

**NSW Falls  
Injury  
Prevention**

**FALLS LINKS**

**Volume 1 Issue 4**

**July/August  
2006**

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**Welcome**

Welcome to the 4th edition of our newsletter. This edition features the inaugural meeting of the Area Health Service Coordinators, the Falls Awareness week at Prince of Wales Hospital and a brief review of the evidence for Vitamin D and calcium supplementation.

The Australian Injury Prevention Network conference is on at the University of NSW from the 27-29 September, for more

information see page 8 of this issue.

The Australian Falls Prevention conference is on in sunny Brisbane from 5-7th of November register before 15th September and receive and early bird registration discount, see page 9.

Hope you enjoy this issue of Falls Links.

**Area Health Falls Coordinators Workshop**

The inaugural Area Health Service Falls Coordinators workshop was held at the Clinical Excellence Commission from 26 to the 28th June. See Page 2 for Workshop Report.

**SPECIAL POINTS OF INTEREST:**

**INAUGRAL MEETING  
AREA HEALTH FALLS  
COORDINATORS**

**FALLS AWARENESS  
WEEK AT POWH**

**VITAMIN D AND CAL-  
CIUM SUPPLEMENTATION**



From left to right, Therese Findlay (SWSAHS), Pam Albany (DoH), Mary-Clare Maloney (NCAHS), Michelle Kershaw (representing SESIAHS), Esther Vance (POWMRI), Patsy Bourke (HNEAHS), Jenny Bawden (SWAHS), Sue Weston (GSAHS), Margaret Armstrong (NSCCH), Lorraine Lovitt (CEC), and Jackie Kelly (GWAHS).

## AREA HEALTH FALLS CO-ORDINATORS WORKSHOP

The Area Falls Co-ordinators have been appointed to co-ordinate the implementation of the NSW Health's Falls Policy. Each Area Health Service has developed an implementation plan and initiatives will affect change across community, hospitals and residential care sectors.

The workshop provided an opportunity for the newly appointed co-ordinators to meet, share information and to develop a team approach to the development of their roles.

The workshop featured a number of presentations by guest speakers, who covered issues about managing change and sustainability; falls best-practice guidelines, including risk screening and assessment; medication management; data collection; monitoring and evaluation. A presentation on the SAFTE project, which is currently being piloted in 4 sites, provided information on the interagency approach to provide integrated community care for frail older people. Early indications have shown that a large proportion of referrals relate to people who either have had a fall or at high risk for falls living in the community.

There was also a visit to the Prince of Wales Medical Research Institute and included a presentation and demonstration of the QuickScreen Falls risk assessment tool.

The Area Falls Co-ordinators found the workshop extremely beneficial and the opportunity to establish networks and communication processes as a good basis of support for them in their roles.



Jenny Bawden participating in the QuickScreen demonstration

Contact details of the Area Health Falls Co-ordinators are:

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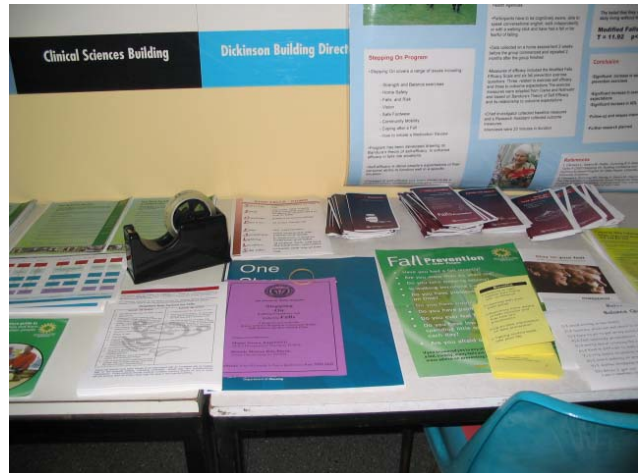
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## Falls Awareness Week at Prince of Wales Hospital

The Prince of Wales Hospital held a very successful Falls Awareness Week from the 10th to 14th July. The week was designed to alert staff, patients and carers, to the risk factors associated with falls as well as interventions shown to be successful in preventing falls.

The activities of this week included a number of presentations to staff including a Grand Rounds talk. Daily bulletins were emailed to medical and nursing staff covering issues such as risk factors for falls, fallers presenting to the ED and tips on preventing inpatient falls and /or reduce future falls and fracture risk following discharge and interventions such as exercise and vitamin D supplementation.



Display of information on falls prevention in the main Foyer of Prince of Wales hospital.

