

Identifying carers' concern for older people at risk of falling at home

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BSc (Nursing) (Hons) (Singapore)

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for the degree of
Doctor of Philosophy in Nursing

September 2019

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an Australian Government Research Training Program (RTP)
Scholarship

Statement of Originality

I hereby certify that the work embodied in this thesis is my own work, conducted under normal supervision. The thesis contains no material which has been accepted, or is being examined, for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made. I give consent to the final version of my thesis being made available worldwide when deposited in the University's Digital Repository, subject to the provisions of the Copyright Act 1968 and any approved embargo.

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September 2019

Statement of Contribution for Paper 1

By signing below, we confirm that Seng Giap Marcus Ang contributed to the conception, design, writing and revision of the paper/ publication:

Ang, S. G. M., O'Brien, A. P., & Wilson, A. (2018). Fall concern about older persons shifts to carers as changing health policy focuses on family, home-based care. *Singapore Medical Journal*, 59(1), 9-11. doi: <https://doi.org/10.11622/smedj.2018005>

Anthony Paul O'Brien, September 16th, 2019

Amanda Wilson, September 16th, 2019

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Dedication

This thesis is dedicated to my parents who have supported my decision to study abroad. I have never been away from my parents for such a long period of time before, and while they could not bear to see me leave, they believed in me and knew this would be the best for my future. Dear mum and dad, I am sorry for being away for so long. I know the photos of me everyday living here and photos of my meals I sent you are insufficient to allay your anxiety as I lived abroad away from you. I would also like to dedicate this thesis to my brother and sister-in-law. Thank you for accompanying mum and dad when I am not around and looking out for them. I would also like to dedicate this thesis to my best friend Samuel. Thank you for being there for me in Australia and accompanying me throughout. Thank you for sending me to the university every day and to the hospital for my recruitment. Without all of you, I wouldn't have been able to see my Ph.D. journey through to the end.

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7. **Ang, S. G. M.,** O'Brien, A. P., & Wilson, A. (2019). Development and validation of an instrument to measure carers' concern for older people at risk of falling at home. Under review by *International Journal of Older People Nursing*.

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Glossary

ABC	Activities-specific Balance Confidence Scale
ACAT	Aged Care Assessment Team
ADLs	Activities of daily living
Carees	Older people; older persons; elders; family members; loved ones
CFC/CFC-I	Carers' fall concern instrument
CVI	Content validity index
FES	Falls Efficacy Scale
FES-I	Falls Efficacy Scale-International
FDWs	Foreign domestic workers
FIBS	Fall-related Impulsive Behaviour Scale
GPs	General Practitioners
HREC	Human Research Ethics Committee
HMRI	Hunter Medical Research Institute
Icon-FES	Iconographical Falls Efficacy Scale
KMO	Kaiser-Meyer-Olkin
MMAT	Mixed Methods Appraisal Tool
NSW	New South Wales
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-analyses
REDCap	Research Electronic Data Capture
SAFE	Survey of Activities and Fear of Falling in Elderly
SD	Standard deviation
SEM	Standard error of mean
SSA	Site-specific assessment
3G	Three Generations

Abstract

Background

Informal carers such as family members and friends are crucial in providing assistance to older people (care recipients) and preventing them from falling at home. Many carers experience increased psychological distress and caregiving burden when looking after their care recipients who have fallen previously. However, there were no previous studies found about carers' concern for their care recipients at risk of falling, and there was no validated instrument for measuring this concern.

Aims

This thesis aims to: 1) explore the factors influencing carers' fall concern, 2) develop an instrument for measuring this concern, and 3) evaluate the psychometric properties of the Carers' Fall Concern Instrument (CFC-I).

Methods

The study was conducted over three phases which include: 1) interviewing 22 carers about their fall concern, 2) exploring the content validity and reliability of the initial CFC-I on 32 carers, and 3) testing the construct validity and reliability of CFC-I on 143 carers. All participating carers were providing support for an older person aged 60 years and over and living at home.

Results

During Phase One, four themes were identified as influencing carers' fall concern. These included: 1) carers' perception of fall and fall risk, 2) care recipients' behaviour and attitude towards fall risk, 3) care recipient's health and function, and 4) care recipients'

living environment. During Phase Two, a 46-item CFC-I was developed and tested with a resultant average content validity of 0.82. In Phase Three, the final 16-item CFC-I reported a Cronbach alpha of 0.93 and can discriminate carers looking after care recipients with or without falls.

Conclusion

The CFC-I is the first multi-item instrument designed for measuring carers' fall concern. Healthcare professionals are encouraged to use the CFC-I in future fall prevention programmes to determine the impact of fall risk on carers and to develop targeted interventions for managing their fall concern.