An Overview of Fall Risks and Preventions including Environmental Strategies to Assess and mitigate risks associated with falls

Caring for Patients at Risk with Behavioral Health Concerns

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Learning Objectives

- Discuss the incidence and injuries associated with falls in persons living with behavioral health diagnoses
- Explain effective strategies when assessing environmental conditions that potentially increase an individuals' risk for falls
- Identify environmental modifications that can be adapted in an inpatient psychiatric facility to decrease risks associated with falls

Characteristics of Falls in Inpatient Psychiatric Settings

- The researchers set out to explore factors associated with falls in inpatient units in a large metropolitan mental health service
- The fall rate was 1.25 per 1000 occupied bed days
- The highest incidence of falls occurred in geriatric psychiatric units
- Physiological factors: Balance or mobility difficulties most common (almost 50%)

Source: Scanlan, Wheatley, & McIntosh, 2012

Characteristics of Falls in Inpatient Psychiatric Settings (continued)

- Location: most falls occurred in bedrooms, outdoor areas, corridors & bathrooms.
- Most common activity at the time of the fall: Walking (41%)
- Additional activity associated with high rate of falls: transfers (17%)
- Outcome of falls: Evenly spread between no outcome and minor to moderate injury

Source: Scanlan, Wheatley, & McIntosh, 2012

Nurses' Perception of factors associated with falls & fall prevention strategies

Top Ten In-Patient Associated Risks

- Impaired balance (#1 documented risk factor)
- Altered or limited mobility/gait problems
- Impaired muscle strength
- Inability to follow safety instructions
- Vertigo or complaints of dizziness

Source: Innab, 2022

Nurses' Perception of factors associated with falls & fall prevention strategies

Top Ten In-Patient Associated Risks (Continued)

- Cognitive impairment: disorientation
- Cognitive impairment: confusion
- Slippery or wet floor surfaces
- Age 85 or older
- Visual impairment

Source: Innab, 2022

Knowledge Gained from Recent Studies

- Patients in psychiatric settings tend to be out of their beds (e.g., in lounge rooms, dining areas, and in outdoor areas) more frequently than patients in other settings. This is the likely explanation as to why falls occur more frequently in these areas as opposed to almost exclusively in the bedroom.
- Special attention should be paid to patients who have balance & mobility challenges, have comorbid medical conditions, or experience significant medication side effects such as sedation, dizziness, agitation, or restlessness.
- Almost 12% of the falls occurred when patients were attempting to stand. This suggests that there may be an opportunity to reduce falls through enhanced patient education regarding safe transfers and by ensuring that the furniture on the unit supports safer transfers.

Effective Strategies to Prevent Falls

- Follow your facility Fall Prevention Policies & Procedures
- Collaborate with all care providers
- Standardize patient education (include visual tools)
- Conduct a mental status assessment daily
- Conduct safety/post-fall debriefing - Formalize post-fall debriefing huddles
- Keep floors & surfaces dry and free of clutter
- Toileting regimen (offer assistance)
- Complete a fall risk assessment on admission and PRN
- Apply fall risk identification and wrist band according to facility protocol
- Assess medications that have the potential of increasing fall risk

Potential Components of Fall Prevention Policy and Procedures

- Definitions
- Universal fall precautions to include Environmental Rounds
- Standardized Fall Risk Assessment
- Care Planning and Interventions that address the identified Fall Risk factors
  - Patient
  - Environment
- Post-Fall Practices – to include a clinical review and root cause analysis
- Quality Improvement Initiatives
- Create a Fall Prevention Toolkit

Top Ten Considerations to Assess when Caring for Persons at Risk for Falls in Community Settings

- Complete a fall risk assessment upon admission and re-assess as needed and prior to discharge
- The older the client the higher the fall risks
- A history of a fall within six-months prior to admission increases the likelihood of a fall
- Incontinence and/or urgency increase the likelihood of falls, but urgency and incontinence double that risk
- Medications (laxatives, sedatives and psychotropic increase the risk of a fall)
  - Sedated procedure within the past 24 hours is a high-risk factor for falls
- Any equipment that tethers the patient
- Mobility challenges (need for assistance, impulsivity, visual or auditory impairments)
- Alteration in cognition

Examples of Assessment Tools to identify patients who may be a Fall Risk

- TUG test: The Timed Up and Go test is a simple assessment that takes less than one minute to assess and determine lower extremity function, balance, mobility and fall risk
- The Berg Balance Scale is a test used to assess functional balance
- The Tinetti Balance Assessment Tool is a screening tool to identify a patient's fall risk

Examples of Assessment Tools to identify patients who may be a Fall Risk

- The Johns Hopkins Fall Risk Assessment Tool is a risk stratification tool is valid and reliable and highly effective when combined with a comprehensive protocol, and fall-prevention products and technologies
- The Hendrich II Fall Risk Assessment is quick to administer and provides a determination of risk for falling based on gender, mental and emotional status, symptoms of dizziness, and known categories of medications increasing risk

Considerations for Nurses Caring for persons with Behavioral Health diagnoses

- Assess each patient's fall risk daily
- Rule of physiological concerns if you notice changes in gait or balance
- Share information regarding risks for falls especially when the person experience medication changes
- Trust your tactic knowledge!

