MENTAL HEALTH & THE RISK OF FALLING

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SEPTEMBER 17TH, 2016
1. Introduction
2. Risk Factors
   a. Biological
   b. Socioeconomic
3. Consequences
4. Conclusion
5. References
Introduction

- The risk of falling is exacerbated by mental health conditions
- Falls are the most commonly reported patient-safety incident in mental health settings for older people [1]
- Risk of falling is exacerbated by mental health problems, such as impaired mental status due to dementia [2], depression [3] mania and anxiety [4].
- Treatments of mental health conditions, for example, with psychotropic medication [6,7] and electroconvulsive therapy [5] also increase fall risk.
- Falls affect rehabilitation, physical and mental function, can increase length of stay in hospital settings and the likelihood of discharge to long-term care settings [8].
- Falls in older people with mental health conditions associated with greater health care costs compared to the general population of older people [9].
RISK FACTORS

1. Behavioral
2. Biological
3. Socioeconomic
4. Environmental

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Figure 3. Risk factor model for falls in older age

**Behavioural risk factors**
- Multiple medication use
- Excess alcohol intake
- Lack of exercise
- Inappropriate footwear

**Environmental risk factors**
- Poor building design
- Slippery floors and stairs
- Looser rugs
- Insufficient lighting
- Cracked or uneven sidewalks

**Socioeconomic risk factors**
- Low income and education levels
- Inadequate housing
- Lack of social interactions
- Limited access to health and social services
- Lack of community resources

**Biological risk factors**
- Age, gender and race
- Chronic illnesses (e.g. Parkinson, Arthritis, Osteoporosis)
- Physical, cognitive and affective capacities decline

Falls and fall-related injuries
Biological Risk Factors

1. Depression
2. Cognitive Impairment
3. Alcohol Misuse
Depression

- Depression is associated with increased risk of falls.
- Older people with a symptom of depression have an approximately 2.2-fold increased risk of falls [11].
- However, depression could be the result of a fall rather than a causal or risk factor.
- For example, depression could result from fear of falling or from self-imposed functional limitations.
Cognitive Impairment

- Cognitive impairment and confusion, even at relatively modest levels, can increase the risk of falling.

- Five or more errors on a short mental status questionnaire [12], a score <26 [13] or a score <24 [14] on the Mini-Mental State Examination is associated with increased risk [14].

- One study in the Netherlands showed short-term memory to be an independent risk factor for falls in those over age 75 years [15].

- In the USA, one study found an increased risk of 1.8 for persons with cognitive impairment; other studies have reported increased risks ranging from 2.0 to 4.7 [16].
Research has demonstrated a correlation between alcohol consumption and falls.

Alcohol consumption is related to postural hypotension [17]

Heavy drinking may result in recurrent falls [18]

When compared with abstainers, persons with a monthly ethanol intake of more than 1000g have a three-fold increased risk of injurious falls that can lead to hospitalization or death [19].

14 or more alcoholic drinks a week elevates the risk of falling [20].

Long-term alcohol use, combined with age-related decline in the portion of the brain that controls posture & balance, can increase age-related postural instability & increase the likelihood of falling.

Alcohol use can accelerate the loss of postural control.

Alcohol consumption increases the risk of hip fracture, may be due to the increased risk of falling while intoxicated, combined with decrease in bone density associated with alcoholism.
Social connection and inclusion are vital to health in older age.

Social interaction is inversely related to the risk of falls.

Isolation and loneliness are commonly experienced by older people, particularly among those who lose their spouse or live alone.

They are much more likely than other groups to experience disability and the physical, cognitive, and sensory limitations that increase the risk of falls.

Isolation and depression triggered by lack of social participation increase fear of falling, and vice versa.

Fear of falling can increase the risk of falls through a reduction in social participation and loss of personal contact, which in turn increases isolation and depression.

Providing social support and opportunities for older people to participate in social activities to help maintain active interaction with others may decrease their risk of falls.
Consequences of Falls

- Falls can result in fractures (64%), fear of falling (44%) and hospital admissions (32%), and reduced quality of life.

- Falls can also result in a “post fall syndrome” that includes dependence (32%), loss of autonomy (14%), confusion (22%), and immobilization (4%), depression (2%), and restrictions in daily activities [21].

- Falls are often considered a contributing reason for admission to a nursing home [22, 23].
Conclusion

- Mental health important to prevent falls
- Need to keep mental status in mind when accessing older adults’ fall risk
- Older adults with mental health problems should be offered a mix of strength and balance training, home hazard assessment, vision assessment and medication review
- Staff working with older people should be provided with knowledge and skills regarding causes and prevention of falls.

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10. WHO global report on falls prevention in older age


Thank you!

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