

**NSW Falls  
Injury  
Prevention  
Network**

# FALLS LINKS



**Volume 1 Issue 6**  
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**INSIDE THIS ISSUE:**



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This is our final issue for 2006. This issue features a report on the 2nd Australian Falls Prevention Conference held in Brisbane from 5-7 November. This report is on pages 2-4.

We wish you all a peaceful, joyful and restful Christmas and holidays.

Looking forward to 2007 with more articles and information for you all.

The ACT Annual Falls Prevention Summer Forum was held on December 7th and a report is on pages 5-6.

There are also a number of interesting abstracts this week and these are on pages 6-8.



**SPECIAL POINTS  
OF INTEREST:**

- WELCOME**
- AFP 2006**
- ACT FALLS  
FORUM**
- NEW ABSTRACTS**

## AFP 2006

The 2nd Australian falls Prevention Conference was a great success with over 450 delegates present, and over 70 presentations and 66 posters. The venue was excellent and presentations and posters were of a high quality.



FALLS LINKS

# Australian Falls Prevention Conference 2006

The 2nd Australian Falls Prevention Conference was held at the Sofitel Hotel in Brisbane from the 5th to the 7th of November. This conference addressed issues of falls in older people with particular emphasis on 'at risk' populations and included plenary speakers from Australia, Great Britain, and New Zealand.

Plenary sessions included presentations on falls prevention strategies for visually impaired people, an Occupational therapist's perspective on falls prevention, Interventions for preventing falls in hospitals, older people's beliefs and attitudes about falls prevention, a systematic review of exercise programmes for falls prevention, falls prevention strategies for people with Parkinson's disease and cognitive impairment and fracture prevention strategies. A number of the plenary session presentations are now available on the NSW Falls Injury Prevention Network website at <http://www.powmri.edu.au/fallsnetwork>

The concurrent sessions included presentations on understanding balance, community based exercise, falls risk assessment, exercise in residential aged care settings, community falls prevention initiatives, risk factors for falls, falls prevention programs in hospitals, fracture prevention, hip protectors and the implementation of falls prevention programs. There were also a large number of poster presentations on the above topics.

There were a number of workshops including one on the ProFaNe falls intervention taxonomy and breakfast workshops on Falls risk assessment/ screening and the development and implementation of the NSW Falls Policy.

Participants came from a range of professional disciplines and settings including hospital, aged care, research and area health service facilities.

There was an excellent trade exhibit.

Though only a small number attended the conference dinner it was a great time to network , the band was great ensuring all had plenty of exercise on the dance floor. See page 3 for photos of the conference and dinner.

A lunch time meeting was held to discuss the proposal for an Australian Falls Prevention Society. The objectives of an Australian falls Prevention Society are:

- To plan and organise AFP meetings, the prime objective is to provide the expertise, a core group of people with a strong background in falls prevention research and practice and sufficient knowledge of the research base and researchers in the topic area to organise AFP meetings.
- To facilitate student participation at AFP meetings through travel grants, low registration fees and presentation awards.
- To provide members with e-mail notifications about upcoming AFP meetings and other e-mail updates.
- To foster links with similar societies and networks around the world.

The following motions were put forward to the meeting:

1. **That the meeting support the formation of an Australian Falls prevention Society.**
2. **That the meeting elect an interim Executive Committee comprised of the following:**

- President
- Vice-President
- Secretary
- Treasurer
- Committee Members
  - Past meeting host (ex officio)
  - Next meeting host (ex officio)
  - Elected members (4-6)
- Student elected members
- Web page manager

# AFP 2006



3. **That the interim committee be charged with producing a constitution/ by-laws for circulation to AFP 2006 delegates before the 2008 meeting and ratification at the 2008 meeting.**
4. **That the interim committee oversees the planning and organization of the 2008 AFP conference.**
5. **That the interim positions be declared vacant at the 2008 AFP conference, with new elections held consistent with the new constitution.**
6. **That \$5,000 be set aside from any revenue of the AFP 2006 meeting, and allocated to assist the interim committee in organizing the 2008 meeting, drafting the constitution/ bi-laws and maintaining a website and email list serve.**

**All motions were passed unanimously and an interim Executive committee was elected as follows:**

**President:** Stephen Lord

**Vice president:** Keith Hill

**Secretary:** Michael Bourke

**Treasurer:** Lindy Clemson

**Committee Members:**

- Terry Haines
- Sandy Braver
- Dr Hannah Seymour
- Anne Tiedemann
- Shylie Macintosh
- Steve Morrison

**Web Page manager:** Hylton Menz

**Student Elect:** to be decided by the committee

Two bids were presented to host the 2008 Australian Falls Conference one each from Melbourne and Perth.

