BMJ Open 'I've always done what I was told by the medical people': a qualitative study of the reasons why older adults attend multifactorial falls risk assessments mapped to the Theoretical Domains Framework

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ABSTRACT

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Correspondence to Emmy Racine; emmy.racine@ucc.ie **Objectives** Multifactorial falls risk assessments reduce the rate of falls in older people and are recommended by international guidelines. Despite their effectiveness, their potential impact is often constrained by barriers to implementation. Attendance is an issue. The aim of this study was to explore why older people attend communitybased multifactorial falls risk assessment clinics, and to map these reasons to a theoretical framework.

Design This is a qualitative study. Semi-structured interviews were conducted and analysed thematically. Each theme and subtheme were then mapped onto the Theoretical Domains Framework (TDF) to identify the determinants of behaviour.

Participants Older adults (aged 60 and over) who attended community-based multifactorial falls risk assessments.

Results Sixteen interviews were conducted. Three main themes explained participants' reasons for attending the multifactorial risk assessment; being that 'type of person', being 'linked in' with health and community services and having 'strong social support'. Six other themes were identified, but these themes were not as prominent during interviews. These were knowing what to expect, being physically able, having confidence in and being positive towards health services, imagining the benefits given previous positive experiences, determination to maintain or regain independence, and being 'crippled' by the fear of falling. These themes mapped on to nine TDF domains: 'knowledge', 'skills', 'social role and identity', 'optimism', 'beliefs about consequences', 'goals', 'environmental context and resources', 'social influences' and 'emotion'. There were five TDF domains that were not relevant to the reasons for attending.

Conclusions These findings provide theoretically based factors that influence attendance which can be used to inform the development of interventions to improve attendance to falls prevention programmes.

Strengths and limitations of this study

- To our knowledge, this is the first qualitative study to explore older peoples' reasons for attending multifactorial falls risk assessments.
- Semi-structured interviews were conducted with older adults (aged 60 and over) who attended multifactorial falls risk assessments to explore their reasons for attending.
- Qualitative data were analysed following the principles of thematic analysis and each theme and subtheme were mapped to the Theoretical Domains Framework to identify the determinants of behaviour (attendance).
- Our findings provide theoretically based factors that influence attendance which can be used to inform the development of interventions to improve attendance at falls prevention programmes.
- Future research with those who do not attend multifactorial falls risk assessments would provide additional insight into the barriers to attending which could be used to further develop an intervention to improve attendance.

INTRODUCTION

Falls and fall-related injuries pose a major challenge for older people and our health systems.¹ Falls among older adults are increasing in prevalence as a result of increasing life expectancy.² For an older person, a fall may lead to serious physical, psychological and social consequences including pain and fractures, loss of confidence, increased dependency, social isolation and depression.^{1 3-5} WHO rank fall-related injuries as the third leading cause of 'years lived with disability'⁴ and injurious falls are a

leading cause of death in those aged 75 years and over.⁶ Moreover, as the proportion of the population aged over 65 is growing, falls among older people place significant demands on health services.² These demands are expected to increase unless effective preventive strategies are implemented.⁷

Systematic reviews support multifactorial risk interventions as effective in reducing the rate of falls in older people.⁵⁸ Multifactorial interventions assess an individual's risk of falling, and then initiate treatment or arrange referrals to reduce identified risks.¹ As this approach focuses on several risk factors, it can result in greater reductions in falls when compared with a single intervention.⁹ International guidelines on the prevention of falls recommend multifactorial risk assessments be carried out with older people who are at increased risk for falls.^{3 10} Increased risk for falls can be identified by assessing individuals for a history of falls and/or problems in physical functioning and limited mobility.¹⁰ Following initial identification of an increased risk for falls, the multifactorial assessment may include an assessment of gait, balance and mobility, muscle weakness, osteoporosis risk, perceived functional ability and fear related to falling, visual impairment, cognitive impairment and neurological examination, urinary incontinence, home hazards, cardiovascular examination and medication review.¹¹

