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A U S T R A L I A

Personal care staff and falls prevention in residential aged care

Presented by Jo-Aine Hang

Bachelor of Physiotherapy (Hons) 2015

PhD Candidate, Curtin University

Research Team: **Dr J Francis-Coad, Ms J Hang, A/Prof C Etherton-Beer, Ms A Ellis, Prof A-M Hill**

Problem

Falls In Residential Aged Care Settings:

- ❖ High incidence of injurious falls

 - ❖ 25%-30% sustained physical injury

(Burland et al., 2013; Oliver et al., 2007)

 - ❖ 4% hip # (Vlaeyen et al., 2015)

 - ❖ ~50% of residents fall annually (Deandrea et al., 2011)

- ❖ 45%-80% direct contact with care staff (Gray et al., 2016; Qian et al., 2014)

- ❖ Gap in translating knowledge (Francis-Coad et al., 2015)



Source:

<https://healthcare.utah.edu/healthfeed/postings/2018/10/elderly-fall.php>

Aim

To explore care staff knowledge about falls and confidence, motivation and opportunity to undertake falls prevention strategies, along with preferences for fall prevention education in Residential Aged Care settings (Francis-Coad et al., 2019)



Methods

- ❖ Mixed methods cross-sectional survey
 - ❖ Custom-designed questionnaire using **COM-B model** (Mitchie et al., 2011)
 - ❖ Feasibility testing of **questionnaire** and implementation (Hang et al., 2016)
- ❖ Settings
 - ❖ **8 RAC Facilities**
 - ❖ **388 care staff**
- ❖ Qualitative data: Qualitative content analysis
- ❖ Quantitative data: Descriptive statistics; Cross-tabulations (chi-squared) for analyses of differences between groups



Results

Survey response

❖ n = 147 (37.9%)

Demographics

❖ Female; > 40 years old
90.5% (133); 67.3% (99)

❖ Education
Up to Yr 12 = 40 (27.2%)
TAFE & above = 107 (72.8%)

❖ Languages spoken at home

Other than English = 30
(20.4%)

❖ Experience in RAC facility

>1 year = 129 (89.6%)

❖ Work shifts

AM & PM = 71 (48.3%)



Results

Definition of a fall

- ❖ **n = 126 (76.2%)**
- ❖ **Only 1 care staff** accurately defined a fall
- ❖ **8.16% (12) fall as injurious**



