


The impact of peer-led falls prevention education on community-dwelling older adults: A mixed methods evaluation

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Chapter 1

Introduction

Chapter

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1.1 Chapter Outline

This chapter provides a synopsis of the research in this thesis including the background of the research and an outline of each chapter.

1.2 Introduction

Falling among older adults is a major public health problem and can have serious consequences for the individual, family and the community (Peel, 2011; World Health Organisation, 2007). Older adults spent more than 1.3 million patient days in hospital each year in Australia in 2011-2012, because of falls (Tovell, Harrison, & Pointer, 2014). While there is strong evidence that interventions such as exercise and review of medications can reduce falls among community-dwelling older adults (Deandrea et al., 2010; Gillespie et al., 2012), there has been difficulty in translating these evidence-based interventions into practice. Reasons for the gap in translation may be attributed in part to inadequate reporting of research interventions for replication and practice (Glasziou et al., 2010). However, some of the research to practice gap can be explained by examination of the role of the older adult within the “research to practice pipeline” (Glasziou & Haynes, 2005). This explains that even when interventions are accepted and practiced by health professionals and health care systems, the patient (in the case of falls prevention – the older adult), must be aware of and understand the interventions, then agree to them and subsequently adhere to them (Glasziou & Haynes, 2005). Multiple studies have now demonstrated that many older adults have low perceived risk of falls, low levels of knowledge about effective strategies to reduce their risk of falling and low motivation to engage in falls prevention strategies (Bunn, Dickinson, Barnett-Page, McInnes, & Horton, 2008; Dickinson, Machen, et al., 2011; Dorresteijn, Rixt Zijlstra, van Eijs, Vlaeyen, & Kempen, 2012; Hill, Hoffman, Beer, et al., 2011; Hughes et al., 2008; Yardley, Bishop, et al., 2006). Unsurprisingly in this case, it has been shown that there is a lower than optimal level of engagement, and low levels of uptake and adherence, to falls prevention strategies by community-dwelling older adults (Nyman & Victor, 2012).

Health education: specifically; peer education; has been recommended as an intervention that could potentially improve community-dwelling older adults’ knowledge about falls and falls prevention and uptake of relevant evidence-based strategies (Peel & Warburton, 2009). Peer education encompasses interventions where information, skills and values are imparted amongst people who share common characteristics such as age or shared experience (Shiner, 1999; Simoni, Franks, Lehavot, & Yard, 2011). There are also reported theoretical benefits of peer education

(Quine, 2006; Turner & Shepherd, 1999) and other health-related peer education studies have shown this approach is effective in achieving positive health behaviour change outcomes (Lorig, Ritter, & Gonzalez, 2003; Swerissen et al., 2006). Health behaviour change theory suggests that providing an individual with knowledge and motivation are critical for achieving health behaviour change (Michie et al., 2011). However, there is a paucity of empirical evidence about whether the peer-led approach to falls prevention education can raise knowledge about falls prevention and motivation to engage in falls prevention strategies amongst community-dwelling older adults. Therefore, evidence to date about the efficacy of a peer-led approach in falls prevention education is inconclusive (Peel & Warburton, 2009). There is also a paucity of falls prevention education studies, using any education approach, being conducted among older community populations, and the evidence for education in falls prevention in this setting has been reported as inconclusive (Gillespie et al., 2012).

This research aimed to design a peer-led falls prevention education program and evaluate its impact on community-dwelling older adults' beliefs, knowledge, motivation, and intention to engage in falls prevention strategies. It was conducted in two phases. In Phase 1, three studies were conducted concurrently to gain an understanding of key stakeholders' perspectives about the provision of falls prevention information and education for older adults to inform the research in Phase 2. Subsequently, Phase 2 consisted of the design and development of a new contemporary peer-led falls prevention education program, which was underpinned by health behaviour change theory and incorporated relevant adult learning principles. A quasi-experimental trial was then conducted to evaluate the effectiveness of delivering the contemporary peer-led falls prevention education program on community-dwelling older adults' beliefs and knowledge about falls prevention, their motivation, and intention to engage in falls prevention strategies.

