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Reducing Staff Isolation and Developing Evidence-Informed Practice in the Aged Care Environment Through an Action Research Approach to Falls Prevention

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This study aimed to examine whether an action research approach was effective in reducing the isolation of staff in 2 residential aged care facilities, within the context of an evidence-informed falls prevention program. A Falls Action Research Group comprising 12 nursing/nonnursing staff across 2 residential aged care facilities was established and engaged in critical dialogue and action over 12 months to improve their fall prevention activities. Through the group members' engagement, a research community was established that diminished staff isolation by engaging members in a sustained process of collaboration around falls prevention, which worked to disrupt occupational silos and challenge traditional staff hierarchies. **Key words:** *action research*, *aged care*, *evidence-informed practice*, *falls prevention*, *nurses*, *nursing homes*, *staff isolation*

FALLS are common among aged care facility residents, with approximately half of residents reporting a fall every 6 months.[1,2] Falls may directly lead to resident injury, mortality, increased dependency on nursing

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staff, and high levels of health care resource use.[3] Several approaches to preventing falls in residential aged care facilities (RACFs) have been attempted, ranging from simple, single intervention studies (eg, medication review[4] and provision of supervised exercise programs[5]) to provision of complex, multifactorial interventions by a multidisciplinary team of health care professionals.[6] It is apparent from the evidence that interventions that target multiple risk factors are not clearly effective in preventing falls but may be so when these interventions are provided by a coordinated multidisciplinary team of health care workers.[7]

Several issues confront both RACF staff and management who seek to implement a "best practice" model of care for falls prevention in the aged care environment. First, the variable physical environments, usual care practices, and resident characteristics between different facilities may limit the ability to readily use research findings in a particular RACF. Second, in multifactorial intervention trials, it is difficult to know which components of interventions were most responsible for any reductions in falls that were observed. Third, there may be limited availability of specialized staff in providing multifactorial interventions and financial resources to support intensive interventions. Finally, facility staff may have different perceptions of what are the most relevant interventions, and methods of implementing them, within their facility, as may residents and their families.[8] Hence, a "one-size-fits-all" approach for implementing best practice for falls prevention in RACFs will be of limited success.[7] The importance of having contextually specific, tailored interventions to promote the uptake of evidence into practice is well documented within the knowledge translation literature.[9]

The existing literature suggests that deploying an action research approach may assist facility staff to tailor evidence-based falls prevention strategies to meet local needs and preferences.[10,11] Action research has been successfully utilized by researchers in a range of settings to facilitate the development of evidence-informed practice and has been reported as a method that is efficacious in promoting the translation of evidence into practice.[12,13] It has a focus on "changing people's practices, their understandings of their practices and the conditions under which they practice."[14(p1)] Action research has been broadly described and applied in a range of contexts,[13,15-19] but its use in the RACF setting presents as an intriguing opportunity to achieve more than just the prevention of falls. Its use in RACFs has been demonstrated to promote the professional engagement of nursing staff to address ongoing problems with professional isolation[20] and the development of networks.[13,19,20]

Isolation from both peers and learning environments—2 key components of professional isolation according to Coleman and Lynch[21]—has previously been documented to be a significant issue in RACFs in Australia and overseas.[22-26] For example, there have been reports of limited information sharing, fragmented communication, and support between and within different levels of staff in the aged care environment.[23-26] Registered nurses (RNs) have been identified as having limited opportunities to collaborate with peers due to shift work and generally being the only RN working on the shift.[22] Importantly, professional isolation has been identified as a workforce factor that may limit the adoption of evidence-informed practice.[23-29] Therefore, in the context of this multisite project, a decision was made to include an action research component to enhance the implementation of best practice for falls prevention in a cohort of Australian RACFs.[30] The authors draw on the findings from 2 Tasmanian RACFs involved in the project as case studies to examine how an action research approach may impact both on the isolation of nursing and other staff members and on the learning culture among staff, and thus on the development of falls prevention strategies in the residential aged care environment.