Despite the effectiveness of multifactorial risk assessments and targeted interventions, attendance for multifactorial interventions is often suboptimal.^{12 13} Yet few studies have explored the factors influencing attendance at this type of prevention programme. Much of the existing literature focuses on factors influencing attendance at exercise-based falls prevention programmes.¹⁴⁻¹⁶ Falls prevention programmes are sensitive to the context in which they are implemented; this may contribute to low levels of attendance.¹⁴ These contextual factors include but are not limited to the content of the intervention (hazard reduction vs exercise), the format of the intervention (individual vs group), how participation is encouraged (eg, community action vs health professional prescription) and how the population is sampled (eg, unselected vs high risk).¹⁴ Furthermore, uptake may be reduced in falls prevention programmes when more is required of the participants.¹³ Multifactorial interventions are conducted by a multidisciplinary team, focusing on several risk factors with multiple potential referrals, requiring individuals to make multiple changes. Therefore, the cost to individuals in both time and resources is high.¹³

Understanding the reasons why individuals attend multifactorial risk assessments will allow for the optimising of these factors and inform interventions to improve attendance. Using theory to identify the determinants of behaviour can increase the likelihood that an intervention will be effective.¹⁷ Michie and colleagues developed a framework derived from 33 commonly used behavioural theories and 128 psychological constructs called the Theoretical Domains Framework (TDF). The TDF has been identified as a useful tool for identifying determinants of behaviour and barriers to behaviour change.¹⁸ To date, a number of studies have used this framework to understand the determinants of behaviour in different contexts.¹⁸

Therefore, the aim of this study was to explore why older people attend newly established community-based multifactorial falls risk assessment clinics, and to map these reasons to a theoretical framework (TDF). This theoretical framework will identify factors that influence attendance, which can be used to inform the development of an intervention to improve attendance at falls prevention programmes.

METHODS

Semi-structured interviews were conducted with older adults (aged 60 and over) who attended multifactorial falls risk assessments to explore their reasons for attending. As a qualitative descriptive study, the design was not based on a specific methodological framework but drew from the general principles of naturalistic inquiry to understand the experiences and actions of people in their social and cultural context. This design is considered appropriate for answering questions relevant to practitioners and policy-makers, such as what are peoples' reasons for attending a new service.¹⁹

Risk assessment clinics

Four community-based multifactorial falls risk assessment clinics were established in Cork city and county in the Republic of Ireland between November 2015 and April 2017. The referral pathway to the service is outlined in figure 1 below.

Interview participants

Participants were purposively sampled from those who had opted-in to be contacted for a follow-up interview during a preceding service-user experience survey. The survey was administered to every client who attended a clinic during the first 12 months of the service (July 2016–July 2017).

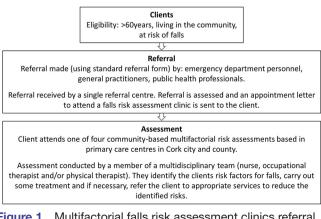


Figure 1 Multifactorial falls risk assessment clinics referral pathway.

The criteria used to select interview participants who had agreed to be followed up were gender, age group (60–69, 70–79, 80+) and clinic location. The study researchers did not have access to individual medical records; therefore, they were unable to sample on the number of falls and/or fear of falling.

Interview topic guide

The topic guide was developed by one researcher (SMM) as part of a wider evaluation of the fall risk assessment service. It was designed to explore older peoples' experiences of the service. It contained questions relating to the overall reasons for and experiences of attending the clinic including the referral process, assessment, outcome, acceptability of the service, and barriers and facilitators to participation. The topic guide was not based on the TDF framework (see online supplementary file 1 for interview topic guide).

Procedure

All interviews were conducted by ER, a young, female PhD candidate with previous experience of conducting and analysing qualitative research. ER has a background in social science and experience in participatory research methods and patient and public involvement (PPI). Prior to the interviews, ER contacted participants by phone and invited them for an interview at a time and place convenient for them. This was the first interaction between ER and the research participants. All interviews were conducted in person. Some interviews took place in the person's own home, others in a nearby cafe/hotel. Three participants brought a friend or family member with them to the interview. At the beginning of each interview, ER stressed that she was independent from the healthcare professionals running the clinic and therefore would not be offended if they voiced negative experiences. In interviews where a friend or family member was present, written informed consent was obtained from each family member so that their contributions could be used as part of the research. The interviews were digitally recorded. The recordings were transcribed verbatim and de-identified.