**Dr Hannah Seymour and Chris Costa** presented the Perth bid outlining the strong interest

and expertise held in Western Australia (WA). A state falls forum was recently organized with over 250 delegates and a National Conference for Injury Prevention attracted delegates from the Asia Pacific. WA also has a large indigenous population which is a focus for research and they would also like to foster the involvement of General Practice.

**Dr Keith Hill** presented the Melbourne bid outlining the infrastructure that is already in place and the dedication and significant expertise of professionals in falls prevention in Victoria.

A motion was put forward that the Interim Executive committee make the decision regarding the host city for the 2008 Australian Falls Prevention Conference.

This motion was passed unanimously.

In final conclusion and summary, all items presented were nominated and passed by those present at this inaugural meeting.



Thanks to the organizing and scientific committees for organizing a highly successful conference. Thanks also to the major and associate sponsors who generously supported this conference. Details of these are in the program of the conference which can be accessed at: <http://www.powmri.edu.au/afp2006/>

## ACT ANNUAL FALLS PREVENTION SUMMER FORUM

The ACT Annual Falls Prevention Summer Forum was held on the 7th December at The Canberra Hospital with the theme of 'Translation of research evidence into practice across the Continuum of Care'.



This forum included entertaining keynote presentations by A/ Professor Stephen Lord summarizing the current research into falls prevention and Dr Jacqui Close on translating falls prevention research into practice, which is usually more complex than it seems.



There were then a variety of presentations of programs and strategies that have been developed in the ACT and surrounding districts to prevent falls and reduce injury in older people. A short summary is provided of these presentations.

A cost evaluation was carried out for a community exercise program (CALM). This program cost \$466 per participant for weekly exercise classes for 9

months. The outcomes of this program included an increase in time spent on physical activities by 50% of participants and a significant reduction in falls risk (those with the highest risk at the beginning of the program had the best improvement). It has been shown that a 10% increase in physical activity by the older population can save about \$590 million per year.



Preventing falls in 3 residential Aged care facilities highlighted the benefits of these facilities working together to produce uniform incident reporting and putting falls prevention on the agendas of all meetings at these facilities. Each of these facilities cater for different populations yet they have developed a number of strategies such as a sunlight program to encourage residents to spend time outside and they have raised the garden beds. There is also pole walking for the more mobile residents and this increases upper body strength. They also promote the use of hip protectors and there is education of staff, residents, family and carers on falls prevention.

A Psychogeriatric Unit falls prevention program was presented, aimed at patients considered high risk due to cognitive impairment, psychosis and/or depression and anxiety, and many of these patients were on a number of psychotropic medications. The program focused on falls risk management plans and access to a physiotherapist as well as staff education and monitoring of falls. Though the fall rates did not reduce with this program the injury rates did.

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Enhancing proprioception to minimize falls risk, this presentation investigated the importance of motor and sensory loss on postural control responses, and highlighted that the aging process leads to a change in the body reference map and biomechanics. These changes need to be considered when developing exercise programs for older people

A rural falls prevention initiative entitled 'Stand tall, don't fall' from the Bega Valley was presented. This is an 8 week intervention program of exercise and education sessions with presentations by a podiatrist, pharmacist, audiologist and dietician. The main outcome of this program were that 2/3 of the participants were still exercising 2 years after participating in the program and 50% had not had a trip, slip or fall.

A Falls prevention and balance program from a private rehabilitation hospital included a 6 week outpatient exercise and education program (twice weekly for 2 hours), based on the Stepping-On program. Topics discussed in this program included home safety, footwear, medication management, community safety, healthy eating, incontinence, and personal safety. Participants in this program had improved scores in tests measuring their functional mobility and balance.



The afternoon finished with an evaluation of 3 years of the Community Outreach assessment Program in the ACT, including the Ambulance referral program which has made 451 referrals to the program, the Health promotion and education service which has screened over 600 consumers with 14-25% having a marked to very marked falls risk. Successful community exercise programs involving the YMCA have also been established.

The day was very informative and also a good chance to network with colleagues.

### Recent Interesting Abstracts from the Literature

#### Falls risk and functional decline in older fallers discharged directly from emergency departments

Russell MA <sup>1,2</sup>, Hill KD <sup>2</sup>, Blackberry I <sup>2</sup>, Day LL <sup>3</sup>, Dharmage SC <sup>1</sup>.