METHODS

Design

This action research study is part of a larger evidence-informed falls prevention project (Star project) involving 9 RACFs across 3 Australian states. The project had the overall goal of reducing falls and falls-related injuries in RACFs. Details of the design of this broader project have previously been reported.[30] Overall, the Star project researchers adopted a multifaceted approach to falls prevention. The project incorporated a number of core activities (eg, environmental modifications, use of hip protectors and high-low beds, and staff education) based on evidence-informed guidelines.[31-32] However, in recognition of the contextual differences between RACFs, a number of other project interventions were driven by staff members within their respective facilities using an action research approach.[33] The authors utilized qualitative data from the 2 Tasmanian RACFs obtained during the 12 months of the action research component of the study. The Tasmanian facilities were differentiated from the other 7 RACFs because staff from these 2 sites met as a single group to pool ideas and resources to implement change processes within their organizations.

Action research

Broadly, the term *action research* has been used to refer to a number of research activities that have in common characteristics of collaboration, a focus of local problem solving, shared ownership of the research between participants and researcher, and action to promote change.[33-36] Critical action research, the approach used in this study, engages practitioners to take self-critical and critically reflective stances to the problem under investigation.[36] It is particularly useful when people, such as aged care staff, want to better understand and improve their practice,[14,17,18] such as falls prevention practices. Action research with a critical participatory intent seeks to bring people together to challenge their understandings and "taken-for-granted" ways of practicing.[37] To do this, the establishment of an action research group,[36] wherein people can work together to reflect on issues with the intention of taking strategically informed action, is central to operationalzing this approach. Members of an action research group work together through an action research spiral that comprises a preliminary investigation, problem identification, planning, taking action, data collection, analysis, and reflection.[36] In the case of this study,[12] staff members across the 2 Tasmanian RACFs formed a Falls Action Research Group (FARG).

Participants: FARG members

This study involved 2 regional Tasmanian RACFs located less than 10 kilometers apart, one charitable and one privately funded. The number of beds for each RACF ranged between 100 and 150 (both high and low care), whereas staff numbers for each RACF ranged between 150 and 200 (including part-time staff and casual—employed on an hourly basis). Both RACFs were allocated funding to release a nursing staff member to the role of key contact and project support person known as the falls resource nurse (0.1 equivalent full time for 12 months). The falls resource nurses were recruited after having voluntarily registered an interest in taking on the role. They helped to form, and became members of, the FARG. Staff members working within the 2 facilities who shared an interest in falls prevention were subsequently recruited into the FARG. Across the 2 facilities, 12 staff members volunteered to form one FARG.

The FARG members consisted of RNs (n = 3), enrolled nurses (second-level nurses working under the direction and supervision of the RN) (n = 3), domestic and maintenance services staff (n = 3), extended care assistants (personal care workers) (n = 1), physiotherapy assistants (n = 1), and lifestyle and leisure officers (n = 1). The majority of the 12 FARG members were female (n = 11), aged 46 to 55 years (n = 7), had worked at their facility for between 1 and 5 years (n = 8), and had worked in aged care for 11 years or more (n = 7).

The falls action research process

Reconnaissance

The FARG members initially participated in 9 meetings that formed the "reconnaissance" or preliminary investigation.[35,37] In the first instance, the project team provided the FARG members with education and resources about action research to facilitate their familiarity with their role as "coresearchers,"[16] and the action research process itself.[38] Subsequent discussions in this phase provided both an opportunity and impetus for the FARG members to identify areas of concern about falls prevention practices in their RACFs. A list of topics, drawn from a review of the literature, was compiled to assist with guiding the group discussions, including issues that impacted on falls management (ie, staff knowledge about falls), increased risk of resident falls (ie, footwear, environment, documentation), and undermined staff capacity to adopt evidence-based practice (ie, professional isolation). Of relevance to this article, the latter issue also included staff opportunities to discuss falls prevention. Together with an analysis of baseline data, collected to gauge the extent to which each RACF was implementing evidence-informed falls prevention practices (see reference 31 for more details), the data collected in these FARG meetings informed the subsequent development of action plans.