Analysis

All data were entered into NVivo (V.11) software. Data analysis was performed using a combination of inductive and deductive approaches. First, inductive analysis was performed following the principles of thematic analysis as outlined by Clarke and Braun.²⁰ Two researchers read the interview transcripts multiple times (data familiarisation). The first five interviews were open-coded by two researchers independently (ER and SMM). The researchers then met to discuss potential themes and subthemes and to examine convergence and divergence of the researchers' coding. Any uncertainties were discussed until both researchers reached consensus. One researcher (ER) proceeded to code the remaining interviews. The codes were grouped and synthesised

(by ER) to develop initial themes. Themes were examined and compared according to the purposive sampling groups (gender, age and clinic attended). No differences in themes were observed across these groups. Themes were refined through discussion (by ER and SMM) and consensus was established on the interpretation of the data.

Each theme and subtheme were mapped to the TDF to identify the determinants of behaviour (attendance). This process was conducted by two researchers independent of each other (ER and SMM). Each researcher re-read data within the codes and themes, then allocated the themes to the appropriate domains. Some themes were coded to more than one TDF domain. Minor divergences on the mapping of each theme to its relevant domain, mainly themes that were mapped to more than one domain, were discussed with a third researcher (SMM) to reach consensus. During this process, data within the themes were reviewed and we iteratively applied the original definition of each theoretical domain to the raw data.¹⁸

The consolidated criteria for reporting qualitative research (COREQ) statement was used to inform reporting of the findings (available from the authors on request).

Patient and public involvement

One older person who had attended an assessment and one older person who did not reside in the catchment area (aged 80+) were involved in the refinement of the interview topic guide. As part of this process, the lead researcher conducted a pilot interview with each individual separately and asked them for feedback on the questions asked. Changes were subsequently made to the wording and sequence of the interview questions.

Five older people who attended an assessment were involved in making changes to the assessment appointment letter and the service-user experience survey pack which was used to recruit participants for the semistructured interviews. The changes included reducing the number of words, paragraphs and logos, increasing the font size and simplifying the language used. These changes, along with an introduction of a $\in 10$ shopping voucher incentive, increased the survey response rate from 35% to 60%.

RESULTS

Interview participants

In total, 45 older adults agreed to be interviewed in the preceding service-user experience survey (opt-in response rate 33%). Sixteen interviews were conducted with 16 individuals who attended an assessment. In three of these interviews, participants asked for a family member to be present. Of the 16 participants who had attended an assessment, 9 participants were female (56%) and 10 participants (62.5%) were aged 80 years and over. Purposive sampling allowed us to ensure that the demographics of interview participants were similar to those who attended the service overall (see online supplementary file 2 for further details). Interviews lasted on average 33 min (range 25–55 min). It was decided a priori to conduct 16 interviews (based on budget and time constraints). However, conceptual data saturation occurred at interview 13, as subsequent interviews did not contribute to the development of new themes.

Reasons for attending

Three main themes explained participants' reasons for attending the multifactorial risk assessment. These were being that 'type of person', being 'linked in' with health and community services, and having 'strong social support'. Six other themes were identified, but these themes were not as prominent during interviews. These were knowing what to expect, being physically able, having confidence in health services, imagining the benefits given previous positive experiences, determination to maintain or regain independence, and being 'crippled' by the fear of falling. These themes and subthemes are summarised in online supplementary file 3.

Being that 'type of person'

One of the main reasons participants' attended the falls risk assessment was that they always attend medical appointments and adhere to medical advice. Many participants stated that there was nothing specific about the falls risk assessment that encouraged them to attend; they just go to every appointment that is offered to them. Most participants strongly self-identified themselves as a person who always 'does what they are told'. Some participants believed that this was an inherent characteristic and they have always been that 'type of person'. Others believed this identity developed because they felt grateful for health services and healthcare professionals.

I've always done what I was told by the medical people, because they were so good to me since 1980. Any time I needed them, they really looked after me. (P3, male, 80)

It was clear throughout the interviews that participants felt strongly about the importance of attending health services; some participants reported trying to instil the same value into their family members.

I always do what I'm told and I'm always telling my family, if there's something wrong with you, go to a doctor. It's only money. That's all. (P5, male, 82)

In the interviews where a friend or family member was present, they too identified the participant as 'the type of person that never misses an appointment and is always early for everything' (P16, female, 79).

Being 'linked in' with health and community services

Prior to attending the assessment, participants were already linked in with health and community services. Most of the participants were well connected with health services in general and were well connected with local services and supports. They had a good relationship with healthcare professionals, attended different healthcare professionals on a regular basis and many of them were attending multiple services at the time. These healthcare professionals made them aware of the falls risk assessment and encouraged them to attend. This encouragement reinforced the credibility of the falls risk assessment.