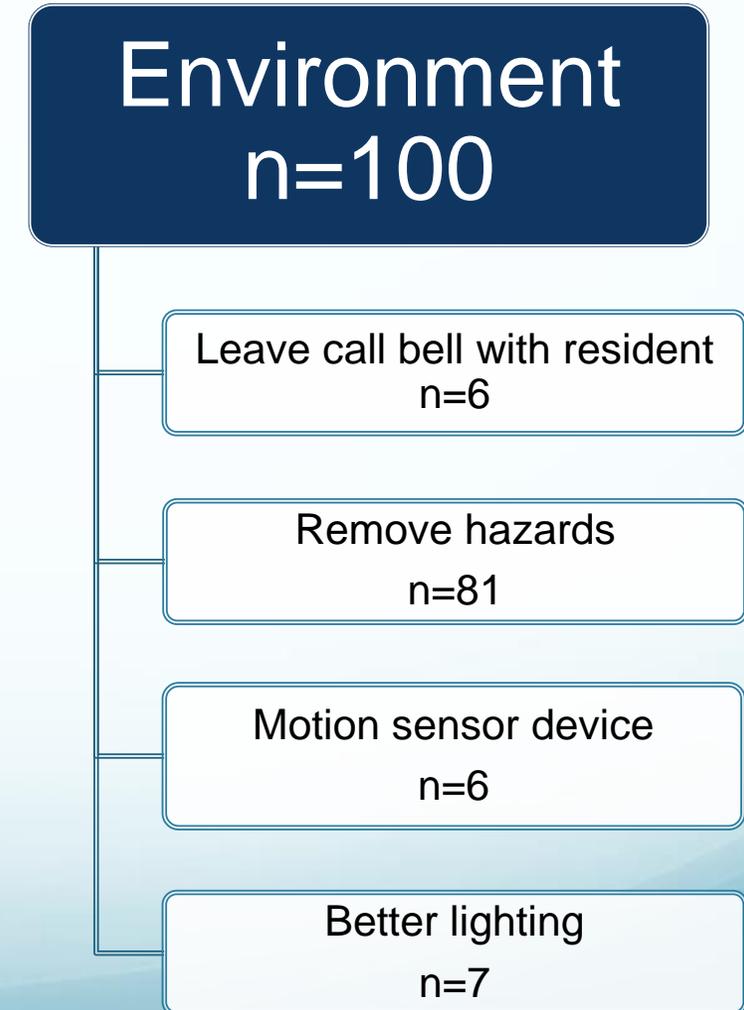
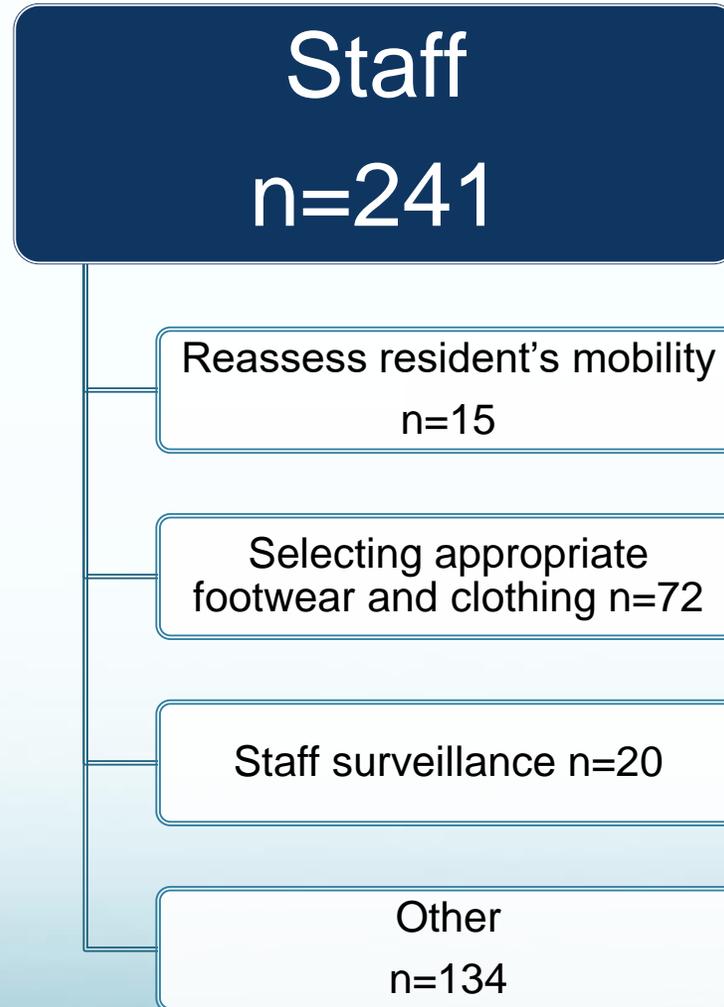
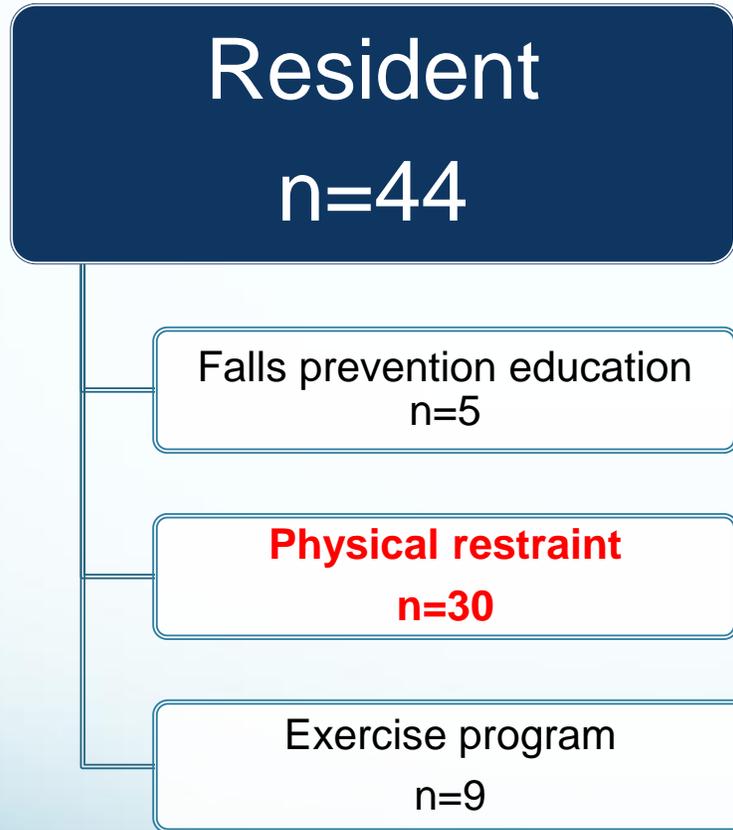
Source: <https://purecleanperformance.com/blog/-peace-and-love-for-injuries-/>