*J Gerontol A Biol Sci Med Sci* 2006; 61(10): 1090-5.

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<sup>2</sup> Preventative and Public Health Division, National Ageing Research Institute, Parkville, Victoria, Australia.

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**BACKGROUND:** There is currently no standard approach to falls risk assessment and management for older fallers presenting to the emergency department (ED) who are discharged directly home. Hence, this study was conducted to describe the prevalence of falls risk factors associated with older fallers presenting to the ED and to identify the factors associated with post discharge decline in function in this group.

**METHODS:** This cross-sectional study was performed with 300 community-dwelling individuals, aged 60 years or older, admitted to the ED following a fall, and discharged directly home. A home-based assessment after ED discharge was performed, which included the prevalence of falls risk factors, identification of functional decline, and objective measurements of balance, gait, depression, and falls efficacy.

**RESULTS:** Fall-related injuries were sustained by 91% (95% confidence interval [CI], 87.2%-94.0%) of participants presenting to the ED. The most common falls risk factors identified in the home assessment were polypharmacy (79.0%, 95% CI, 73.9%-83.5%), home hazards (76.0%, 95% CI, 70.8%-80.7%), decreased balance (61.3%, 95% CI, 55.6%-66.9%), and arthritis (61.3%, 95% CI, 55.6%-66.9%). A decline in function was reported by 35% of participants (95% CI, 29.6%-40.7%).

**Continued on Page 7**

## Recent interesting abstracts from the literature on falls prevention

Sustaining a fracture, functional independence before the fall, being female, depression, and slower Timed Up and Go (TUG) scores were associated with a decline in function ( $p < .05$ ).

**CONCLUSION:** Older fallers discharged directly from the ED have a high prevalence of falls risk factors and are at risk of functional decline.

### **Balance training program is highly effective in improving functional status and reducing the risk of falls in elderly women with osteoporosis: a randomized controlled trial.**

Madureira AL, Takayama L, Gallinaro AL, Caparbo VF, Costa RA, Pereira RM.

*Osteoporos Int.* 2006 Nov 7; [Epub ahead of print] Division of Rheumatology (Bone Mineral Metabolism Laboratory), School of Medicine, University of Sao Paulo, Sao Paulo, Brazil.

**INTRODUCTION:** The purpose of this study was to investigate the effect of a 12-month Balance Training Program on balance, mobility and falling frequency in women with osteoporosis.

**METHODS:** Sixty-six consecutive elderly women were selected from the Osteometabolic Disease Out-patient Clinic and randomized into 2 groups: the 'Intervention', submitted for balance training; and the 'Control', without intervention. Balance, mobility and falling frequency were evaluated before and at the end of the trial, using the Berg Balance Scale (BBS), the Clinical Test Sensory Interaction Balance (CTSIB) and the Timed "Up & Go" Test (TUGT). Intervention used techniques to improve balance consisting of a 1-hour session each week and a home-based exercise program.

**RESULTS:** Sixty women completed the study and were analyzed. The BBS difference was significant higher in the Intervention group compared to Control (5.5 +/- 5.67 vs -0.5 +/- 4.88 score,  $p < 0.001$ ). Similarly, the number of patients in the Intervention group presented improvement in two conditions of CTSIB compared to Control (eyes closed and unstable surface condition: 13 vs one patient,  $p < 0.001$  and eyes open, visual conflict and unstable surface condition: 12 vs one patient,  $p < 0.001$ ). Additionally, the differ-

ences between the TUGT were reduced in the Intervention group compared to Control (-3.65 +/- 3.61 vs 2.27 +/- 7.18 seconds,  $p < 0.001$ ). Notably, this improvement was paralleled by a reduction in the number of falls/patient in the Intervention group compared to Control (-0.77 +/- 1.76 vs 0.33 +/- 0.96,  $p = 0.018$ ).

**CONCLUSION:** This longitudinal prospective study demonstrated that an intervention using balance training is effective in improving functional and static balance, mobility and falling frequency in elderly women with osteoporosis.

### **Utilization of a screening tool to identify homebound older adults at risk for falls: validity and reliability.**

Flemming, PJ

*Home Health Care Serv Q.* 2006;25(3-4):1-26

Pi Beta Phi Rehabilitation Institute, Vanderbilt University, Nashville, TN, USA.  
pat.flemming@vanderbilt.edu

**PURPOSE:** This study examined the reliability and validity of a Falls Risk Assessment (FRA) tool developed to identify risk factors associated with falls in homebound older adults.