The [public health nurse] came and she told us about the falls clinic, and then from the falls clinic we are in physiotherapy now. (P11, male, 79)

Likewise, participants had strong connections with individual healthcare professionals. Many reported that they had a good relationship with their public health nurse, general practitioner or community occupational therapist and attended the assessment because they were referred or encouraged to attend by them. Some participants believed healthcare professionals were advocates for their healthcare as they had worked on their behalf to get them the appointment without delay.

When you have a public health nurse to represent you, you get [the appointment] quicker. (P13, female, 69)

Having strong social support

Participants had strong social support from family and friends who provided encouragement and practical assistance. Many of the participants' family and friends encouraged them to attend the assessment and to follow the advice given to them. Participants took this encouragement and advice seriously, especially in cases where family members were healthcare professionals themselves.

My granddaughter is a physiotherapist there as well and when I phoned her and she came down after work and my daughter who is a nurse, they took me up... [When asked did you know what to expect?] I did really, I did because my granddaughter had told me.... (P12, female, 80)

Family members and friends also provided practical support, helping participants to get to the clinic by driving them or travelling with them in a taxi. Some participants reported that their family members travelled with them to find the clinic the day before their assessment just so they would know where to go and would feel more confident attending. Some of the clinics did not have parking available nearby, so participants relied on a family member or friend to drop them at the door of clinic or to assist them in walking to the clinic door. One older person who did not have the same level of social support spoke about the difficulties getting to the assessment, particularly the expense involved in getting a taxi to and from the clinic.

Knowing what to expect

As a result of *being 'linked in' with health and community services*, participants had a clear understanding of what the clinic was about. They knew what to expect before attending the assessment as it was clearly explained to them by the person who referred them to the service. Knowing what to expect meant that they were not nervous or anxious about attending.

Oh yes, [the referrer] explained it very clearly, there would be a nurse there and maybe a physio and maybe an occupational therapist and they would ask me questions and do some tests and then we would take it from there then. (P15, male, 80)

As the clinics were based in the local community, most participants were familiar with the location beforehand. Participants reported that being familiar with the clinic location made them feel more confident about attending the assessment.

Being physically able

Being physically able to drive and walk to the clinic was an important skill that enabled participants to attend the assessment. Participants who did not receive support from family members and friends were able to drive themselves to the clinic. Despite having suffered a recent fall or having a fear of falling, many participants reported being able to walk the distance from the car to the clinic location without much difficulty, even in cases where the clinics did not have parking availability directly nearby.

There was no [parking] outside so I had to go down and I parked on the right hand side just above the shops... Oh yes, I could walk down the hill then to the door. (P10, male, 81)

Having confidence in health services

Participants had confidence in and were positive towards health services in general. Participants reported that previous experiences with health services and health professionals were 'outstanding' and therefore expected the falls assessment to also be a similar positive experience. This confidence and optimism led them to believe in the benefits of attending the assessment.

Every single [health professional] that we've come across, everywhere, has been fabulous. (P1, female, 82)

Imagining the benefits given previous positive experiences with health services

Previous positive experiences, as described previously, enabled participants to imagine the benefits of attending the assessment. Some participants attended the assessment because they believed that their experience of falling could be used to benefit others. They wanted to give health professionals information about how they fell so the health professionals could help to prevent others from falling.

Some attended the assessment in the hope of gaining access to health services and supports. One participant stated that he attended because he was told that he would be given a new four-wheel rollator. After the last operation... I went to a physio, she was very good. I had a few sessions with her. They made a difference. They made me steadier on my feet. [I was hoping] that there might be something like that again this time. (P2, female, 77)

Others believed that attending the assessment would help them to understand the reason that they were falling. Many participants did not understand why they had fallen and felt that if they could 'get to the bottom of it' (P7, male, 71), then they could prevent future falls.

Some participants had previously attended other falls prevention programmes which made them more aware of their falls risk and taught them some useful tips and exercises to help prevent future falls.

Determination to maintain or regain independence

Participants were motivated to attend by their desire to get their independence back after a fall. Throughout the interviews, participants referred to their experiences of falling, recovering after a fall and then suffering another fall/recurring falls. As mentioned in the previous theme, participants wanted to understand why they were falling so that they could prevent falls in the future. They were strong minded and refused to accept falls as 'just the way things are' as this would mean they would lose their independence and be 'even more of a burden' on their family members. They viewed the falls risk assessment as a way of 'fighting' to maintain their independence.

