COMMENTARY

Why should clinical practitioners ask about their patients' concerns about falling?

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Abstract

Concerns (or 'fears') about falling (CaF) are common in older adults. As part of the 'World Falls Guidelines Working Group on Concerns about Falling', we recommended that clinicians working in falls prevention services should regularly assess CaF. Here, we expand upon these recommendations and argue that CaF can be both 'adaptive' and 'maladaptive' with respect to falls risk. On the one hand, high CaF can lead to overly cautious or hypervigilant behaviours that increase the risk of falling, and may also cause undue activity restriction ('maladaptive CaF'). But concerns can also encourage individuals to make appropriate modifications to their behaviour to maximise safety ('adaptive CaF'). We discuss this paradox and argue that high CaF—irrespective of whether 'adaptive' or 'maladaptive'—should be considered an indication that 'something is not right', and that is represents an opportunity for clinical engagement. We also highlight how CaF can be maladaptive in terms of inappropriately high confidence about one's balance. We present different routes for clinical intervention based on the types of concerns disclosed.

Keywords: fear of falling, balance confidence, falls prevention, older people

Key Points

- Concerns about falling (CaF) are common in older adults.
- They can be both adaptive and maladaptive, with respect to falls risk.
- Irrespective, high concerns indicate that 'something is not right'.
- They therefore represent an opportunity for clinical engagement and target for intervention.

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T. J. Ellmers et al.

Introduction

Concerns (or 'fears') about falling (CaF) are common in older adults, with prevalence ranging from 21 to 85% [1].¹ Reported risk factors for CaF include having experienced a fall, generalised anxiety, balance impairments and poor general health [1]. CaF have been reported to be associated with various negative outcomes, including depression, decreased quality-of-life and social isolation [1]. CaF-related avoidance of activities [1] can lead to physical deconditioning, resulting in reduced strength and impaired balance [2], which may serve to increase the risk of future falls. Based on this, we as the 'World Falls Guidelines Concerns about Falls and Falling Working Group' recommended in the recent World Falls Guidelines that clinicians working in falls prevention services should regularly assess CaF [3].

Box I. Details of our recommendations regarding terminology for the psychological effects of falls.

From Fears to Concerns: A Note on Terminology

There are a variety of terms that refer to the psychological effects of falls, including 'concerns about falling (CaF)', 'fear of falling', 'fall-related anxiety', 'photophobia', 'balance confidence', 'fear-related activity avoidance' and 'falls-efficacy'. These terms refer to related—yet distinct—psychological constructs, which has led to considerable complexity and confusion within the literature. The term 'fear of falling' is most commonly used in clinical practice. However, in the recent World Falls Guidelines, we recommended that clinicians instead use the term 'CaF' [3], primarily because the older adult panel whom we consulted preferred the term 'concern' over 'fear'. Fear reflects an emotional response to a perceived threat (resulting in distinct physiological and cognitive changes), which may or may not be accurate for describing what is experienced when an older person discloses being "fearful of falling". Compared with 'fear', the term 'concerns' is "less intense and emotional (and therefore maybe more socially acceptable for older adults to disclose)" (p. 617 [16]). Finally, 'concerns' are also congruent with the wording of the Falls Efficacy Scale-International [16] the most frequently used tool to assess the psychological effects of falls.

Causality dilemma of falls and concerns

Early conceptualisations described strong associations between experiencing a fall and the development of CaF [4]. However, recent longitudinal research suggests that only

1 See Box 1: 'Fear of Falling' is now recommended to be known as 'Concerns about Falling'.

small, short-term increases in CaF occur following a fall, with no long-term relationship observed over 12 months [5]. This implies that although a fall may lead to an increase in CaF shortly after the fall (i.e. in the month following), these concerns will not necessarily remain elevated when the memory and emotional impact of the fall has faded [6]. Recent qualitative work by Ellmers *et al.* [7] suggested that CaF develop in response to one's perception of their 'ageing body' and recognition of their vulnerability to suffering severe injuries, rather than the fall itself. Accordingly, individuals with persistent high CaF tend to be primarily concerned about the anticipated long-term consequences of an injurious fall (e.g. loss of independence) [7].

The reverse association is also true, where CaF can directly impact fall risk. First, CaF can lead to individuals adopting a more cautious gait strategy. This is characterised by reduced velocity, shorter steps, wider base of support and increased double-support time [8]. Such cautious behaviour may paradoxically reduce balance control in more complex and challenging situations that require rapid, highly coordinated and powerful behavioural responses [9]. Second, CaF can also cause greater visual and cognitive attention (i.e. hypervigilance) towards threatening stimuli in the environment, such as an uneven paving stone [10]. This can lead to individuals walking with their gaze fixed on the floor, causing ineffective processing of visual information for walking stability and safety [10]. Such overly cautious or hypervigilant behaviours have recently been labelled 'maladaptive CaF'. CaF may also indirectly increase fall risk, by encouraging undue activity restriction resulting in physical deconditioning [11].

Complex entanglement of adaptive and maladaptive behaviours

Adaptive behaviours associated with CaF are those that reflect a realistic appraisal of one's fall risk and are, therefore, often labelled as 'protective'—especially for those with *poor* functional mobility. Such adaptive behaviours could potentially reduce risk-taking and encourage compensatory adaptations that enhance safety [7], such as calling for help to change a lightbulb or buying more sturdy footwear for walking outdoors.