Planning action

The FARG members recognized that to improve falls prevention practices at their RACFs, it was imperative that they engaged collaboratively to identify and address evidence-practice gaps. By reflecting on the data collected as part of the reconnaissance, the group agreed on a number of areas for action and developed action plans accordingly.

Action, analysis, and reflection

The FARG members took action to implement 2 action plans aimed at improving their falls prevention practices and met regularly during this process. In these meetings, the members were able to review the outcomes of their actions and critically reflect on the benefits of working collaboratively to reduce their professional isolation at their respective facilities.

Data collection

From May 2008, the FARG members met fortnightly (approximately) until June 2009 during their work time, totaling 22 meetings, with an 84% attendance rate. The FARG meetings were facilitated by a project officer (a university-employed researcher from the project team skilled in action research processes) who worked closely with the group members to foster the development of collaborative, reciprocal relationships and critical dialogic encounters about practice. In keeping with the democratic imperative of critical action research, the project officer worked with the group early on to establish ground rules that would frame discussions.[37] These rules related to creating an environment where all participants felt safe to share their stories, had an equal opportunity to contribute to discussion, and felt valued as a member of the team. The importance of maintaining confidentiality of identities and issues raised within the group was also discussed and revisited as the group moved through the stages of the action research spiral. Other ethical considerations are discussed later. The FARG meetings lasted for approximately 1 hour and were digitally recorded and transcribed verbatim.

Data analysis

NVivo (QSR, version 8) software was used to assist with qualitative data management. The FARG meeting transcripts were subject to a thematic analysis[39] undertaken independently by 2 research team members, who regularly met to explore the findings. These meetings also provided an opportunity for peer debriefing about the findings that, in turn, contributed to the rigor of the analytic

process. From this first-level analysis meeting minutes were developed and were returned to group members prior to each successive meeting in order to facilitate their reflection on emerging issues and to enable member checking.[40]

Ethics

The project was approved for the 2 Tasmanian RACFs by the Human Research Ethics Committee (Tasmania) Network (ref H9907). Plain Language Statements and Consent Forms were provided to participating staff. The Plain Language Statement informed staff that information arising from the project would be treated as confidential (eg, no names to be used in case notes or publications) and that they could decide to withdraw from the project at any stage with no consequences with regard to their work/organization. This anonymity helped to ensure that staff could be candid during meetings.

RESULTS

Reconnaissance: Understanding the issue of professional isolation

The narratives of FARG members suggested that before coming together to investigate their falls prevention activities they had few opportunities to meet and discuss practice issues. Key issues identified in the reconnaissance included dissatisfaction with their lack of engagement with other RACF staff and operational systems and processes that worked to entrench their sense of isolation. These discussions also highlighted a demarcation between staff in different occupational roles in both facilities, which meant that the FARG members had little knowledge of what each other actually did in terms of their daily practice. For example, one RN member stated that despite sharing responsibilities for the same residents, she did not have "a good understanding ... about the [role of] lifestyle and leisure staff." Furthermore, the increasing number of casual staff employed at both RACFs was also identified as a factor that exacerbated staff members' lack of engagement. In the following account, one FARG member explained how these staffing circumstances diminished cohesiveness and capacity for effective teamwork. She argued:

> In the old days there used to be very strong teams ... that worked really well together. We've lost that a lot now. We've got so many more casuals, so many more people just doing a shift here or there ... it's really difficult. [RN]

Related to issues of casualization and role demarcation, the FARG members also expressed a sense of powerlessness to affect change in their practices. When considering the possibility of improving their care practices one FARG member stated: "People don't feel empowered ... to make changes." Group members argued that staff had little opportunity to contribute to organizational decision making that ultimately impacted on their practice. For example, one RN member noted that they had little input into strategic planning, when she reported: "I don't think staff really know very much about it [the RACF strategic plan]. It's not widely available for staff to have input or to know what our strategic plan is."

Reflective of the hierarchical power relations in RACFs,[19,41,42] a care assistant in the FARG argued that "[staff] do not feel that they are responsible for making changes" and so struggled to envisage their role in promoting change in developing evidence-informed falls prevention practices.