I went because I have to stop it from happening, I'm not giving in to this, you know, I can't give in to this, I have to understand why it is happening, if it happens again, I'll be even worse so I have to do something, and that's just it. (P14, female, 72)

What would a bed do for you, a bed won't do anything. I do fight it. I get up and get on with it. Because if you lie in bed, nobody will want you. That's the only way I can explain it. (P13, female, 69)

'Crippled' by the fear of falling

Participants discussed having a very real and strong fear of falling. They explicitly described this fear as a 'desperate dread' which 'crippled' them. Many participants had a fatalistic attitude towards falls as they had either suffered a fall previously, or had witnessed a friend or family member suffer a fall. As a result, they were aware of the severe consequences that a fall can have on their physical and psychological health, and in particular on their level of independence.

I know friends of mine who got falls and it ruined their life... You can go from being active and moving around to being bedridden or in a wheelchair. (P10, male, 81)

Theoretical Domains Framework

The identified themes mapped directly on to nine TDF domains. The nine TDF domains included 'knowledge', 'skills', 'social role and identity', 'optimism', 'beliefs

Table 1 Summary of TDF domains and key themes	
TDF domain	Themes
Knowledge	Knowing what to expect
Skills	Being physically able
*Social/professional role and identity	Being that 'type of person'
Optimism	Having confidence in health services
Beliefs about consequences	Imagining the benefits given previous positive experiences with health services
Goals	Determination to maintain or regain independence
*Environmental context and resources	Being 'linked in' with health and community services
*Social Influences	Having strong social support
Emotion	'Crippled' by the fear of falling
*Main theme.	

TDF, Theoretical Domains Framework.

about consequences', 'goals', 'environmental context and resources', 'social influences' and 'emotion'. There were five TDF domains that were not relevant to the reasons for attending. These were 'beliefs about capabilities', 'behavioural regulation', 'intentions', 'reinforcement', and 'memory, attention and decision processes'. These findings are summarised in table 1 below. Please see online supplementary file 4 for additional information including subthemes and example quotes.

DISCUSSION Main finding

Main findings

This study presents a unique insight into the reasons why older people attend multifactorial falls risk assessments. Three main themes explained their reasons for attending: they were the 'type of person' who attends appointments, they were 'linked in' with health and community services, and had strong practical and emotional social support. Six other themes were identified but were not as prominent. These were knowing what to expect, being physically able, having confidence in health services, imagining the benefits given previous positive experiences with health services, determination to maintain or regain independence, and 'crip*pled' by fear.* These themes identified in this study mapped directly onto nine TDF domains. Mapping these themes to a theoretical framework helps us to identify target beliefs and attitudes that need to be maximised to encourage attendance. In this way, the results of this study can be used to inform interventions to improve attendance at falls prevention programmes.

Context of previous literature

The results suggest that older adults attended the falls risk assessments as they perceive themselves as individuals who always attend medical appointments and adhere to medical advice. This finding is consistent with a wellestablished theory used in observational studies and effectiveness research known as the 'healthy user effect'. The healthy user effect can be best described as the propensity for patients who receive one preventive therapy to also seek other preventive services or partake in other healthy behaviours.²¹ Previous studies have shown that such 'adherent' behaviours are dependent on several interacting factors. In a review of factors associated with patient adherence to prescribed medicines,²² particular social factors were shown to improve adherent behaviours including strong family cohesiveness, availability of local help and positive attitudes of others in the community especially family, friends and associates. These factors are explicitly linked to the two other main themes identified in our study: being 'linked in' with health and community services and having strong practical and emotional social support. A systematic review of older peoples' perceptions of various falls-prevention interventions also found that positive links with healthcare professionals was an important facilitator, as healthcare professionals were important social referents for older people.¹² Similar to our findings, previous studies have found that social support is an important facilitator for older people to attend falls prevention programmes as family and friends often encourage and provide practical help for them to attend (eg, transport).^{12 14 23}

Participants in this study had a clear understanding of what the risk assessment was about because it had been clearly explained to them by the person that referred them to the service. Good communication between the patient and the referrer has been shown to be important in previous qualitative research on attitudes to falls prevention programmes.^{14 23} Similar results have also been found in other studies looking at why people attend preventative healthcare services. For example, studies exploring the barriers and facilitators for patients attending diabetes eye screening services found that communication between the patient and referrer is an important enabler as it increases their knowledge of the service and also adds an element of trust and credibility to the service.^{24–26}

