PB-PG-1208-18211 - NIHR Research for Patient Benefit Programme - Final report

Project title: Risks, roles and responsibilities: Evaluating falls in inpatient mental healthcare settings for older people

Authors: Dr Angela Dickinson - University of Hertfordshire
Mrs Griffiths Caroline - Oxford Health NHS Foundation Trust
Mrs Humphrey Deborah - Oxford Health NHS Foundation Trust
Mr Venkataramanan Narayanan - Oxford Health NHS Foundation Trust
Professor Christina Victor - Brunel University London

Plain language summary

Background

Despite the large number of falls in mental health settings, we know little about what contributes to falls. The main aim of the study is to explore how fall risk, prevention and management is understood and experienced in everyday practice by patients, family carers and staff, in inpatient mental health settings providing care for older people. We looked at fall incident reports to determine where and when falls happened. We used observation, interview and focus group methods to help us explore experiences of falls from patients, family carer, staff and managers perspectives in 5 wards in one NHS Trust.

Findings

Of patients experiencing a fall, almost half had a mental health problem other than dementia. We found most falls were in bedrooms (42%), and only 27% were directly observed by staff. Fall patterns were influenced by ward routines. Both staff and patients thought cramped/cluttered spaces had an impact on falls. We tracked 24 patients following a fall, all had a mix of mental and physical health problems which staff found challenging. Patients took between 4 and 12 medicines, including at least one associated with increased risk of falls. Staff considered falls to be a physical health problem and prevention the domain of physiotherapy/medical care. The main way staff prevented falls was through observing patients with little evidence of fall prevention education for patients. Some patients felt they lost physical function during their hospital stay. Staff found balancing patient independence and risk of falling challenging. Much thinking about risk management in relation to falls is undocumented. For senior managers, falls were one of a number of concerns relating to patient safety.

Conclusions

Fall reporting is generally poor and falls underreported.

Understanding the patterns of falls could help in planning care and staffing levels in order to reduce falls, but is specific to each setting. Nursing staff report that their specialist education is inadequate to support them to provide optimal care for this changing patient group. Education needs to keep pace with changing patient needs. There is a feeling among staff of a poor fit between what they do every day and fall policy/assessment tools. Staff require support to incorporate evidence-based practice and policy into practice. Staff have to balance the risk of falls due to patient's fluctuating mental health condition and physical health with maintaining function and independence.

Keywords

Older people, falls, acute mental health settings for older people, dementia, functional mental health.

Summary of research findings

1: Background

The study is the outcome of a lay/clinical/academic collaboration that identified an urgent need to improve the care of older people who experience falls in acute mental health settings.

The evidence base about falls in mental health settings for older people is sparse. However the National Patient Safety Agency reported falls were the main adverse event experienced by patients, with over 36,000 events recorded annually.

2 Aims and objectives

Our key objectives were:

To explore how fall risk, prevention and management is understood and experienced in everyday practice by patients, family carers and staff, in inpatient mental health settings providing care for older people.

To identify how assessment tools, guidelines and policy for fall prevention are used.

3: Methods

A case study approach enabled us to understand the complexity of fall prevention and incorporated the following:

- 3.1: Analysis of fall incident reports (3 years) to determine where and when falls happened, causes and impact of falls on patients.
- 3.2: Non-participant observation to explore ward routines, practises and use of space in order to build an understanding of the clinical settings and to understand data from 3.1.
- 3.3: Documentary analysis: All mental health Trusts in England and Health Boards in Wales were asked to send copies of their fall policies so we could document the extent to which evidence-based guidelines influenced local policies.
- 3.4: Interviews and focus groups were used to explore approaches to risk-taking, policy interpretation and decision-making at strategic, operational and clinical levels.
- 3.5: Patient tracking was used to explore a patient's experiences of a fall, incorporating interviews with patients, key staff, relatives, case note review and follow up to discharge. Setting

Our study was undertaken in wards providing care for older people in one Mental Health Trust in Southern England.

Ethics

NRES (10/WNo01/45) and R&D approval from the NHS Trust.

Data analysis

All quantitative data was analysed using Excel and SPSS (v19). Qualitative data was transcribed and coded. Analysis was facilitated by NVivo 9. All data was checked by at least 2 researchers, emergent themes and interpretations were discussed by all team members and any differences in interpretation resolved by discussion.

Sample

920 reported falls (over 3 years), 7 staff focus groups (n=45 staff) 1 focus group with a 'friends group', 308 hours of observation; analysis of 43 fall policies (41 NHS Trusts in England, 2 Health Boards in Wales), 6 interviews with managers; 24 patients tracked, with interviews with staff (n=48) and carers (n=5).