Falls awareness week also signified the start of a co-ordinated hospital wide approach to reduce the number of falls and falls related injuries occurring to patients during an inpatient stay.

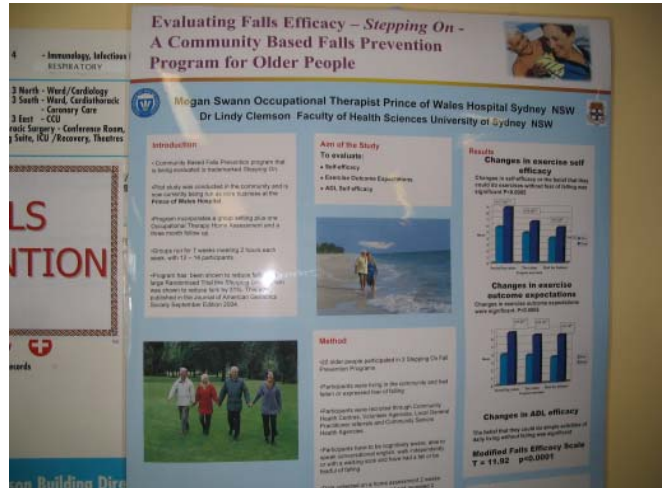


Some of the friendly staff manning the Falls Awareness week stall in the foyer of the Prince of Wales Hospital. The stall provided information pamphlets to both hospital staff and the public on falls prevention.

A stall was set up each day, rotating to each of the entrance foyers of the hospital and manned by staff involved in falls prevention. Information on falls prevention was displayed and information packs given out to patients and carers.

Over 1,000 information packs on falls prevention were handed out. The feedback on the information provided was very positive.

Falls prevention packs were also given to each ward in the hospital.



Poster display of the very successful Stepping On community exercise program, which is being facilitated from the Prince of Wales Hospital.

## Recent Interesting Abstracts from the literature on Falls Prevention

### Economic analysis of a community-based falls prevention program

J. Beard<sup>a,b,c</sup>, D. Rowell<sup>d</sup>, D. Scott<sup>d</sup>, E. van Beurden<sup>d,e</sup>, L. Barnett<sup>a</sup>, K. Hughes<sup>b,f</sup> and B. Newman<sup>b,f</sup>

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<sup>f</sup>Queensland University of Technology, Injury Prevention and Control, Brisbane, Australia

[Public Health Volume 120, Issue 8](#), August 2006, Pages 742-751

#### Abstract

##### Objectives

To undertake a cost-benefit analysis of 'Stay on Your Feet', a community-based falls prevention program targeting older people at all levels of risk in New South Wales, Australia. Hospital separations were monitored in the intervention region, a control region and for the state of New South Wales as a whole. Changing admission patterns over the intervention period were used to assess the impact of the program.

##### Methods

Cost-benefit analysis compared the costs of the program with two estimates of savings from avoided hospital admissions. The first compared the cost of hospital admissions in the intervention region to a control region of similar demographics, while the second compared hospital utilization in the intervention region with the state of New South Wales as a whole using falls-related hospital diagnosis related group (DRG) codes.

##### Results

The total direct costs of the program were estimated at A\$781 829. Both methods identified clear overall net benefits ranging from A\$5.4 million for avoided hospitalizations alone to A\$16.9 million for all avoided direct and indirect costs. The confidence intervals around these estimates were small. The average overall benefit to cost ratio for the intervention as a whole was 20.6:1.

##### Conclusions

These findings suggest that well-designed community-based interventions targeting falls prevention among older people are highly cost effective and a wise investment for all levels of government. The models used are conservative and are likely to underestimate the real benefit of the intervention, which may have lasted for some time beyond the life of the program.

**Comment:** This paper provides a cost benefit analysis of a community based falls prevention program and clearly shows the benefits in cost terms of such a program.

### Health-protective behaviours and risk of fall-related hip fractures: a population-based case-control study

Nancye May Peel<sup>1,2</sup>, Roderick John McClure<sup>3</sup> and Joan Katherine Hendrikz<sup>1</sup>

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<sup>3</sup> School of Medicine, Griffith University, Meadowbrook, Queensland, Australia 4131

[Age and Ageing, Volume 35, Number 5](#), September 2006, pp. 491-497.

#### Abstract

**Background:** Fall-related hip fractures are one of the most common causes of disability and mortality in older age. The study aimed to quantify the relationship between lifestyle behaviours and the risk of fall-related hip fracture in community-dwelling older people. The purpose was to contribute evidence for the promotion of healthy ageing as a population-based intervention for falls injury prevention.

