as those asked earlier. It would be helpful if you could please complete them again. Thank you.

1) Age: please tick one or more answers

| a. under 20 | b. 20 - 24 |
| c. 25 - 29 | d. 30 - 34 |
| e. 35 - 44 | f. 45 - 54 |
| g. 55 - 64 | h. 65+ |

2) How long have you been a member of Fernwood? ___________ months / years

3) Were you born in Australia

| a. Yes | b. No |

If No, where were you born? ________________________________

How long have you been in Australia? ___________ months / years

4) Have you given birth vaginally?

| a. Yes – how many times? ___________ |
| b. No |

Appendix
5) Have you given birth by caesarean?  
   a. Yes – how many times? ____________  
   b. No

6) Bladder control issues: please tick one or more answers
   a. do not affect younger women  
   b. affect only older women  
   c. affect only older men  
   d. can occur at any age  
   e. affect women only after child-birth  
   f. can be aggravated by certain types of exercise

7) Pelvic floor exercises: please tick one or more answers
   a. are another name for Kegel exercises  
   b. strengthen stomach muscles  
   c. should be done before child-birth  
   d. strengthen vaginal tone and improve sexual feeling/experience  
   e. should be done after child-birth  
   f. improve muscle tone during pregnancy and child-birth  
   g. can help prevent/correct prolapse (dropping of bladder, uterus or bowel)  
   h. can assist with better bladder and bowel control  
   i. are something I do regularly  
   j. should only be done under medical supervision

8) Issues associated with bladder control and pelvic floor exercises are not relevant to me? please tick one answer
   a. Agree  
   b. Disagree

9) Class instructors at Fernwood talk about bladder control: please tick one answer
   a. often  
   b. occasionally  
   c. never  
   d. not applicable

10) Bladder control information is given during fitness assessments/new program prescriptions: please tick one answer
   a. often  
   b. occasionally  
   c. never  
   d. not applicable

11) I have learned how to do pelvic floor exercises at Fernwood in the last few months: please tick one answer
   a. Yes (Go to question 12)  
   b. No (Go to question 13)
12) Did you like the way instructions about pelvic floor exercises were given? please tick one answer
   a. Yes
   b. No
   Why? .................................................. Why? ..................................................
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13) I am doing pelvic floor exercises when I’m not at Fernwood: please tick one answer
   a. 1 – 2 times per week
   b. 3 – 5 times per week
   c. daily
   d. occasionally
   e. never

14) I am doing pelvic floor exercises at Fernwood: please tick one answer
   a. 1 – 2 times per week
   b. 3 – 5 times per week
   c. daily
   d. occasionally
   e. never

15) I feel comfortable when the staff talk about bladder control issues and pelvic floor exercises: please tick one answer
   a. Yes
   b. No

16) I would feel comfortable to talk to staff about bladder control: please tick one answer
   a. Yes
   b. No
   Why? .................................................. Why? ..................................................
   .......................... ..........................
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Appendix
17) I have experienced: please tick one or more answers

- a. leakage of urine when coughing, laughing or during exercise
- b. just making it to the toilet in time
- c. a feeling of something pushing down into the vagina
- d. a deep vaginal ache, particularly late in the day

If you have ticked one or more of the above, please tick any of the following statements which apply to you.

- a. I would consider consulting a health professional because of bladder problems
- b. I have consulted a health professional because of urinary incontinence
- c. I have not consulted a health professional because this is normal
- d. I have not consulted a health professional because of embarrassment
- e. I have stopped having sex because of uncontrolled leakage of urine
- f. I have occasionally limited or stopped exercising because of bladder problems
- g. I have avoided or limited beverages because of uncontrolled leakage of urine
- h. I have performed pelvic floor exercises in order to control leakage of urine
- i. Occasionally I have worn protective pads because of uncontrolled leakage of urine
- j. I have been experiencing uncontrolled leakage of urine for ______ months/years

18) As a result of the information provided by Fernwood about bladder control I have: please tick one or more answers

- a. sought medical assistance
- b. taken away information pamphlets from Fernwood
- c. rang a women’s health service
- d. rang the Continence Foundation
- e. learned about issues I was previously unaware of
- f. irrelevant/not applicable

19) Would you be interested in completing a final survey in 3 months time?: This will help us to assess if our project has worked. Women’s Health Victoria will mail a survey to your home address and provide a reply paid envelope so that you can return the survey anonymously. You need only provide your first name if you wish.

- a. Yes
- b. No

Name: __________________________________________________________

Address: __________________________________________________________

______________________________________________________________

Thank you for taking the time to complete this survey.

Please put into the box at reception.
We need your help to complete this survey. Over the last few months, Women's Health Victoria and Fernwood Mitcham have been undertaking a trial which aimed to raise awareness of bladder control issues in young women.

