



A participatory mixed-methods evaluation of a Falls Awareness Programme

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ABSTRACT:

Purpose- Falls are common in older adults and are associated with injuries and serious ongoing problems. This paper presents a participatory evaluation of a Falls Awareness Programme implemented in South Wales for older adults living in sheltered housing schemes or in the community. It identifies methodological issues and provides recommendations for evaluation design and methods for community-based interventions in the future.

Methods- A mixed-methods study combining a non-experimental pretest-posttest design with face-to-face focus groups.

Findings- Concerns about falling and self-reported general health at baseline were worse for participants living in sheltered housing schemes, compared to participants in the community. There was no statistically significant change between baseline and follow-up in general health or concerns about falling, however the data suggesting the programme may be more effective for people in sheltered housing schemes. Participants reported making small but sustainable behaviour changes following the programme and described unexpected outcomes from the programme, e.g. socialising and meeting new people.

Originality/value- This paper demonstrates the benefit of engaging older adults in research using a participatory approach, highlights key components of community-based interventions for older people and identifies some methodological issues when conducting evaluations in the community. Specifically, it highlights the importance of selecting appropriate measurement tools for data collection and the utility of continuous monitoring where programme participation is flexible and fluid.

Keywords: *Falls, public health, older people, ageing well, public participation, evaluation*

Paper type: Research paper

1.0 Background

The UK has an ageing population (Government Office for Science, 2016), with adults over 65 years making up 18.2% of the population in 2017. This figure is increasing and is projected to rise to 20.7% by 2027 (ONS, 2018). Falls are common in older people and often result in fall-related injuries, which are associated with serious ongoing problems (NICE, 2013). A fall is defined as “*an event which results in a person coming to rest unintentionally on the ground or lower level, not as a result of an intrinsic event (such as a stroke) or overwhelming hazard*” (Tinnetti, *et al.*, 1988). It is estimated that 30% of people over the age of 65 years fall at least once a year. The risk of falling continues to increase with age, with 50% of people over the age of 80 years falling at least once per year (NICE, 2013).

Falls have serious physical, functional and mental consequences for older people (Terroso *et al.*, 2014). These commonly include fractures, bruises and injuries, which put patients at risk of not returning to their former rate of mobility and function (Votchteloo *et al.*, 2012). Consequently, individuals may find that they lose their autonomy and independence and become more reliant on carers or family members. This is associated with increased depression, social isolation, loneliness, loss of self-confidence, loss of self-efficacy and fear of falling (Terroso *et al.*, 2014; NICE, 2013). Salkeld *et al* (2000) found that 80% of older women surveyed stated that loss of independence and quality of life following a hip fracture and admission to a nursing home would be worse than death. The psychological consequences of a fall may also slow subsequent recovery by reducing activity levels due to fear of falling and lack of confidence. The burden of falls extends to family members and carers (NICE, 2013) and has significant financial implications for health and social care services. NICE (2013) estimated the financial burden of falls to be more than £2.3 billion per year to the NHS in the UK.

To mitigate the risk of falls and reduce the burden of the consequences of falls, intervention and prevention programmes have been developed in communities for at-risk older adults. Chang *et al* (2004) reviewed 40 studies investigating efficacy of falls intervention programmes on falls outcomes and found that interventions significantly reduced frequency and rate of falling in older people. Exercise interventions which increase muscle strength and activity levels in older people are also effective in reducing the risk of falls (Chang *et al.*, 2004).

1.1 Aim

The aim of this research was to evaluate how a Falls Awareness programme was received in both community settings and supported housing settings and whether it had an impact on attendees. The research aimed to identify key components of programmes and provide recommendations for falls awareness and prevention programmes and evaluations in the future.

1.2 The intervention

The Falls Awareness Programme was delivered in 10 venues in South Wales between August 2017 and July 2019. This included 6 sheltered housing schemes and 4 community venues (including libraries, social centres and lifelong learning centres). The programme consists of a 10-15-week programme of hour-long sessions which were free to attend and open to residents of the sheltered housing schemes and members of the local community.