**Methods:** A case-control study was conducted with 387 participants, with a case-control ratio of 1:2. Incident cases of fall-related hip fracture in people aged 65 and over were recruited from six hospital sites in Brisbane, Australia, in 2003-04. Community-based controls, matched by age, sex and postcode, were recruited via electoral roll sampling. A questionnaire designed to assess lifestyle risk factors, identified as determinants of healthy ageing, was administered at face-to-face interviews.

**Results:** Behavioural factors which had a significant independent protective effect on the risk of hip fracture included never smoking [adjusted odds ratio (AOR): 0.33 (0.12-0.88)], moderate alcohol consumption in mid- and older age [AOR: 0.49 (0.25-0.95)], not losing weight between mid- and older age [AOR: 0.36 (0.20-0.65)], playing sport in older age [AOR: 0.49 (0.29-0.83)] and practising a greater number of preventive medical care [AOR: 0.54 (0.32-0.94)] and self-health behaviours [AOR: 0.56 (0.33-0.94)].

**Conclusion:** With universal exposures, clear associations and modifiable behavioural factors, this study has contributed evidence to reduce the major public health burden of fall-related hip fractures using readily implemented population-based healthy ageing strategies.

## **Evidence for Vitamin D and Calcium supplementation, a mini-review of the recent literature.**

There has been considerable debate on the benefits of vitamin D and calcium supplementation in preventing falls in older people.

The landmark study by Chapuy et al in 1992<sup>1</sup> found that female nursing home residents that had been given 800IU vitamin D3 and 1200mg elemental calcium daily had a 43% reduction in non-vertebral fractures compared to the control group who did not receive the supplements.

A review on vitamin D and the elderly<sup>2</sup> found well documented evidence for vitamin D deficiency in those over 65, 80% were found to have vitamin D insufficiency and 44% of nursing home residents had severe vitamin D deficiency (<25nmol/ml 25-hydroxyvitamin D (25[OH]D serum levels). This review also reported evidence that vitamin D deficiency increases the risk of colon, breast, prostate and ovarian cancers. Low plasma 25[OH]D levels were associated with increased cardiovascular morbidity.

In two systematic reviews<sup>3,4</sup> of the literature on the effect of vitamin D on falls and fracture it was found in 5 Randomised Controlled Trials (RCTs) that participants who had received daily vitamin D supplementation had a 22% reduction in falls. In 5 RCTs of hip fractures and 7 RCTs for non-vertebral fractures there was a 26% reduction in the risk of sustaining a hip fracture and a 23% reduction in sustaining any non-vertebral fracture in those receiving vitamin D and calcium compared to calcium alone or placebo.

These reviews also found that studies showed that a daily dose of 400IU of vitamin D was insufficient to produce any reduction in hip or non-vertebral fractures. These analyses also found that vitamin D plays a role in improving muscle function besides its essential role in bone metabolism.

There have been a number of RCTs<sup>5,6</sup> that have not reported any significant reduction in fractures from vitamin D and calcium supplementation. These studies did not measure vitamin D status in all participants and there were compliance problems with only 63% taking the supplements after 2 years.

A recent review<sup>7</sup> of randomized controlled trials and systematic reviews on the role of vitamin D and calcium in the prevention of falls, concluded that although there was some conflicting evidence on the benefits of vitamin D and calcium supplementation, this should still be recommended, especially for frail elderly patients living in institutions. A clear advantage of vitamin D and calcium supplementation, was that it provided a safe and cheap intervention, with few adverse effects, the most serious being hypercalcaemia, kidney stones, and renal insufficiency which were all extremely rare.

A recent Australian feasibility study<sup>8</sup> found that orally administered vitamin D3 (100,000 IU) at 3 monthly intervals was well tolerated and increased serum 25[OH]D to normal levels in all subjects, from residential aged care facilities when given for 2 years. The baseline serum 25[OH]D levels of 95% of the residents were below desirable levels.

They concluded that oral supplementation with Vitamin D3 every 3 months was a safe, effective and inexpensive way to meet the vitamin D requirements of aged-care residents.

The Australian Safety and Quality Council Guidelines in 'Preventing falls and harm from falls in older people'<sup>9</sup> recommend vitamin D and calcium supplementation be considered as a routine management strategy, as there is evidence that it appears to reduce the risk of falls and fall-related fractures, in ambulatory or institutionalized older people.

