

Getting Down to Get Up – How Older People Can Improve their Ability to Get Up from a Fall

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Summary

- Falls are common, and many older people require assistance to get up from the floor or ground after a fall.
- Inability to get up after a fall is associated with adverse health outcomes, including hospitalisation and admission to residential aged care.
- People who cannot get up often have health conditions (e.g. arthritis, depression, cognitive impairment) and physical impairments (e.g. weakness, poor balance, and gait disturbances).
- Training using the backwards chaining approach (staged practice of lowering to the floor) may improve the ability to get up without inducing anxiety.
- Resistance and balance training may build the physical capacity needed to rise from the floor after a fall.

Introduction – The Critical Importance of Getting Up from the Floor After a Fall

Each year, approximately one in three people aged 65 years and older experience a fall (1), defined as “an unexpected event in which people come to rest on the ground, floor, or lower level” (2). The ability to get up from the floor following a fall is a fundamental motor skill, typically acquired in early childhood. However, this skill often declines with age due to reduced physical capacity and lack of practice, leading to an inability to get up independently. This can result in “long lies” which are associated with several adverse health outcomes, including further falls, hospitalisation, impaired recovery of physical function, admission to residential aged care, and increased mortality (3–6). In a longitudinal study of people aged 90 and over, 80% of those who fell were unable to get up, with 30% remaining on the floor for over an hour (4).

Beyond personal health risks, long lies place a burden on healthcare systems, particularly emergency services. Older people may call an ambulance solely for assistance to get up from the floor, even when no injury has occurred (7). In one Australian study of more than 1,500 Silver Chain community care clients who experienced a fall over the course of a year, 30% called an ambulance for help to get up, despite not requiring medical treatment (8).

This mini-review outlines the key risk factors associated with an inability to get up from the floor and summarises interventions aimed at improving this ability in older people.

Risk factors for Reduced Ability to Get Up from the Floor

Similar to falls, the ability to rise from the floor is influenced by physical capacity, self-efficacy and environmental factors (9). In a longitudinal study of over 1,000 older people followed for 21 months, 220 of the 596 reported non-injurious falls involved falls where the individual was unable to get up independently (5). Risk factors included advanced age (≥ 80 years), depression, and deficits in balance and gait as measured by the modified Performance-Oriented Assessment of Mobility. Another study examining floor-to-stand performance found that advanced age and poor balance (e.g., poorer single-leg stand ability) were significantly associated with slow speed and inability to get up from the floor (10). Additional physical attributes such as leg weakness (e.g., slower sit-to-stand times), mobility limitations (e.g., slower timed up and go test), and difficulty climbing stairs were also identified as important contributors (10–13). Similar findings have been reported for clinical populations including people with Parkinson's Disease (14). A systematic review further highlighted associations with chronic health conditions such as lung disease, stroke, arthritis, obesity, cognitive impairment, and depression (11). Identifying these characteristics can support screening and targeted interventions to enhance recovery following a fall.

How do People Get Up from the Floor?

People use several strategies to initiate getting up from the floor, such as the sit-up, side-sit and roll-over techniques (10,15). The sit-up technique is the fastest method and involves immediately transitioning from a lying to seated position, requiring good mobility (flexion) around the hip and knee joints (15). In contrast, the side-sit and roll-over techniques involve transitioning to a hands-and-knees position and generally take longer to complete. The roll-over technique, in particular, is often preferred by older people, as it allows for greater reliance on upper limb support, potentially compensating for lower limb weakness (15,16). Links to step-by-step instructions and images demonstrating how to get up from the floor after a fall are provided in the Resources section below.

Training to Get Up from the Floor

Teaching older people how to get up from the floor is often overlooked in clinical rehabilitation programs (9,17). Two commonly taught strategies are the “conventional” method (18) and a backwards chaining approach (18). While both methods follow a

similar sequence of movements, they differ in their starting points. The conventional method begins from lying on the ground, progressing to side-lying, hands-and-knees and then standing using nearby furniture or supports (19). Backwards chaining begins with the final stage of fall recovery (e.g., standing or sitting on a chair) and progresses stepwise to kneeling, sitting on the floor, and finally lying down (20). This staged approach is thought to reduce anxiety for both participants and trainers (19–21). The steps of backwards chaining are as follows:

1. Face the chair with feet hip width apart for stability
2. Take a step (lunge) forward with your strongest leg to hold the sides of your chair or arms
3. Bend you back leg to have the knee down on the floor
4. Bring your other knee down to the floor
5. Bring one hand off the chair and onto the floor
6. Bring your other arm down to the floor so that you are on your hands and knees four-point kneeling position
7. Turn your body and gently lower your hips onto the floor
8. Gradually lower yourself down until you're lying on the floor

Several randomised controlled trials (19,22) have compared the effectiveness of backwards chaining with conventional or other training modalities. In a 12-week trial, backward-chaining instruction combined with seated and standing exercises improved the ability get up from the floor more than the conventional method (19). In a 7-week trial in a long-term care facility, backwards-chaining outperformed chair-based exercises for reducing concerns about falling and improving independent mobility in their life-space, despite no changes in strength or functional mobility (22). Other interventions targeting task-specific requirements have yielded mixed results. A systematic review and meta-analysis of randomised controlled trials using time to rise from the floor as an outcome reported an overall non-significant effect (11). For example, four studies combining resistance and balance training reported a non-significant reduction of 0.43 seconds in floor rise time. Similarly, three studies focusing solely on resistance training showed a non-significant 0.81 second improvement. Despite these modest quantitative effects, participants commonly report subjective benefits, such as reduced difficulty in performing floor-rise tasks, pain, weakness and concerns about falling when rising from the floor (19,21,23).

Given these findings, clinicians should tailor strategies to the person. Those with marked anxiety may benefit from the backward chaining approach, which breaks down the task into manageable steps and builds confidence. Conversely, those with lower

limb weakness or impaired balance may require targeted strengthening and balance training before or alongside floor-rising practice. Personalising strategies can enhance both safety and effectiveness.

Conclusions

Many older people are unable to get up from the floor after a fall, which can lead to worse health outcomes and increased healthcare use. Older people may use a variety of techniques to rise from the floor, with their choice often reflecting factors such as anxiety or physical limitations. Interventions that combine strength and balance training, alongside the practice of the backward chaining method, may be especially beneficial in preventing long lies and their associated adverse outcomes.

Resources

Comprehensive video covering getting up from the floor, what to do if you can't get up and practice of backward chaining

- <https://www.youtube.com/watch?v=mbUp9ODetbM>

Instructions and videos demonstrating how to get up from the floor after a fall

- <https://www.nhsinform.scot/healthy-living/preventing-falls/dealing-with-a-fall/what-to-do-if-you-fall/#>

Instructions and images showing how you could get up from the floor after a fall

- <https://www.activeandhealthy.nsw.gov.au/preventing-falls/if-you-have-a-fall>
- <https://www.injurymatters.org.au/programs/stay-on-your-feet/program-resources/>

Guidance for what to do if you have a fall, how to get up and what to do after getting up

- <https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/resources/standing+up+to+falls+sa+falls+and+fall+injury+prevention+-+fact+sheet+7>

Video describing how backward chaining can be practiced

- <https://www.youtube.com/watch?v=Ggkynz7xopI>

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