The programme aimed to raise awareness of falls risks and contribute towards falls prevention in older adults. It combines informational sessions, covering topics such as foot and nail care, sensory impairment, medication management and home safety advice with

gentle exercise sessions. In addition, participants meet with a range of partner organisation for practical advice, including first aid advice and assessments of functional mobility. These include the Welsh Ambulance Service Trust, British Red Cross and NHS physiotherapists.

Local demographics show an ageing population in the county borough area. Furthermore, 36% of the local population live in areas considered to be within the most deprived 20% in Wales (Welsh Government, 2015). The burden of falls is greater among the most deprived communities (Public Health Wales, 2012), which has implications for those living in the deprived areas of Cwm Taf. There are also more hip fractures per 100,000 people in Rhondda Cynon Taf (596.6), compared to the average for Wales (632.4) and rates of meeting physical activity guidelines in Rhondda Cynon Taf are lower (41.7%) than the Welsh average (53.2%). This demonstrates the need for a falls prevention programme to be rolled out in Rhondda Cynon Taf.

2.0 Methods

The mixed-methods design combined a non-experimental pretest-posttest design with face-to-face focus groups. Quantitative data was derived from participant questionnaires collected at the start and end of the programme.

A participatory approach was employed for the evaluation. This engages participants in the research and evaluation process, recognising their unique expertise of working within and accessing the project (Cousins & Chouinard, 2012). To engage these perspectives, the researchers regularly engaged with a steering group comprising of two academics, two members of the local public health, protection and community services team and two lay individuals who had participated in the Falls Awareness Programme. The steering group collaborated on aspects of the evaluation including, seeking ethical approval, designing the interview schedule, planning recruitment, interpretation and triangulation of findings and generating conclusions and recommendations.

2.1 Quantitative methods

2.1.1 Participants: A total of 147 participants (77% female) took part in the Falls Awareness programme, with 82 participants (57%) attending a community-based programme and 62 attending a programme in a sheltered housing scheme (43%). Data was collected at baseline for 134 participants (92%) and at follow-up in the final session (10-15 weeks later) for 74 participants (51%).

2.1.2 Materials: General health, well-being, falls history and falls concern were assessed using a 17-item questionnaire. The EQ-5D-5L (Herdman *et al.*, 2011) was used to assess generic health status, comprising of a health assessment on five dimensions and a visual analogue scale for participants to rate their current health status between 0-100. The Falls Efficacy Scale-International (Yardley *et al.*, 2005) was used to assess concern about falling doing a range of 16 daily activities, ranging from 1 (not at all concerned) to 4 (very concerned). It asks participants to answer how concerned they think that they would be, if they do not currently do that activity.

2.1.3 Data analysis: Data collected were analysed using IBM SPSS (V26) and R software version 3.6.1 (R Core Team, 2019). Descriptive statistics were reported and paired-samples t-tests and repeated measures ANOVA's were used to compare baseline and evaluation data. In accordance with guidance for the 16-item Falls Efficacy Scale-International (Yardley *et al.*, 2005), responses with five or more items missing were

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3 excluded. New total scores were calculated for responses with 1-4 items missing by taking
4 the mean and multiplying by 16. The EQ-5D-5L index score was calculated using the EQ-
5 5D-5L Crosswalk Index Value Calculator (Euroqol, 2020).
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8 **2.2 Qualitative methods**

9 **2.2.1 Participants:** Four focus groups were held with 24 participants, including
10 attendees of the Falls Awareness programme ($n=20$) and service providers/managers who
11 hosted the programme ($n=4$). Participants were predominantly female ($n=19$, 90%) and the
12 average age of participants was 77 years (range 62-92 years).
13