EVEN IF YOU COMPLETED A SURVEY EARLIER, YOUR COMPLETION OF THIS SURVEY IS IMPORTANT so that we can assess if our program has been effective. You will be helping us to assist young women in preventing bladder problems. You will also be helping Fernwood to redesign their programs so that all members can benefit!

This questionnaire will take 5 minutes to complete and is completely anonymous. Please place your completed questionnaire at the box on the reception desk.

We appreciate your assistance. Thank you.

Did you participate in an earlier survey about this program?  a. Yes  b. No

If yes, you may note that some of the questions are the same as those asked earlier. It would be helpful if you could please complete them again. Thank you.

1) **Age**: please tick one or more answers

   a. under 20
   b. 20 - 24
   c. 25 - 29
   d. 30 - 34
   e. 35 - 44
   f. 45 - 54
   g. 55 - 64
   h. 65+

2) **How long have you been a member of Fernwood?** ________ months / years

3) **Were you born in Australia**  a. Yes  b. No

   If No, where were you born?

   How long have you been in Australia

   ________ months / years

4) **Have you given birth vaginally?**  a. Yes – how many times?__________

   b. No

5) **Have you given birth by caesarean?**  a. Yes – how many times?__________

   b. No

If you would like further information, please contact the Project Co-ordinator, Sarah Brown, who is located at Women's Health Victoria. You can contact her on (03) 9662 3755.
6) **Bladder control issues**: please tick one or more answers

- a. do not affect younger women
- b. affect only older women
- c. affect only older men
- d. can occur at any age
- e. affect women only after child-birth
- f. can be aggravated by certain types of exercise

7) **Pelvic floor exercises**: please tick one or more answers

- a. are another name for Kegel exercises
- b. strengthen stomach muscles
- c. should be done before child-birth
- d. strengthen vaginal tone and improve sexual feeling/experience
- e. should be done after child-birth
- f. improve muscle tone during pregnancy and child-birth
- g. can help prevent/correct prolapse (dropping of bladder, uterus or bowel)
- h. can assist with better bladder and bowel control
- i. are something I do regularly
- j. should only be done under medical supervision

8) **The issue of bladder control and pelvic floor exercises are not relevant to me?**

- a. Agree
- b. Disagree

9) **Class instructors at Fernwood talk about bladder control**: please tick one answer

- a. often
- b. occasionally
- c. never Please go to question 11

10) **I feel comfortable if staff talk about bladder control and pelvic floor exercises**: please tick one answer

- a. Yes
- b. No
11) I would feel comfortable to talk to staff about bladder control: please tick one answer

- a. Yes
- b. No

Why? .................................................... Why? ......................................................
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12) Information on bladder control is given during fitness assessments/new program prescriptions: please tick one answer

- a. often
- b. occasionally
- c. never

13) I have learned how to do pelvic floor exercises at Fernwood in the last 6 months: please tick one answer

- a. Yes (Go to Question 12)
- b. No (Go to Question 15)

14) Did you like the way instructions about pelvic floor exercises were given? please tick one answer

- a. Yes
- b. No

Why? .................................................... Why? ......................................................
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15) **I am doing pelvic floor exercises when I'm not at Fernwood:** please tick one answer

- a. 1 – 2 times per week
- b. 3 – 5 times per week
- c. daily
- d. occasionally
- e. never

16) **I am doing pelvic floor exercises at Fernwood:** please tick one answer

- a. 1 – 2 times per week
- b. 3 – 5 times per week
- c. daily
- d. occasionally
- e. never

17) **I have experienced:** please tick one or more answers

- a. leakage of urine when coughing, laughing or during exercise
- b. just making it to the toilet in time
- c. a feeling of something pushing down into the vagina
- d. a deep vaginal ache, particularly late in the day

*If you have ticked one or more of the above, please tick any of the following statements which apply to you.*

- a. I would consider consulting a health professional because of bladder problems
- b. I have consulted a health professional because of urinary incontinence
- c. I have not consulted a health professional because this is normal
- d. I have not consulted a health professional because of embarrassment
- e. I have stopped having sex because of uncontrolled leakage of urine
- f. I have occasionally limited or stopped exercising because of bladder problems
- g. I have avoided or limited beverages because of uncontrolled leakage of urine
- h. I have performed pelvic floor exercises in order to control leakage of urine
- i. Occasionally I have worn protective pads because of uncontrolled leakage of urine
- j. I have been experiencing uncontrolled leakage of urine for ______ months/years

18) **As a result of the information provided by Fernwood about bladder control I have:** please tick one or more answers

- a. sought medical assistance
- b. taken away information pamphlets from Fernwood
- c. rang a women’s health service
- d. rang the Continence Foundation
- e. learned about the issues I was previously unaware of

*Thank you for taking the time to complete this survey*

Look out for the new *Strengthen Your Inside* pamphlets on the pelvic floor & exercises to strengthen it.