In contrast, maladaptive behaviours associated with CaF are often referred to as reflecting a 'mismatch' between the concerns experienced and one's risk of falling. Although typically conceptualised as a mismatch with respect to overestimating one's risk of falling (i.e. overly cautious behaviour and undue activity restriction), these behaviours would also include persons at a high risk of falling who express little or no concern [12]. This can increase the likelihood of future falls, as the individual may continue to engage in risky behaviours (or be less motivated to engage in protective, safety-maximising adaptations). Identifying an indifferent reaction to a high-risk state represents a potential 'teachable' moment. Recent research highlights that a mismatch of subjective and objective risks (including such 'under-estimation'

of one's risk for falling) is particularly prevalent in older individuals with cognitive impairment [13]. This can lead to difficult issues such as determining decision-making capacity, balancing respect for autonomy and safety and modifying the primary objective (i.e. injury prevention) and types (e.g. hip protectors, environmental safety and staff education) of interventions offered.

The relationship is also complex when considering overly cautious or hypervigilant behaviours, which can occur (and increase fall risk) irrespective of whether concerns reflect a realistic and appropriate appraisal of one's risk of falling. Delbaere *et al.* [12] found that high CaF was associated with future falls in both older adults with high and low (physiological) risk for falls. Recently, Litwin *et al.* also reported an association between CaF and increased fall risk in older adults with *good* functional mobility [14].

The presence of high CaF—whether 'adaptive' or 'maladaptive'—should be considered a 'red flag' or an indication that 'something is not right'. High CaF either indicate that the individual recognises their genuine balance limitations and risk for falling ('adaptive' concerns), or that their concerns are 'maladaptive' and could directly increase fall risk through either undue activity restriction or unhelpful (or avoidance of potentially helpful) behavioural adaptations. Likewise, the presence of a high physiological risk of falling should be a red flag regardless of the level of CaF. The level of fall prevention intervention offered should not be reduced just because someone says that they are coping well and have low CaF, although this will need to be taken into account when developing the treatment plan.

Assessing and managing concerns: clinical recommendations

Irrespective of whether concerns are adaptive or maladaptive, high CaF warrant clinical management. Within the World Falls Guidelines [3], we advised clinicians to ask *all* patients about their concerns regularly—not just those who have recently fallen or with balance/mobility limitations. Older adults can ruminate on the potential consequences of falls and develop CaF over time without an obvious direct cause. CaF can also act as a barrier for older adults engaging in physical therapy or rehabilitation [15], especially when CaF leads to activity restriction [11].

Although several validated tools exist for this purpose, in the World Falls Guidelines, we recommended using the Falls Efficacy Scale-International (FES-I [16]), or the 7-item Short FES-I [17], to assess CaF [3]. These reliable tools come with validated cut-off points to indicate high CaF ($\geq 23/64$ for the 16-item FES-I and $\geq 11/28$ for the short 7-item FES-I [6]).

Our recommendations further advised that both physical (e.g. exercise interventions and occupational therapy) and psychological interventions (e.g. cognitive behavioural therapy) can be effective in reducing CaF (see Kruisbrink et al. [18] for review). However, the specific strategy to best

manage CaF will differ based on whether these concerns reflect an adaptive or maladaptive process. If concerns reflect a realistic and appropriate appraisal of one's risk of falling, then structured exercise and balance training programmes, in combination with occupational therapy for those at higher fall risk, are best placed to reduce fall risk and CaF. In contrast, if concerns reflect maladaptive processes, then psychological interventions (e.g. cognitive behavioural therapy) should be recommended in combination with exercise to directly address the maladaptive beliefs and behaviours. This is a particularly important point, as existing RCTs target CaF in general, treating *all* concerns with a standardised intervention—irrespective of whether they reflect an adaptive or maladaptive process.

Key priorities for future research

Future research on CaF should focus on further developing our understanding about the aetiology of CaF (both maladaptive and adaptive). Knowing how to best identify maladaptive or unhelpful concerns is a crucial first step in allowing us to tailor interventions across the wide spectrum of CaF. This advanced understanding will also allow us to explore how we can capture people before any concerns experienced become maladaptive, as well as how to best identify and manage CaF if and when they do become maladaptive.

Previous research has mapped concerns onto the level of physiological fall risk or mobility limitations [12, 14], but this does not address the underlying complexities of overly cautious or hypervigilant behaviours that can occur with CaF. For instance, 'maladaptive CaF' might be better defined by the consequence of concerns (e.g. undue activity restriction, reduced quality-of-life, or overly cautious/hypervigilant behaviour), or the underlying process itself—namely, an overestimation of one's risk of falling. Alternatively, an individual may realistically appraise their risk of falling, yet be overly concerned about a specific scenario that has a relatively low likelihood of occurring and which could be considered a 'maladaptive CaF'.

Evidence from systematic reviews suggests that intervention programmes such as exercise, occupational therapy and CBT are effective for CaF [18], but the effects do not last long-term. Recent research has identified that an individual's perception of control can influence whether concerns may reflect a helpful or maladaptive process [7], which could provide an additional pathway to have more long-term effects.

Concluding remarks

Although the relationship between CaF and risk for future falls is less conclusive than once assumed, high CaF nonetheless reflect a 'cause for concern'. It can lead to activity restriction, reduced quality of life, as well as increased risk for falls for certain individuals. We, therefore, recommend

T. J. Ellmers et al.

that clinicians working with older people routinely ask their patients about CaF and refer them to relevant (physical and/or psychological interventions) when concerns are disclosed.

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