The opportunity for FARG members to meet with their colleagues, from within their own facility and those from another RACF, fostered the development of new understandings about their respective workplaces and the conditions that shaped their practice. As such, by having the opportunity to share experiences from practice, the FARG members became more familiar with the contributions their colleagues, from other occupational groups, made to resident care. For example, an enrolled nurse member reported

that as a consequence of her participation in the group she had "a bit more of an understanding about what each [staff] area gets up to [and] what challenges they have." Similarly, another enrolled nurse member reflected on her new understanding of the different contributions that other staff members make to the care of residents when she noted, "It's certainly opened my eyes a lot." Hence, participation in the FARG facilitated the sharing of ideas between different occupational groups. In turn, this collaboration worked to break down the occupational silos that seemed to isolate staff from understanding one another's roles and capabilities. Reflecting on the benefits of meeting with different staff members and learning about their respective roles, another of the enrolled nurse members argued that there was a need for staff from "different departments ... and all levels to work together." She argued that if this happened, the transfer of information, such as "knowledge about research [and] what goes on in [RACF] management," would markedly improve.

Collaboration: Planning and taking action

From their reconnaissance discussions, the FARG members recognized the importance of working together to address problems in their falls prevention practices. The research meetings provided an opportunity to work together to plan strategic action and implement this in practice. Some of these actions also prompted staff from different occupational groups to work more closely. For example, the FARG members identified a need for improved footwear for residents at their facilities. The members collaborated to plan an intervention at each facility known as Shoe Day that aimed to highlight to residents and their family caregivers the increased falls risk posed by unsuitable footwear. The intervention involved organizing a representative from a specialized shoe company to visit the facilities, talk about the importance of appropriate footwear, and provide an opportunity for residents/family to make a purchase. To this end, the FARG members enlisted the support of enrolled nurses and care assistants in both facilities to target residents and/or their family members who they identified as being in need of more appropriate footwear. One RN FARG member explained how she had not previously engaged with care assistants about this issue and that when she contacted them to participate in the Shoe Day, it was apparent that although they recognized the need for appropriate footwear, they had never been consulted about this issue. She reported:

> They [care assistants] were talking about dangers [of residents having ill-fitting shoes] because some were seeing oedematous feet on some of the residents because their shoes were too tight and residents [were] slipping because they didn't have the right footwear . . . . So they [the care assistants] recognised the importance of having the new appropriate footwear. [RN]

Needless to say, the care assistants supported the Shoe Day concept, recruiting residents and family members, which contributed to its success.

The benefits of collaboration between the FARG members were also evident in the development of an intervention to address the need for education of staff, residents, and family members about falls prevention. This intervention, called Falls Awareness Week, centered on facility-wide falls prevention training for staff with an experiential focus (see http://www.mednwh.unimelb.edu.au/training-expo/index.html). The FARG members collaborated to plan and implement this activity across the 2 RACFs. As outlined previously, this was important because in their initial discussions, the members perceived themselves as having little capacity to instigate change. Yet, as the project progressed, they were empowered to take action to implement an education and awareness raising program in each RACF, sharing resources across the facilities and collaborating in the development process.

Involvement with the program also led to the breaking down of occupational silos within the RACFs. One RN FARG member

reported that "It was all staff [who were involved] for a change, so that catering, kitchen, cleaners and even the receptionist went to it [the education program]. So that was great." Another group member argued that through this kind of engagement, involvement with the education program led to the "connect[ion of] nursing staff with cleaning and catering [staff] . . . to establish teams." She went on to suggest that participation in the training sessions not only reduced the isolation of different staff members from each other but also resulted in "opening up the lines of communication about falls," such that staff members at all levels became active participants in developing their knowledge and understanding of falls prevention. The success of this action is captured in the words of yet another RN member who reported, "They [the participants] all kept saying, 'I hope we can do something like this again'".