There is good evidence in the literature that Vitamin D and Calcium supplementation decreases the incidence of falls and hip and non vertebral fractures when used at doses of at least 800IU Vitamin D3 with 1200mg Calcium for at least 3 months (and preferably longer) in residential care facilities especially for female residents. Vitamin D supplementation may also decrease the risk of certain cancers and reduce cardiovascular morbidity.

**References**

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7. Kannus P, Sievanen H, Palvanen M, Jarvinen T, Parkkari J. Prevention of falls and consequent injuries in elderly people. The Lancet. 2005;366 (9500):1885-93

8. Wigg AE, Prest, Caroline, Slobodian, Peter, Need, Allan G., Cleland, Leslie G. A system for improving vitamin D nutrition in residential care. MJA. 2006;185(4):195-8.

9. Australian Council for Safety and Quality in Health Care. Preventing falls and harm from falls in older aged care facilities. 2005, p95.

# New Books

## staying power

tips and tools to keep you on your feet

written by Lindy Clemson and Megan Swann-Williams

**A fresh new book for older people  
on falls prevention**

**RRP \$29.95**

**available around Australia in all good bookstores**



If you would like to know more about *Staying Power*, including ordering bulk copies at a discount for your community program, please contact:

Jayne Denshire  
Limelight Press  
Ph: (02) 9810 9755  
Fax: (02) 9818 7643  
Email:  
jayne@limelightpress.com.au



### About the book

The key to healthy ageing is to adopt a positive, confident attitude and to stay connected to your community. It is essential to keep your independence, especially as you approach that stage of life when you can fall more easily.

*Staying Power: tips and tools to keep you on your feet* gives practical and inspirational advice on how to prevent falls in your life. Through a combination of exercise and a healthy, active approach, you can beat what seem like the inevitable outcomes of getting older.

The ideas in *Staying Power* are based on a community program called Stepping On, which has successfully changed the lives of many older people. This program reduced the falls rate of its participants by over 30 per cent. Packed with ideas for setting up your home, getting out and about in your community and developing balance and strength in your body, as well as success stories from older people who have adopted these habits, *Staying Power* will have you on your feet in no time ... and will keep you there.

### About the authors

Lindy Clemson is a public health researcher on ageing and an occupational therapist, with a PhD in epidemiology. She has a background in consultancy and research in the areas of physical and cultural environments, adaptation and ageing, and the independence of older persons at home and in the community. She has over 30 publications and has recently completed research as the Principal Chief Investigator into the effectiveness of a community-based falls prevention program, which became the Stepping On program.

Megan Swann-Williams has worked as an occupational therapist for over 24 years. She jointly developed, conceptualised and implemented the Stepping On program with Lindy Clemson. She has run over 30 Stepping On programs in Sydney and Newcastle and is currently facilitating these programs at Prince of Wales hospital in NSW.

## Conferences/Meetings

### Falling for the AIPN conference ....

Don't be alarmed ... we're not expecting a sudden increase in falls at the AIPN 8th Australian Injury Prevention Conference on the 27th to 29th September 2006 at the University of NSW. But there is a terrific program that anyone working in injury prevention would be willing to fall over themselves to attend.

The conference program includes over 150 papers and falls injury prevention features very strongly throughout the conference.

During each day of the conference there are keynote speakers and a program of three concurrent sessions plus workshops. Falls Injury Prevention is one of the streams in the concurrent session on Wednesday afternoon 27 September and there is also a Falls Injury Prevention Workshop on Friday morning 29 September. There are other great sessions which include papers about falls injury prevention such as:

- ✦ Home and Community Safety
- ✦ Safe Communities
- ✦ Safety Culture
- ✦ Injury Research & Surveillance

Translating / Linking Research to Policy

Check out the AIPN website for more details about the conference [www.aipn.com.au](http://www.aipn.com.au) and get your registration in, if you haven't done so already.

# CONFERENCES



It is my pleasure to invite you to attend the second Australian Falls Prevention Conference, to be held at the Sofitel Hotel, Brisbane, Queensland. The conference will address the important issue of falls in older people with a major emphasis on...

## *"Preventing falls in at-risk groups"*

The conference includes 7 keynote speakers from Australia and abroad, free papers, poster sessions, workshops, roundtable discussions and trade exhibitions.

The Organising Committee looks forward to welcoming you to Brisbane.

Graham Kerr,  
Conference Host.