1.3 Overview of Chapters

Chapter 2

This chapter provides an overview of and context for the research by initially reviewing the epidemiology of falls including prevalence, costs and consequences of falls, risk factors and evidence-based strategies to prevent falls amongst community-

dwelling older adults. The chapter also integrates and synthesises findings from previous studies that investigated factors influencing engagement and uptake of falls prevention strategies by community-dwelling older adults. Relevant educational, pedagogical and behaviour change theories applied to falls prevention are presented and a justification for the choice of theoretical framework used in this research. Research findings, specifically falls prevention education for the community-dwelling older adults, are reviewed and gaps in the evidence identified. Furthermore, the chapter provides evidence and the rationale for peer education in the area of health, and importantly, for investigating the effect for older adults in falls prevention. Finally, a summary of the research gap and how the present research addresses this gap via its aims is presented.

Chapter 3

This chapter provides an overview of the design and methodology of the studies included in this thesis. The structure of the thesis including research design, overview of methods used in each study and research aims; ethical considerations, research setting and participants, data collection and procedure, and finally data analysis are described.

Chapter 4

This chapter describes Study 1 (Phase 1) which was a qualitative study conducted to explore the perspectives of a group of peer educators about their role in delivering the peer-led falls prevention education for community-dwelling older adults.

This chapter is based on a published article:

Khong, L., Farrington, F., Hill, K. D., & Hill, A-M. (2015). “We are all one together”: Peer educators' views about falls prevention education for community-dwelling older adults - A qualitative study. *BMC Geriatrics*, 15(28), 1-10. <http://dx.doi.org/10.1186/s12877-015-0030-3>

Chapter 5

This chapter describes Study 2 (Phase 1) which was a community-based participatory research forum that was undertaken to examine the views and preferences of community-dwelling older adults about seeking and receiving falls prevention information.

This chapter is based on two published articles:

Khong, L., Bulsara, C., Hill, K. D., & Hill, A-M. (2016). How older adults would like falls prevention information delivered: Fresh insights from a World Café forum. *Ageing & Society*. <http://dx.doi.org/10.1017/S0144686X16000192>

Bulsara, C., **Khong, L.,** Hill, K. D., & Hill, A-M. (2016). Investigating community perspectives regarding preferences for falls prevention education using a World Cafe approach. *Journal of Community Psychology*, 44(7), 937-944. <http://dx.doi.org/10.1002/jcop.21816>

Chapter 6

This chapter describes Study 3 (Phase 1) which was a mixed methods design study conducted to evaluate peer educators' presentations of the existing falls prevention program against established criteria, by experts from various areas of specialisation.

This chapter is based on a manuscript in press:

Khong, L.A.M., Berlach, R. G., Hill, K. D., & Hill, A-M. (in press) Community peer-led falls prevention presentations: What do experts suggest? *Journal of Primary Prevention*

Chapter 7

This chapter describes the steps taken to develop the peer-led falls prevention education program (intervention) and includes an integration of the evidence from the literature review and the three studies (Study 1, 2 and 3 described in Chapter 4 to 6 respectively) introduced in Phase 1.

This chapter is based on a manuscript submitted for publication and under peer review:

Khong, L.A.M., Berlach, R. G., Hill, K. D., & Hill, A-M. Design and development of a theory-informed peer-led falls prevention education program to translate evidence into practice: A systematic approach.

Chapter 8

This chapter describes a quasi-experimental trial conducted to evaluate the effectiveness of the peer-led falls prevention education program (intervention) compared to the existing program for community-dwelling older adults.

This chapter is based on a published article:

Khong, L.A.M., Berlach, R. G., Hill, K. D., & Hill, A-M. (2017) Can peer education improve beliefs, knowledge, motivation and intention to engage in falls prevention amongst community-dwelling older adults? *European Journal of Ageing* <http://dx.doi.org/10.1007/s10433-016-0408-x>

Chapter 9

This final chapter summarises and synthesises the results of the series of studies included in this thesis. The findings discussed are specific to each study and research aim. The strengths, limitations and challenges, and implications for practice are presented and recommendations for future research considered.