Care staff' awareness of residents falls risk

- ❖ **81.6% (120)** Aware falls were a serious issue
- ❖ **27% (39)** Very high risk of fall

74.5% younger care staff (age<40yrs) cf 51.0% older care staff (age>40yrs) thought falls could be prevented (p=0.05)

Care staff' knowledge of falls prevention strategies



Care staff' knowledge of falls prevention strategies

Linked to **intrinsic falls risk factors:**

❖ Understanding the effect of **medication**

4.6% (18)

❖ Promoting **hydration**

2.08% (8)

❖ Aware of **continence management**

1.04% (4)

Only 41.5% (61) able to list >3 strategies

Care staff' confidence and motivation regarding falls and falls prevention

Confidence to provide falls prevention strategies	SA n(%)	A n(%)	U n(%)	D n(%)	SD n(%)
When working my rostered shift, I feel confident that I know what to do to prevent residents from falling.	57 (38.8)	79 (53.7)	4 (2.7)	4 (2.7)	1 (0.7)
Motivation to carry out falls prevention strategies					
When working my rostered shift, I am keen to prevent residents from falling.	97 (66.0)	45 (30.6)	3 (2.0)	0	0

Results

Barriers to undertaking falls prevention strategies (opportunity)

- ❖ **45.8% (77)** Lack of 'manpower' (**staffing**)
- ❖ **17.26% (29)** Resident behaviour

Falls prevention education preferences

- ❖ **7.5% (11)** E-learning vs **66.7% (98)** In-service training (**face to face**)
- ❖ **50%** preferred on-site training
- ❖ **76.2% (112)** wanted reminders (posters) for undertaking fall prevention



Source:

https://www.nslhd.health.nsw.gov.au/HealthInformation/HealthPromotion/Pages/Projects/Falls_Prevention/EveryonesBusiness/Falls_Prevention_Everyones_Business.aspx

Discussion

- ❖ **Limited knowledge**

- ❖ Defining a fall - implications for reporting

- ❖ Intrinsic risk factors and falls prevention strategies

- ❖ Evidence – consequences of physical restraint

- ❖ Low awareness of residents' high fall risk

- ❖ **Limited opportunity** to undertake fall prevention strategies

- ❖ Despite high levels of motivation and confidence, care staff provided limited descriptions of falls prevention care plan strategies

- ❖ **Low preference** for e-learning

Limitations and Implications

Possible Limitations

- ❖ Low response rate
- ❖ Some care staff unable to participate
- ❖ Knowledge and awareness were self-reported

Future Research Implications

- ❖ Assessment tool for care staff in RAC
- ❖ Inform future training needs

Conclusion

Care staff were found to have:

- ❖ low levels of knowledge about intrinsic risk factors for falls and their prevention (**Capability**)
- ❖ low levels of awareness about residents' at risk of falls
- ❖ limited **Opportunity** to carry out falls prevention strategies
- ❖ good Motivation to carry out falls prevention strategies

Improving care staff **Capability** to action falls prevention through training and enabling more **Opportunity** for them to monitor resident safety may assist in preventing resident falls