Reflections on working together

Both the educational intervention and the Shoe Day activities resulted in a collaborative focus on falls prevention across the RACFs, which extended outside the membership of the FARG. For example, one RN member explained that by involving other staff members outside the FARG to identify residents in need of more appropriate footwear, the understanding by people "at the coalface"—such as volunteers, relatives, and residents—of the importance of appropriate footwear to help prevent falls, had improved. Another RN FARG member also reported that as a consequence of the education program, staff members were now applying their improved understanding of falls prevention to enhance resident safety by reducing clutter in residents' rooms. She noted:

> Lots of people are talking about [the training], saying they didn't realise that is what it's like to be elderly [and being at risk of experiencing a fall]. More people are saying that now, when they go past or into a room, they might see something [falls hazard] on the floor and do something about it. [RN]

The FARG members also argued that RACF staff had a greater awareness of the imperative to report instances when a resident experienced a fall. For example, an FARG member stated:

> I think [there is a] greater awareness [of falls] with staff . . . they're probably reporting more than they used to be. [Previously] I think some staff may have thought, well if somebody falls, get them up and put them back to bed, I don't want to worry about filling out an incident report. [RN]

Development of an enhanced learning environment

Involvement with this project was the first time that the FARG members had been engaged in a process of this nature to develop their practice, thus providing an enhanced learning environment. These changes were sustained past the end of the project, as the falls group continued to meet and plans were made for ongoing falls prevention activities. For example, the success of the Falls Awareness Week resulted in plans to hold a similar event annually, with this opportunity for learning to be extended to a wider audience, including staff from other facilities. Another outcome of the widespread involvement with the falls prevention training was an improved understanding among staff of the rationale behind certain tasks, such as reducing clutter in rooms, referred to earlier. For example, one RN FARG member commented that learning about falls prevention in the training had helped staff to "understand why they're doing those mundane jobs [such as reducing clutter]."

Involvement with the project also resulted in broader benefits outside the FARG meetings and the action research falls prevention activities. For example, the FARG members reported that they were increasingly being accessed as falls resource people by staff members who were not part of the group. A care assistant FARG member noted: "We're out there on the floor and they're coming to us with [questions such as] 'this person's doing this, they're falling, what can we do about it'?"

Furthermore, learning occurred in areas unrelated to falls prevention. For example, an RN FARG member stated, "We've learnt a lot about falls prevention and things, but we've also learnt a lot about the other facilities, some of their ideas." In this sense, the FARG members considered involvement with the project to have had, as encapsulated by an RN member, "lots of spin-offs."

DISCUSSION

This project aimed to improve evidence-informed falls prevention practices among staff members from participating RACFs. There are a range of approaches to developing evidence-informed falls prevention practice,[6-7,43] and the findings of this project highlight the potential of action research studies in this effort. As the study unfolded, it became apparent through the FARG members' narratives that staff members were isolated from each other and had little opportunity to talk about, let alone investigate, their practice. The findings of this study concur with and build on the small body of research on professional isolation in RACFs in the United Kingdom, the United States, and Australia outlined in the introduction. As addressing professional isolation is imperative to developing evidence-informed practice, this article has focused on strategies found to be effective in decreasing such isolation.

Of key importance to reducing staff members' sense of isolation from each other was providing opportunities to meet and discuss their practices with regard to what they considered to be an important area of their practice, falls prevention. While Lindeman et al[19] and others[13,44] have reported on the importance of staff engagement to plan actions that will improve resident care, this study is unique because the findings have allowed the researchers to demonstrate that to successfully plan collaborative action, the FARG members first needed to develop better understandings of each other's roles and capabilities. Within what has been reported as a traditionally hierarchal environment,[19,41,42] the FARG members from varying occupational backgrounds recognized the imperative to adopt a collaborative ethic to work in partnership to effect practice change. This recognition was stimulated by the FARG members having shared mutual concerns about their isolation from each other and how this contributed to a sense of powerlessness to change their practices. It was through the FARG members' critically reflective and sustained dialogic engagement that they recognized possibilities for different ways of working. Hence, the planning and implementation of collaborative actions aimed at improving falls prevention practices at the RACFs (eg, Shoe Day, Falls Awareness Week) reflected a departure from their everyday practices of working in relative isolation. The FARG members' collaborative working challenged the traditional hierarchical relationships between staff and opened up an opportunity to work in partnership, thus building capacity and empowering staff. Facility management has demonstrated support of this process, as the falls group has continued to meet past the end of the project. These findings reflect what Robinson has referred to as a "transformative cultural shift in nursing."[45(p66)]