Participants described having a very real and strong fear of falling which stemmed from having fallen or witnessing someone they knew experience a fall. Participants described this fear as 'crippling'. This fear coupled with the determination to maintain or regain their independence was an important reason for attending the assessment. This finding aligns with the health belief model, one of the most widely applied theories of health behaviour.²⁷ This model proposes that individuals who perceive a given health problem as serious are more likely to engage in behaviours to prevent the health problem from occurring.²⁷

Strengths and limitations

A strength of this study was the use of semi-structured interviews with a particularly hard-to-reach target population (older adults who have suffered a fall or who have a fear of falling). Frailer older adults can be difficult to recruit for research purposes as they often have multiple diseases, poor physical functioning and cognitive problems.^{28–30} In this study, additional efforts were made by the lead researcher to facilitate the completion of the 16 interviews. These included meeting interview participants in their own homes and rescheduling interviews a number of times due to illness/frailty. Within the 16 interview participants in this study, 10 were aged 80 years and over. The successful recruitment of these individuals meant that we gained a unique insight into their reasons for attending a preventive health service.

However, this study is not without its limitations. First, we did not interview those who did not attend the clinic as there was no opportunity to seek their consent for research, and thus we were unable to identify the barriers to attending. Further research with those who do not attend multifactorial falls risk assessments would provide additional insight into the barriers to attending which could be used to further develop an intervention to improve attendance. Second, we did not use the TDF to inform the development of the interview topic guide. Doing so may have obtained greater detail about the role of each domain in influencing the target behaviour as is noted in other studies.^{31 32} Equally, the easy mapping of the naturally occurring themes to the TDF domains validates its usefulness in this research area.

Implications

High non-attendance rates can be costly to health services.³³ It can also contribute to opportunity and social costs, such as wasted resources, increasing waiting lists, frustration among staff and lower productivity.³³ In addition, the non-attending client forgoes the opportunity to receive a preventative health service. The literature thus far has largely focused on the epidemiology and reasons for non-attendance.³⁴ Our results suggest that older people attend fall prevention services if they are well supported in their homes and communities. To improve the uptake of multifactorial falls risk assessments, there is a need to develop interventions which identify and engage with older adults who are less well supported. A major strength of this study is its use of the TDF. While multiple theories and frameworks of individual and organisation behaviour change exist, the TDF is arguably the most comprehensive framework and has been used to inform the development of a wide variety of behaviour change interventions.¹⁸ This study identifies domains that potentially influence behaviour which can be used to develop a theory-based intervention to improve attendance at multifactorial risk assessment. Using the behaviour change wheel approach to intervention development, these domains can be mapped to intervention functions and techniques that have been previously shown to be effective in increasing

attendance. For example, the TDF domain 'social/ professional role and identity' could be mapped to interventions that involve modelling the target behaviour to participants (ie, providing an example for people to aspire to).¹⁷ In a previous intervention to increase older adults attendance at colorectal cancer screening, modelling (an information leaflet which depicted a range of different people attending screening) was successfully used to increase attendance rates.³⁵ Another example is to map the TDF domain 'knowledge' to interventions that involve providing education and information to participants. A previous intervention to increase older women's attendance at mammography screening involved giving educational materials (video and accompanying print materials) to participants to increase their knowledge of the screening process and why it is important to attend.³⁶

CONCLUSION

Multifactorial falls risk assessments reduce the rate of falls in older people³² and are recommended by international guidelines.³ To our knowledge, this is the first study to explore older peoples' reasons for attending multifactorial falls risk assessments. Our results suggest that older people attend fall prevention services if they are the 'type of person' that attends all appointments that they are offered, have existing (positive) links to health services, and are well supported in their homes and communities. To improve the uptake of multifactorial falls risk assessments, there is a need to develop interventions which identify and engage with older adults who are less well supported. Our findings provide theoretically based factors that influence attendance which can be used to inform the development of interventions to improve attendance at falls prevention programmes.

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Contributors SMM conceived the study. ER and SMM designed the study, obtained ethical approval, and conducted data collection and analysis. PB, FC, OH, EM, KAOC and SpT facilitated data collection. ER and AS wrote the initial manuscript with input and direction from SMM. SMM, SuT and PMK contributed to each draft of the manuscript. All authors reviewed and contributed to the final manuscript.

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