14 **2.2.2 Data Collection:** A focus group schedule was co-designed by the steering
15 group, in accordance with the participatory approach, to explore experiences of the
16 programme. Focus groups were conducted in two community venues and two sheltered
17 housing schemes by the lead author. Focus groups lasted an average of 49 minutes
18 (shortest = 35; longest = 68) and were transcribed verbatim.
19

20 **2.2.3 Data analysis:** Thematic analysis (Braun & Clarke, 2006) was used to analyse
21 the focus group transcriptions. This involves iteratively following six steps of familiarisation,
22 coding, searching for themes, reviewing and naming themes and reporting findings. Coding
23 and analysis were primarily done by the lead author, but steering group members coded
24 sections of each transcript to ensure reliability. The steering group together reviewed the
25 transcripts, codes and analysis, identified themes from the data and labelled the themes
26 accordingly.
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29 **2.3 Ethics**

30 Two separate low risk ethics applications were approved by the University ethics committee
31 of the first author to undertake this research (references: 19CW0701LR; 19ME0401LR).
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36 **3.0 Results**

37 **3.1 Quantitative findings**

38 **3.1.1 Participant characteristics:** Participants ranged in age from 56-95 years
39 ($M=76.36$, $SD=9.62$) across all programmes delivered. Participants attending the programme
40 in sheltered housing schemes were significantly older ($M=80$ years) than those attending in
41 the community ($M=73.5$ years), $t(137)=-4.358$, $p<0.001$. Participants were predominantly
42 women (77%, $n=110$), with lower engagement from men (23%, $n=33$). However, there were
43 no significant associations between baseline scores, follow-up scores or completion rates
44 with age or gender.
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48 **3.1.2 Programme attendance:** Overall, 51% of participants ($n=74$) completed the
49 follow-up measures. Rates of completing follow-up measures were greater for participants in
50 sheltered housing schemes (69.4%, $n=43$) compared to those in the community (37.8%,
51 $n=31$).
52

53 All programmes had at least 10 sessions, with some having up to 15 separate sessions. On
54 average participants attended six sessions ($M=6.48$, $SD=4.19$) in a course. Attendance was
55 significantly greater within the sheltered housing schemes ($M=7.6$, $SD=4.17$) compared to
56 the community ($M=5.66$, $SD=3.99$), $t(142)=-2.829$, $p=0.005$. Older age was associated with
57 increased attendance, $r(139)=0.239$, $p=0.005$, even when controlling for the programme
58 venue.
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3.1.3 *Fall concern*: At baseline, self-reported frequency of falls in the previous 12 months ranged from no falls to 15 falls. Fifty percent (50%) of participants reported no falls in the previous 12 months, 25% reported one fall and 25% reported two or more falls.

Responses regarding concern about falling were mixed, and varied across participants, ranging from not at all concerned (32%), somewhat concerned (29%), fairly concerned (21%) and very concerned (19%). The average score on the Falls Efficacy Scale-International for all participants was 30.57, which indicates high levels of concern, based on cut-points defined by Delbaere *et al* (2010). Responses to the single-item question about falls concern correlated with scores on the Falls Efficacy Scale-International ($r=0.595$, $p<0.001$).

Participants who reported doing regular exercise reported less concern about falling ($M=25.96$, $SD=11.81$), compared to those who did not ($M=35.9$, $SD=13.53$), $t(122) = -4.35$, $p<0.001$. Participants who had fallen in the past 12 months were significantly more concerned about falling ($M=33.91$, $SD=1.78$) than those who had not ($M=26.13$, $SD=1.62$), $t(111)=3.226$, $p=0.002$. Concern about falling was significantly greater for participants in sheltered housing schemes at both baseline ($M=33.65$) and follow-up ($M=35.19$) than community participants at baseline ($M=28.03$) and follow-up ($M=26.05$).

A repeated measures ANOVA found strong evidence for a significant main effect of venue ($p=0.0016$), but no significant interaction between venue and time ($p=0.129$) and no significant main effect of time ($p=0.806$). BH-adjusted post hoc tests found that the effect of venue was significant at both baseline ($p=0.0232$) and follow-up ($p=0.0064$).