The success of bringing aged care staff together in a collaborative space to plan and implement change highlights the potential for building a "community of practice." Wenger[46] refers to a *community of practice* as a group of people who come together with common concern or passion; through ongoing interaction and the development of knowledge and expertise they can provide a powerful catalyst for change.[46,47] In this study, community building between staff members across 2 RACFs ameliorated the effects of professional isolation and led the FARG members to focus on developing a shared understanding of falls, enhancing their knowledge of the falls evidence base, and planning strategies to improve their falls prevention practices. Our findings suggest that RACFs can become learning environments for the implementation of best practice, in the context of falls

prevention, and concurrently address the isolation of residential aged care staff identified in the literature.[48,49] We argue that by providing opportunities for staff members to build communities of practice to investigate their falls practices and systematically plan and implement action, RACFs can be places of innovation and learning. Moreover, consistent with the literature,[16,18] employing an action research approach to develop a community of practitioners with a shared interest in improvement can promote the translation of evidence into practice. The FARG members in this study shared the intent to critically interrogate their practices and to take systematically informed action. In this way, they took part in the development of a new strategy in falls prevention—one that involves cultural change and the building of a research community with an increased capacity to engage with independent problem solving utilizing evidence-informed practice within the aged care environment. Simultaneously, this strategy allows for falls prevention practices to be tailored to meet local needs and preferences at individual RACFs, as found to be important by Haines and McPhail.[8] It needs to be acknowledged that implementing the action research approach as described in this article did require some resources, including funding for 0.1 equivalent full time for a falls resource nurse in each facility, provision of training for the falls resource nurse and other staff members by project team members in falls prevention, and provision of training and ongoing support by members of the project team to guide the action research process. Innovative approaches such as this one, where there are limited resources available to facilitate involvement in this type of program between residential facilities and research/university staff, warrant further exploration.

The findings of this study have a number of limitations. First, data were obtained from a small sample of staff that comprised the FARG from 2 Tasmanian RACFs, possibly limiting generalizability of findings to other RACFs and also to other staff members in the 2 facilities. In particular, care assistants were underrepresented in the FARG. However, within the context of an action research approach, those staff members who formed the FARG were not intended to be representative but were volunteers that were interested in and passionate about reducing falls. Moreover, although there were commonalities in the issues raised by the FARG members between the facilities, researchers have suggested that findings from single-action research case studies such as this one that relate to the process of change are valid in other settings.[50] Lincoln and Guba[40] make the point that the reader needs to determine the applicability of the study findings to other situations. The benefits found with regard to diminishing isolation of staff, building a learning culture, staff capacity building and empowerment, and developing falls prevention strategies within these 2 facilities suggest the need for additional and larger-scale research with the RAC sector.

CONCLUSIONS

Through this study, the authors have shown the potential of action research to support programs designed to facilitate falls prevention. An action research approach is a useful technique to decrease isolation among RACF staff from a variety of occupations by constructing a community of practice, building a learning environment, and developing falls prevention strategies in residential aged care. The findings suggest that RACFs need to provide opportunities for collaboration between staff members from a range of occupational groups (including care assistants, nursing, and ancillary staff) in order to decrease staff isolation, break down traditional hierarchies, build capacity and empower staff, enhance the learning environment, and subsequently advance falls prevention strategies. The potential for action research processes to increase staff engagement and build practice communities in RACFs is a theme that should be examined further in a broader range of RACFs and locales. Increasing knowledge development and engagement of staff

in this manner may have a beneficial impact on evidence-informed falls practice, perhaps heralding a new phase in falls prevention strategies.

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