The five W's of falls: A retrospective review of inpatient fall incidences in the acute mental health setting

Nicolette SAGARAM[1], Marcus ANG[2], Irene NGUNE[2], Karol EDGE[1], Karen GULLICK[1], Suzanne CRAIGIE[1], Nicola BAILLIE[1], Caroline DINNIE[1], Rosemary SAUNDERS[2]

1. Hollywood Private Hospital, 2. Edith Cowan University

Background

Patients in the mental health setting are at risk of falling due to symptoms related to the mental illness and its treatment[1]. Previous studies found that the risk factors of falls among psychiatric patients are different from general ward patients[2], however the results were inconsistent across studies.

Nurses and allied health staff are required to provide accurate screening, assessment, and clinical interventions for patients at risk of falling. This study aimed to identify the unique mental health-specific fall risk factors to inform fall prevention strategies in the mental health setting.

Method

Design: A retrospective review of the fall incidents from the hospital incident management system and patients' medical records was undertaken.

- **All inpatients** aged 18 and above, who experienced a fall between July 2019 and June 2021, within three mental health inpatient wards of an acute private metropolitan hospital in Perth, were included.

Data collection: 84 fall incident reports were obtained from hospital risk management system and patients' medical record.

Data analysis: Descriptive statistics were used to describe the demographic data, characteristics of fall, patient, and environmental factors.

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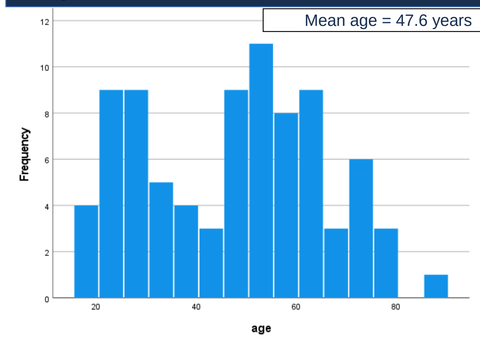
Contact Information:
Nicolette Sagaram, MNE, CN
Email: sagaramn@ramsayhealth.com.au

1) WHO

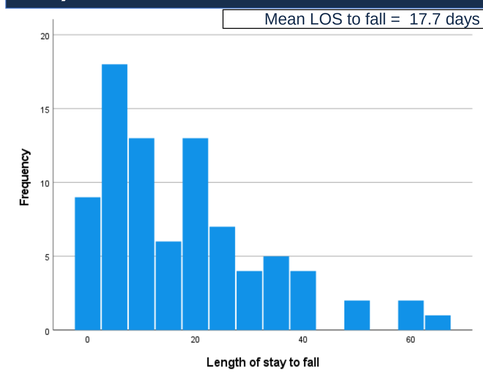


Demographics	N (%)
Less than 65	67 (79.8)
65 and over	17 (20.2)
Male	19 (22.6)
Female	65 (77.4)
Affective and mood disorders	50 (59.5)
Anxiety disorder	17 (20.2)
Eating disorder	4 (4.8)
Personality disorder	9 (10.7)
Substance use	10 (11.9)
Trauma induce	18 (21.4)

2) WHAT

Type of fall	N (%)	Fall injury and care	N (%)
From standing	54 (64.3)	Nil injury	62 (73.8)
Bed to floor	12 (14.3)	Bruising	16 (19.0)
Chair to floor	3 (3.6)	Laceration	1 (1.2)
Trip	4 (4.8)	Skin tear	5 (6.0)
Slip	2 (2.4)	No treatment	57 (67.9)
From sitting	5 (6.0)	Minor treatment	22 (26.2)
Other	4 (4.8)	Moderate treatment	5 (6.0)

3) WHEN



Day of fall	N (%)
Monday	17 (20.2)
Tuesday	9 (10.7)
Wednesday	11 (13.1)
Thursday	13 (15.5)
Friday	8 (9.5)
Saturday	15 (17.9)
Sunday	11 (13.1)
Time of fall	**N (%)**
0700-1359	23 (27.4)
1400-2159	28 (33.3)
2200-0659	33 (39.3)

4) WHERE

Location of fall	N (%)	Activity prior to fall	N (%)
Bed area	34 (40.5)	Walking	25 (29.8)
Corridor	14 (16.7)	Sitting	5 (6.0)
Lounge	2 (2.4)	Showering	2 (2.4)
Bathroom	21 (25.0)	Toileting	16 (19.0)
Other	4 (4.8)	Sleeping	13 (15.5)
Not specified	9 (10.7)	Standing	19 (22.6)
		Other	4 (4.8)

5) WHY

Factors	N (%)
Affected by alcohol/ illicit drugs	2 (2.4)
Affected by medication	13 (15.5)
Comorbidities	6 (7.1)
Deliberate risk-taking behaviour	1 (1.2)
Frail	2 (2.4)
Patient condition	63 (75.0)
Pre-existing conditions	21 (25.0)
Unsteady gait/ use of mobility aid	5 (6.0)
Environment factors	20 (23.8)
Medications administered 24 h prior to the fall	
Anti-depressants	67 (79.8)
Anti-psychotics	49 (58.3)
Sedatives	54 (64.3)
Anticonvulsants	11 (13.1)
Diuretics	2 (2.4)
Hypoglycemic	16 (19.0)
Anti-hypertensives	38 (45.2)
PRN medications administered 24h prior fall	0.9 (1.0)

Conclusion

Results from the study identified that both younger and older mental health inpatients are at risk of falling. Most falls occurred during standing and around the patients' bed area suggest that targeting patient medication education and interventions to address potential postural drops and dizziness when getting up from bed, may be effective in reducing falls among mental health inpatients. Future research to develop age specific fall prevention strategies is encouraged.

References

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