3.1.4 *EQ-5D-5L Index scores*: Greater health and well-being was reported by the community group at baseline ($M=0.689$) and follow-up ($M=0.675$) compared to the sheltered housing group at baseline ($M=0.554$) and follow-up ($M=0.559$). A repeated measures ANOVA found evidence for a significant main effect of venue ($p=0.0161$), but no significant interaction between venue and time ($p=0.2205$) and no significant main effect of time ($p=0.3885$). BH-adjusted post hoc tests found that the effect of venue was only significant at baseline ($p=0.0394$) and not at follow-up ($p=0.2215$). Note that higher index scores indicate greater health and well-being.

3.1.5 *EQ-5D-5L Self-rated Scale*: As with the EQ-5D-5L Index scores, community participants rated their general health and well-being as better at baseline ($M=73.14$) and follow-up ($M=69.49$) compared to sheltered housing participants at baseline ($M=63.26$) and follow-up ($M=63.89$). A repeated measures ANOVA found evidence for a significant main effect of venue ($p=0.0125$), but no significant interaction between venue and time ($p=0.423$) and no significant main effect of time ($p=0.601$). BH-adjusted post hoc tests found that the effect of venue was only marginally significant at baseline ($p=0.0697$) and not at follow-up ($p=0.8663$).

3.2 Qualitative findings

3.2.1 Theme 1: Programme value.

Participants agreed that the Falls Awareness Programme was effective in providing them with useful information and raising their awareness of falls. A lot of the information provided through the programme was perceived to be simple, or common sense, but nonetheless helpful, as it “jogs your memory” [FG2, Sheltered housing scheme] and increases awareness of associations between behaviours and falls risks.

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3 The way that the programme was structured to invite a range of specialist speakers was well
4 received. Information coming from a professional was perceived as valuable, due to their
5 expertise and confidence in the area they were discussing. This expert opinion provided a
6 fresh perspective for participants, and highlighted risks they may not have previously been
7 aware of. This alternative perspective allowed participants to consider whether they needed
8 to adjust habitual behaviours they developed across their lifetime, in order to prevent falls
9 and increase their safety.
10

11
12 *You get to a certain age and you've gone through life on that path and then all of a*
13 *sudden someone comes from the side and says how about this, 'ah I never thought*
14 *about that'* [FG2, Sheltered housing scheme]
15

16 One of the sheltered housing scheme co-ordinators discussed how some tenants may not
17 think that a service or support was necessary or appropriate for them, but that the Falls
18 Awareness programme provided a good opportunity to highlight these potential needs, and
19 available services to address them.
20

21 *But I think although that service is in place, because it came out again, maybe people*
22 *like [name] who probably didn't think that they needed that service, it sort of*
23 *highlighted that well actually I probably do.* [FG2, Sheltered housing scheme, Co-
24 *ordinator]*
25

26 Participants discussed changes that they had integrated into their daily lives as a result of
27 the programme, for example; better foot care [FG1, FG4], keeping medical information in an
28 accessible location for paramedics [FG3, FG4], taking particular care on the stairs [FG3,
29 FG4], practicing Tai Chi at home [FG2], not carrying too much at once [FG4], closing fire
30 doors [FG1] and putting a rail on the pathway to their house [FG3]. For some, the focus
31 group was held up to 18-months after the programme, demonstrating the longevity of some
32 small but effective changes.
33

34 As well as benefiting from information themselves, participants often commented that they
35 were able to take information and advice from the session away to family members or
36 friends:
37

38
39 *I think the ones that don't come, dare I say it are the ones who should come ... but I*
40 *suppose we talk to them and say what it is like and they're getting it from word of*
41 *mouth* [FG1, Sheltered housing scheme]
42

43 This increased their confidence in being able to provide support or advice for others and
44 knowing what to do in a situation where someone else has fallen. A community scheme co-
45 ordinator reported that information from the programme enabled her to make adjustments to
46 the venue set-up, to make it safer and more comfortable for users. Another community host
47 shared that the programme contents added to the array of services and resources that he
48 could share with his community:
49

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51 *I personally found the sessions informative and beneficial and have added to the*
52 *information services I can direct inquiries to* [FG3, Community venue, Co-ordinator]
53
54

55 3.2.2 Theme 2: Programme structure

56 3.2.2.1 Sub-theme 1: Accessibility.