References

- Burland, E., Martens, P., Brownell, M., Doupe, M., & Fuchs, D. (2013). The evaluation of a fall management program in a nursing home population. *The Gerontologist*, 53(5), 828–838. <https://doi.org/10.1093/geront/gns197>.
- Brightwater image. Retrieved from:
<http://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CB0QFjAA&url=http%3A%2F%2Fwww.brightwatergroup.com%2F&ei=PGhcVLSIlcf98AWOhoD4Bg&usq=AFQjCNFkt802Ts0RHA-1DiZW6TKhzUXOOQ>
- Francis-Coad, J., Hang, J., Etherton-Beer, C., Ellis, A., & Hill, A. M. (2019). Evaluation of care staff knowledge, confidence, motivation and opportunity for preventing falls in residential aged care settings: a cross-sectional survey. *International Journal of Older People Nursing*, 14, e12224. <https://doi.org/10.1111/opn.12224>
- Francis-Coad, J., Etherton-Beer, C., Bulsara, C., Nobre, D., & Hill, A. M. (2015). Investigating the impact of a falls prevention community of practice in a residential aged-care setting: a mixed methods study protocol. *Journal of advanced nursing*, 71(12), 29\–2986. doi: 10.1111/jan.12725
- Gray, M., Shadden, B., Henry, J., Di Brezzo, R., Ferguson, A., & Fort, I. (2016). Meaning making in long-term care: What do certified nursing assistants think? *Nursing Inquiry*, 23(3), 244–252. <https://doi.org/10.1111/nin.12137>
- Hang, J., Francis-Coad, J., Burro, B., Nobre, D., & Hill, A. M. (2016). Assessing knowledge, motivation and perceptions about falls prevention among care staff in a residential aged care setting. *Geriatric Nursing*, 37(6), 464–469. <http://dx.doi.org/10.1016/j.gerinurse.2016.06.019>
- Lamb, S. E., Jørstad-stein, E. C., Hauer, K., & Becker, C. (2005). Development of a common outcome data set for fall injury prevention trials: The prevention of falls network Europe consensus. *Journal of the American Geriatrics Society*, 53(9), 1618–1622. <https://doi.org/10.1111/j.1532-5415.2005.53455.x>
- Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behavior change interventions. *Implementation Science*, 6, 42. <https://doi.org/10.1186/1748-5908-6-42>
- Oliver, D., Connelly, J.B., Victor, C.R., Shaw, F.E., Whitehead, A., Genc, Y., . . . Gosney, M.A. (2007). Strategies to prevent falls and fractures in hospitals and care homes and effect of cognitive impairment: Systemic review and meta-analyses. *British Medical Journal*, 35, 334. doi: <http://dx.doi.org/10.1136/bmj.39049.706493.55>
- Qian, S., Ping, Y., Hailey, D. M., Zhenyu, Z., Davy, P. J., & Nelson, M. I. (2014). Time spent on daytime direct care activities by personal carers in two Australian residential aged care facilities: a time-motion study. *Australian Health Review*, 38(2), 230–237. doi: 10.1071/AH13161
- Vlaeyen, E., Coussement, J., Leysens, G., Van der Elst, E., Delbaere, K., Cambier, D., . . . Milisen, K. (2015). Characteristics and effectiveness of fall prevention programs in nursing homes: A systematic review and meta-analysis of randomized controlled trials. *Journal of American Geriatrics Society*, 63(2), 211–221. <https://doi.org/10.1111/jgs.13254>



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Feature Article

Assessing knowledge, motivation and perceptions about falls prevention among care staff in a residential aged care setting



Jo-Aine Hang, BSc Phty (Hons)^{a,*}, Jacqueline Francis-Coad, MClin Phty^a,
Bianca Burro, BSc Phty (Hons)^a, Debbie Nobre, BA (Social Sciences)^b,
Anne-Marie Hill, PhD^c

^aSchool of Physiotherapy, The University of Notre Dame Australia, P.O. Box 1225, Fremantle, WA 6959, Australia

^bAllied Health Consultant, Brightwater Care Group, Brightwater House Central Office, Level 3, 355 Scarborough Beach Rd., Osborne Park, WA 6017, Australia

^cSchool of Physiotherapy and Exercise Science, Curtin University, Perth, WA 6102, Australia

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ABSTRACT

Falls are a serious problem in residential aged care settings. The aims of the study were to determine the feasibility of surveying care staff regarding falls prevention, and describe care staff levels of knowledge and awareness of residents' risk of falls, knowledge about falls prevention, motivation and confidence to implement falls prevention strategies. A custom designed questionnaire was administered to care staff at one site of a large residential aged care organization in Australia. The survey response was 58.8%. Feedback from staff was used to inform the administration of the survey to the wider organization. Seven (29.2%) care staff reported they were unsure or thought residents were at low risk of falls. Only five (20.8%) care staff were able to suggest more than three preventive strategies. These preliminary findings suggest that education to change care staff behavior regarding falls prevention should target improving care staff knowledge and awareness of falls.

Thank You!

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Evaluation of care staff knowledge, confidence, motivation and opportunity for preventing falls in residential aged care settings: A cross-sectional survey

Jacqueline Francis-Coad¹  | Jo-Aine Hang² | Christopher Etherton-Beer³ |
Alexandra Ellis⁴ | Anne-Marie Hill²

¹School of Physiotherapy, Institute of Health Research, The University of Notre Dame Australia, Fremantle, Western Australia,

Abstract

Aims: To explore care staff knowledge about falls and confidence, motivation and