**DESIGN AND METHODS:** FRA scores of 307 Medicare-eligible adults over 65 admitted sequentially to a home health agency (HHA) were analyzed retrospectively using a case-control design. A total of 18 subjects participated prospectively in assessment of criterion-related validity and rater reliability.

**RESULTS:** Mean FRA scores of fallers were significantly higher than non-fallers (10.13, 7.2, respectively;  $p < 0.05$ ). The FRA and Performance-Oriented Mobility Assessment (POMA) demonstrated a strong negative correlation ( $r = -0.74$ ), utilizing a Pearson correlation. Using percent agreement, FRA scores of nine raters yielded 94.74% agreement. Kuder-Richardson (KR)-20 analysis yielded internal consistency of 0.98, 0.97, and 0.98 within subjects scored, indicating high consistency among raters.

# Abstracts Continued

An intraclass correlation coefficient (Model 3,1) of 0.83 supports intra-rater reliability. History of recurrent falls was the only significant predictor in logistic regression ( $p = 0.027$ , odds ratio: 2.83).

**IMPLICATIONS:** Data support use of the FRA in screening for fall-related risk factors in homebound older adults.

### Reducing hazard related falls in people 75 years and older with significant visual impairment: how did a successful program work?

La Grow SJ, Robertson MC, Campbell AJ, Clarke GA, Kerse NM.  
*Inj Prev.* 2006 Oct;12(5):296-301.

School of Health Sciences, Massey University, Palmerston North, New Zealand.

**BACKGROUND:** In a randomized controlled trial testing a home safety program designed to prevent falls in older people with severe visual impairment, it was shown that the program, delivered by an experienced occupational therapist, significantly reduced the numbers of falls both at home and away from home.

**OBJECTIVES:** To investigate whether the success of the home safety assessment and modification intervention in reducing falls resulted directly from modification of home hazards or from behavioral modifications, or both.

**METHODS:** Participants were 391 community living women and men aged 75 years and older with visual acuity 6/24 meters or worse; 92% (361 of 391) completed one year of follow up. Main outcome measures were type and number of hazards and risky behavior identified in the home and garden of those receiving the home safety program, compliance with home safety recommendations reported at six months, location of all falls for all study participants during the trial, and environmental hazards associated with each fall.

**RESULTS:** The numbers of falls at home related to an environmental hazard and those with no hazard involved were both reduced by the home safety program ( $n = 100$  participants) compared with the

group receiving social visits ( $n = 96$ ) (incidence rate ratios = 0.40 (95% confidence interval, 0.21 to 0.74) and 0.43 (0.21 to 0.90), respectively).

**CONCLUSIONS:** The overall reduction in falls by the home safety program must result from some mechanism in addition to the removal or modification of hazards or provision of new equipment.

### Atishoo! Atishoo! we all fall down!

Carey BJ.  
*Age Ageing.* 2006 Jul;35(4):446-7.

Department of Geriatric Medicine, Bantry General Hospital, Bantry, Co. Cork, Ireland. brian.carey@mailp.hse.ie

We report the unusual case of an elderly lady with glaucoma and sneeze syncope because of transient complete atrioventricular block, who had resolution of syncopal and pre-syncopal symptoms following removal of her beta-blocker eyedrops. This case suggests a previously unrecognised pathophysiology in sneeze syncope and illustrates the potential problems associated with the systemic absorption of beta-blocker eyedrops as well as the ingenuity of older patients when participating in the investigation of their own illnesses.

### This case study highlights the fact that topical $\beta$ - blocker eyedrops for glaucoma can increase the risk of falls, as these drops are absorbed systemically through the nasal mucosa.

Spratt and colleagues recently wrote a letter to the editor of this journal (*Age & Ageing* doi: 10.1093/aging/afl113) regarding this paper in which they report a case of a patient on  $\beta$ - blockers eye drops who collapsed. He recovered after resuscitation and cessation of the eyedrops. Often eyedrops are not recognized as being medications and it is important to question older people presenting with falls.

# 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)

## 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

## NETWORK INFORMATION

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

Do you have any news on Falls Prevention you want to share with other 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 want to continue to promote this. To send an item to the listserv where all members of the network can see it, send an email 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 of the on the listserv. Remember to put a short description in the subject line. Recently some posts to the listserv have bounced due to email address changes in the area health services, you need to re-subscribe with your new e-mail address and unsubscribe from your old address following the Join the Network instructions as shown on this page.



### 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.
- 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).