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58 Participants learnt of the Falls Awareness programme through a variety of different routes,
59 e.g. posters [FG1, FG2, FG4], word-of-mouth [FG4], tenants meeting [FG2] and advertised
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3 in community venues [FG3]. Participants were motivated to attend because of an awareness
4 of the consequences of falls and the impact they have on others. Fear of falling was a strong
5 motivating factor for some:
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7 *That is the fear nowadays, falling is top of my mind, all of the time* [FG3, Community
8 venue]
9

10 As a result, some felt that the programme name, the Falls Awareness Programme, was
11 appropriate in capturing their interests and making them want to attend. Whereas, others
12 found the title ambiguous and felt that it did not encompass the breadth of information
13 provided in the programme.
14

15 *"It just seems that we're only interested in falls, whereas it's a very, very varied*
16 *programme"* [FG4, Community venue]
17

18 Whilst participants commended the Falls Awareness programme for having a varied array of
19 sessions, some felt that there was a lack of coherence in topics covered under the general
20 theme of falls. They felt that there was a risk that people would see the title and be put-off
21 attending the programme or think that it was not appropriate for them.
22

23 *I didn't see the point in someone telling you don't store medicines, what's that got to*
24 *do with falling down you know. It won't save you falling down will it?* [FG1, Sheltered
25 housing scheme]
26

27 3.2.2.2 Sub-theme 2: The social component

28
29 Being part of a group was a really important part of the programme. The peer support
30 enabled participants to share their experiences, understand how others coped with similar
31 challenges and share advice.
32

33 *Meeting together and sharing things, sharing opinions and seeing what had*
34 *happened to other people ... seeing how they coped.* [FG3, Community venue]
35

36 *We learnt as much from each other as much as the people presenting.* [FG3,
37 Community venue]
38

39 This happened both during the programme sessions and afterwards, where many of the
40 participants would stay behind for discussions and more social interaction:
41

42 *That was perfect because we all sat in there [the library], we didn't leave straight*
43 *away you know, so we discussed the group things after, so we chatted.* [FG3,
44 Community venue]
45

46 Both community hosts and participants felt that it was important for presenters to stay behind
47 after their session to have informal discussions and answer questions from the participants:
48

49 *A cup of tea, a biscuit, that gives you the ability to chat then, ask questions, very*
50 *much a case of 'ah can you explain that to me?'. I think [programme organiser] fed*
51 *that back then, the latter group stayed behind much more* [FG3, Community venue]
52

53 In addition to this type of social learning, other participants explained how they had taken
54 information from the programme and shared it with people who did not want to participate, or
55 with their family members or friends:
56

57 *I have told my sister off, and my brother off, which I never do ... she was standing on*
58 *a stupid little rickety stool and I said 'get down off there now!'* [FG1, Sheltered
59 housing scheme]
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3 An unintended benefit of the programme for many participants was the opportunity to
4 socialise and meet new people:
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6 *I suppose at the end of the day it's a little bit of social activity, when people came*
7 *together, that's another thing see [FG1, Sheltered housing scheme]*
8

9 *P1: It was good socially, meeting people*

10 *P2: I was going to say, it's all a social event [FG4, Community venue]*
11

12 3.2.2.3 Sub-theme 3: Mode of delivery and content

13
14 Attendance at the Falls Awareness programme sessions varied widely. The programme
15 aimed to recruit approximately 15-20 people to each session, and whilst this was not always
16 achieved, participants shared a preference for smaller groups. The smaller groups made it
17 easier for participants to socialise, meet new people and be able to ask questions.
18