### *session themes*

- Vision Impairment
- Cognitive Impairment
- Parkinson's Disease
- Understanding Balance
- Falls risk assessment
- Exercise programs
- Compliance issues
- Fracture prevention
- Falls prevention initiatives
- Falls policy development



**Australian Government**  
**Department of Health and Ageing**



**POPI**  
*Prevention of Older  
People's Injuries*

### *important dates*

- Abstracts open.....10th February 2006
- Registrations open.....27th February 2006
- Abstracts close.....30th June 2006
- Notification of abstract acceptance...1st September 2006
- Early registrations close.....15th September 2006

### *invited speakers*

- Lindy Clemson (Sydney, Australia) 'Occupational interventions for the prevention of falls'.
- Bob Cumming (Sydney, Australia) 'Interventions for preventing falls in hospitals'.
- Stephen Lord (Sydney, Australia) 'Overview of 50 RCTs on exercise for falls prevention'.
- John Wark (Melbourne, Australia) 'An update of fracture prevention strategies'.
- Graham Kerr (Brisbane, Australia) 'Falls prevention strategies for people with Parkinson's disease'.
- Clare Robertson (Dunedin, NZ) 'Falls prevention strategies for people with visual impairment'.
- Jacqui Close (Sydney, Australia) 'Falls prevention strategies for people with cognitive impairments'.

#### *Organising Committee*

G Kerr, J Wood, S Morrison, S Brauer, J Nitz,  
N Peel, M Bourke, P Vardon, R O'Keefe

#### *Scientific Committee*

G Kerr, J Wood, S Morrison, S Lord, J Close, R Fitzpatrick, C Sherrington, L Day,  
J Steele, B Cumming, I Cameron, H Menz, K Hill, L Clemson, C Vogler, D Sturnieks

for further information about the conference and abstract submissions.....

[www.powmri.edu.au/AFP2006](http://www.powmri.edu.au/AFP2006)

[afp06conference@qut.edu.au](mailto:afp06conference@qut.edu.au)

ph.07 3864 2916

**NSW FALLS INJURY PREVENTION NETWORK**

For information, suggestions and ideas regarding the network or this newsletter, contact Esther Vance at [e.vance@unsw.edu.au](mailto:e.vance@unsw.edu.au)

[www.powmri.edu.au/fallsnetwork](http://www.powmri.edu.au/fallsnetwork)

## Network

### SHARE YOUR NEWS AND INFORMATION/IDEAS ON FALLS PREVENTION

Do you have any news on Falls prevention you want to share with others on the network, or do you want to report on a project that is happening in your area, please email Esther with your information. We also welcome suggestions for articles and information you would like to see in this newsletter.

Send your information to [e.vance@unsw.edu.au](mailto:e.vance@unsw.edu.au)

### THE NETWORK LISTSERV

It is great to see the increased activity on the listserv and we certainly want to promote this. To send an item to the listserv where all the members of the network can see it, send an e-mail to:

[nsw-falls-network@lists.health.nsw.gov.au](mailto:nsw-falls-network@lists.health.nsw.gov.au)

You need to be a subscriber to the listserv to send an email that will be distributed to all members on the listserv. Remember to put a short description in the subject line.

### NSW FALLS INJURY PREVENTION NETWORK BACKGROUND

The NSW Falls Injury prevention network has existed since 1993. The role of this network has grown since its inception and now includes:

- Meetings for discussion of falls related issues;
- Dissemination of research findings both local and international;
- Sharing resources developed and exploration of opportunities to combine resources in joint initiatives;
- Encouragement of collaborative projects and research;
- To act as a lobby group to influence policy;
- To liaise with NSW Health to provide information on current State/Commonwealth issues in relation to falls and
- Maintenance of resources pertinent to the field

The main purpose of the network is to share knowledge, expertise, and resources on falls injury prevention for older people.

**The NSW Falls Injury Prevention Network activities are part of the implementation of the NSW Falls Policy funded by NSW Health**

## Information

### JOINING THE NETWORK

To join the NSW Falls Injury Prevention Network listserv :

- Send an email to : [majordomo@lists.health.nsw.gov.au](mailto:majordomo@lists.health.nsw.gov.au)
- In the body of the message type : **subscribe nsw-falls-network**
- Do not put anything in the subject line;
- Do not put anything else in the body of the message including your signature. If your signature is automatically added every time you send an email you will need to turn this off;
- You will receive an e-mail from the listserv to say you have been successful in joining and giving instructions on how to send e-mails to the listserv.
- To unsubscribe send an e-mail to the above address and in the body of the message write **unsubscribe nsw-falls-network**

If you have any problems contact Esther at [e.vance@unsw.edu.au](mailto:e.vance@unsw.edu.au).