Falls & The Older Adult

- Falls and fall related injuries are common for older adults with approximately 30% of adults 60 years of age or older falling each year (Muir, Berg, Chesworth, Speechley, 2010).
- According to Burns et. al., (2016), falls are the leading cause of morbidity & mortality among older adults; each year in the U.S.as many as one in three adults over the age of 65 sustain a fall, and nearly 25,000 deaths can be directly attributed to falls in this age group.
- Fear of falling (FOF) (Tinetti et. al., 1990) continues to be associated with an increased risk of experiencing falls, (Friedman et. al., 2002, and prior work has supported that the presence of FOF may in fact help identify individuals at high risk for falling (Lavedan et, al., 2018).

The National Institute for Occupational Safety & Health's (NIOSH) Top 10 Hazards which May Lead to Falls in Community Settings

- Contaminants or spills on the floor
- Indoor walking surface irregularities
- Weather conditions: Ice & snow
- Inadequate lighting
- Stairs & handrails
- Stepstools & ladders
- Tripping hazards: Clutter, Loose Cords, etc.
- Improper Use of Floor Mats & Runners
- Poor drainage: Pipes & Drains

Factors that Contribute to Falls

Environmental

- Wet floor
- Indoor walking surface irregularities
- Other slip (including continence related)
- Equipment
- Trip/Stumble
- Other/Unclear

Physical

- Patient behavior
- Footwear/socks
- Rushing (excluding toilet urgency)
- Not using mobility aide
- Other/Unclear

Factors that Contribute to Falls (Continued)

Physiological

- Balance/Mobility issues
- Dizziness
- Effects of medication
- Medical condition
- Confusion/Mental state
- Substance intoxication/ withdrawal
- Toilet urgency
- Other/Unclear
- Unknown
- Multiple factors

Fall Prevention Interventions

- Focus interventions on a combination of environmental modifications to reduce falls and fall risks should be tailored to individuals' needs
- Have adaptive supplies readily available
- Incorporate all interventions into the patient's care plan
- Communicate the plan of care with all team members/ disciplines
- Assess potential medication side effects
- Assessable Fall Prevention Toolkit

- Appropriate slip-resistant flooring, dry surfaces, no parquet or carpets
- Adequate lighting (e.g., night light or supplemental lighting - easy to switch on)
- Appropriate furniture (e.g., low bed/chair height, bed side rails, chairs with armrests, and handrails in the bathrooms and hallways)
- Adequate layouts (e.g., sufficient room to move and use walking aids, all areas uncluttered and cleared of tripping hazards; RNAO, 2017).

Slip-Resistant Flooring

Slip-resistant flooring surfaces are floors that include a polymer resinous floor coating incorporating various levels of grit to create a slip-inhibiting surface.

Signage

Post signs on patient room doors as a reminder that the patient is at an increased risk of falling

Grab Bars

Ligature free in a high-risk area

Raised Toilet Seats

Raised toilet seats can help to prevent falls

Handles may be prohibited depending on the setting

Gripper (Non-Skid) Slipper Socks

For patients who may not pay attention, have the cognitive ability or just too quickly put on slippers

Motion Activated Night Lights

In an environment where these would not present a safety risk

Bed Linens

Developed to be ligature free linens

Less and heavier material helps to prevent patients from getting tangled in the linens

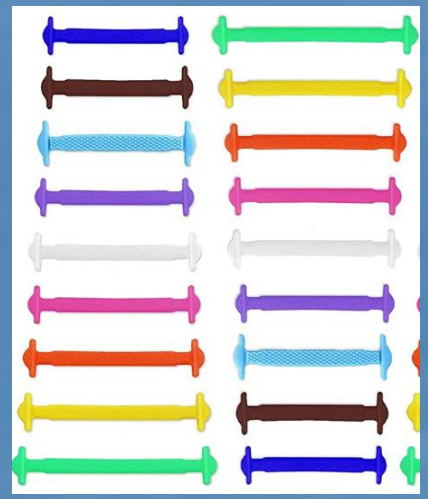
Serves a dual purpose, help with Fall Prevention, but also there is less ability to use linens to inflict self harm

Footwear and Shoe Laces

Well fitting, supportive shoes

Rubber soles, when possible

Ligature-free laces



Create a Path in Cluttered Rooms

Cluttered rooms increase the risk of falls, delineating an area that is to stay clear between the bed and the bathroom or the door can help prevent unnecessary falls

Outline a pathway using 3-4 inch pieces of ligature free tape

Barriers & opportunities to patients moving forward with modifications

- Health professionals must address individuals' lack of a sense of urgency or motivation to change behaviors in order to raise their awareness of being at risk of falling
- Every modification must be discussed and approved by the facility, or in the home, by the individuals and their caregivers to produce targeted and lasting results
- A lack of financial resources could be a major barrier for both the individual and society

(RNAO, 2017)

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