19 *I think I probably enjoyed the smaller groups ... it's more personal. In a large group I*
20 *don't think I might've participated as much. [FG4, Community venue]*
21

22 However, attendees at the programme were predominantly female and one participant noted
23 that there were very few males who attended the programme. Participants living in sheltered
24 housing schemes in both focus groups [FG1, FG2] also commented that it was the same
25 people who typically participate in activities organised by the scheme, and it was hard to
26 engage others.
27

28 A key message was that sessions must be fun and interactive, to capture interest and help
29 build confidence in performing actions, e.g. exercises or helping someone who had fallen.
30 Sessions presented in lecture format were not well received, and in some cases put people
31 off returning to other sessions. Participants favoured sessions that involved learning a new
32 skill and being active, such as Tai Chi, Keep Fit or Physiotherapy.
33

34 A recommendation offered by a participant was to build in review sessions to help them
35 retain information and give them the opportunity to go away and think of any other questions
36 that they had. One of the co-ordinators agreed that this would be a good addition to the
37 programme:
38

39 *I think if we had a sort of recap maybe the week after or something, just to go over*
40 *everything, you know, everybody can ask questions if they're not sure of anything,*
41 *would be good wouldn't it? [FG4, Community venue]*
42
43

44 Additionally, whilst participants valued the majority of the information that they learnt in the
45 programme, there felt some recommendations were inappropriate and unpractical. For
46 example, participants in two different focus groups raised the recommendation to put a
47 blanket and bottle of water in every room in case of a fall. They felt that this was unpractical
48 and served as a constant reminder of their risk of falling.
49

50 51 52 4.0 Discussion

53
54 The Falls Awareness Programme delivered in South Wales aims to raise awareness of falls
55 and falls risks, encourage behaviour change and prevent falls in older adults. Using a mixed-
56 methods participatory approach, this study demonstrated that the programme was well
57 received by participants in both community venues and sheltered housing schemes and
58 produced small but sustainable changes in behaviour to reduce risk of falls. This paper also
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3 identifies key components of a falls awareness programme which were valued by older
4 people, for example, interactive sessions with specialist speakers.
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6 Need for intervention appears to be greater in the sheltered housing schemes. These
7 individuals reported higher concern about falls, worse general health on two measures and
8 were older in age at the time of participation. Poor health is frequently reported as a reason
9 to move to sheltered housing (Field, Walker & Orrell, 2002). However, in spite of the
10 worsened health, these participants had higher attendance and completion rates. This may
11 be due to ease of access and not being required to travel to the programme, but nonetheless
12 indicates good engagement. Furthermore, although not statistically significant, the results
13 indicate that following the programme, individuals living in sheltered housing schemes had
14 either maintained or increased their general health, whilst those in community venues
15 showed a slight decline in general health. This indicates that the programme might be more
16 appropriate for individuals in sheltered housing schemes and alternative programmes and
17 support should be sought for community venues.
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20 Engagement of men in the Falls Awareness programme was low, particularly in the
21 community venues. However, the two men who discussed their attendance in the focus
22 group were positive about their experience and felt that they learnt a lot and benefited from
23 the programmes. Engagement of men in health promotion programmes is low in general
24 (Robertson *et al* 2013) and this is reflected in this situation. However, men are still at risk of
25 falling, so seeking to engage more men would be beneficial.
26
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28 **4.1 Methodological issues and recommendations**

29 The present study highlights a number of methodological issues and makes
30 recommendations for designing evaluations of community-based interventions in the future.
31

32 No significant differences were found on the measures of falls efficacy and general health
33 between baseline and follow-up. Whilst this may indicate that the programme did not have
34 an effect on falls efficacy or general health, this may also be due to the tools used. Given
35 that the intervention was relatively light touch, a change in general health over a 10-15-week
36 period would have been unexpected. Alternative tools assessing certain aspects of health
37 and well-being or behaviour change may be more sensitive to changes resulting from the
38 programme. Furthermore, completion rates of all 16 items in the Falls Efficacy Scale-
39 International (Yardley *et al.*, 2005) were relatively low in the present sample. Participants
40 reported confusion about the tool in judging their concern regarding actions that they do not
41 undertake, and frequently missed items that did not make up their daily life. The scale does
42 not seek reasons for high/low concerns, or whether concern was mitigated by an aid, e.g. a
43 walking stick. For example, a participant may respond with low concern about going
44 shopping, but this may be because they only go to the shops with a family member and use
45 a trolley to support themselves. Without these aids, the same individual may report
46 extremely high concern, which would not be reflected in her answer. Tools should be piloted
47 with the target participant group prior to use to ensure correct interpretation and reduced
48 confusion, particularly in older participant groups.
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52 Whilst the main aim of the Falls Awareness programme was to increase awareness of falls
53 and ways to reduce the risk of falls, the programme also aimed to increase activity levels
54 and social activity amongst participants. Comments from the focus groups alluded to
55 improvements in activity levels and increased social activity, however there was no
56 quantitative measure of these outcomes. Future studies should seek to identify potential
57 outcomes prospectively and select measurement tools accordingly.
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3 Completion of questionnaires at follow-up was low, and only undertaken by half of
4 participants, limiting comparison of baseline and follow-up data and conclusions that can be
5 drawn from the data. No interim data was collected during each of the programmes, this
6 interim data could have mitigated some of the limitations of low completion rates at follow-
7 up. Alternatively, a brief tool (maximum of 5 questions) could be used at the end of each
8 sessions to identify concern about falls, understanding of the session and any changes that
9 had been implemented since the week before. This continual monitoring data may give
10 further insight into the impact of the programme. Researchers should seek to develop a brief
11 tool that could be used frequently to monitor impact, whilst minimising participant burden.
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14 Finally, some of the focus groups were held a long time (up to 1.5 years) after participants
15 had participated in the programme, therefore memories of some of the specifics of the
16 programme or specific challenges experienced, behaviours implemented or changes noticed
17 may not have been remembered, and therefore captured in this evaluation. Integrating the
18 mixed methods approach prospectively at the start of the intervention would enable data to
19 be collected throughout, rather than retrospectively at a single time point.
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22 **4.2 Implications**

23 The present study employed a participatory approach to involve older people in the research
24 process throughout the evaluation. The contribution of the two lay members of the public in
25 this research was crucial in ensuring that the research methods and tools selected were
26 appropriate and acceptable to participants. Further interpretation of the findings and
27 exploration of methodological issues, e.g. issues with the Falls Efficacy Scale-International
28 were also supported by these individuals. Future research should seek to employ a
29 participatory approach or peer researcher model to engage older people in research.
30
31

32 The methodological issues identified here highlight the importance of co-designing an
33 evaluation prospectively alongside the development and implementation of an intervention.
34 Building the evaluation into the process and working with a multi-disciplinary steering group,
35 including members of the public, ensures that the methods, design and measurement tools
36 used are appropriate for the study and can fully evaluate the programme against its' aims.
37
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39 **4.3 Conclusions**

40 This mixed-methods participatory evaluation has drawn several interesting conclusions and
41 provided a range of recommendations for Falls Awareness programmes and evaluations. In
42 general, the Falls Awareness Programme was positively received by participants and it was
43 successful in improving awareness of falls and falls risks. The results indicate that the
44 programme may be more appropriate for delivery in sheltered housing schemes due to their
45 increased levels of need, higher levels of retention and completion and trends towards
46 increased health following the programme; and an alternative programme or programme
47 structure may be more appropriate for delivery in community venues. The paper identifies a
48 number of key components for community-based interventions for older adults and identifies
49 some key methodological issues to consider when conducting evaluations in the community.
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