4: Key findings

4.1: Patients' experience of falls

For the 12 months fall reports for 130 patients with a mean age of 81.7 years were recorded; 40% had a primary functional diagnosis, 46% an organic mental health diagnosis (14% non specific). Patients fell on average on their 50th day of admission (43 days for those with an organic diagnosis and 65 days a functional illness).

Across settings, we found spatial and temporal patterns to falls, the majority reported in bedrooms (42%), day rooms (20%) and corridors (12%). 27% were directly observed by staff; 57% of patients were found on the floor or staff heard the fall. Peak times for fall incidents varied between settings, were linked to routines/patterns of activity, with peaks between 8am and 11, 3pm, 6-8pm and 1-2am. Almost half (43%) of reports mentioned no injury, 22% injury with bleeding, 3% suspected fractures and 10% referral to A&E for assessment/x-ray/suturing.

Incident report data are likely to underreport falls as staff had difficulty deciding when to report falls thought to be deliberate/due to patient's mental health condition/behaviour and/or where there was no injury.

4.2: Policy guidance

Policy documents included fall risk assessment tools with Fall Risk Assessment Tools (FRAT), the most commonly used as it includes cognitive status. The number of risk factors included varied but only one met all the NICE (2004) guidance recommendations.

4.3: Case studies of patients who fell

We studied 24 patients in-depth representing 38 falls, 26 of which were unobserved. Patients sometimes reported falls that had not been reported to staff so were unrecorded in incident reports. Interviews highlighted:

1: Contribution of co-morbidity to falls

All patients presented a complex mix of mental and physical health problems which staff found challenging because their expertise and training was in mental health. This was felt to be a relatively recent phenomena presenting a clear need for training. Physical health problems could be missed or interpreted as mental health problems, eg. balance difficulties due to neuropathy could be ascribed to patient personality/behaviour. Patients were taking a minimum of 4 medicines (maximum of 12) with all taking at least one medicine associated with increased risk of falls. Some patients and family carers thought falls were caused by medication. Staff explained the difficulty of balancing the risk of injury due to, eg, untreated agitation with potential side-effects of medication.

2: Perception of falls as a physical problem

Staff perceived falls as a physical health problem and fall prevention the domain of physiotherapy/medical care. Mental health skills were not seen as useful in fall prevention/management. Falls (aside from 'behavioural' falls-thought to be a mental health issue) were seen as accidental in nature, with little that could be done to avert them; attention thus focused on reducing harm. Both staff and patients thought the care

environment could impact negatively, particularly where wards had cramped/cluttered spaces.

3: Prevention and management of falls

Staff draw on a limited repertoire of fall management activities with the main 'intervention' drawn directly from mental health practice, ie, surveillance. Patients at risk of falls were observed with varying frequency, from 15 minutes to constant observation, dependent on the degree of perceived risk. Referral to physiotherapy was a frequent action in response to identified fall risk. A range of equipment is used (eg. walking aids, hip protectors, low profile beds, and mattress alarms), but use varied and some was thought to have limited use, eg. mattress alarms which patients could disable. There was little evidence of educational interventions for patients, including information leaflets.

Prompt access to physiotherapy services was valued by staff. Patients took part in activity sessions as part of physiotherapy/groups organised by occupational therapy but some settings were not conducive to independent mobility, eg. one of the settings had restricted space for patients to walk around safely following modifications made to comply with single sex accommodation policy. Some patients felt they lost physical function during their hospital stay.

4: Managing fall risk

There were differences in thinking about risk across the organisation, between disciplines and within staff teams.

Staff described challenges posed by balancing the need to promote patient independence with prevention of the risk of falling. Enabling patients to 'take risks' was something staff learned 'on the job' and this was reported to be part of the process of becoming an expert practitioner. Much thinking about risk management in relation to falls is undocumented with discharge letters sometimes failing to mention that a patient had fallen.

The risk taking behaviour of some staff appears to have been affected by an increasing awareness of potential legal repercussions.

Senior managers noted the shifting nature of priorities often as a result of specific targets. Falls were one of a number of concerns relating to patient safety, were the most frequently reported safety incident but senior managers noted that most reports resulted in no/very minor injuries to patients. Managers supported clinical staff through provision of policies, guidance, training, supporting risk taking and monitoring, investigating and learning from incident reporting. They acknowledged that incidents resulting in low to moderate harm were less likely to attract investigation.

Expected impact

This is the first comprehensive study of falls in acute mental health settings and provides a sound foundation for the development of tools, guidance, policies and interventions relevant to these settings. Findings provide evidence of the challenges that those providing services to this population face, with implications for education providers and patient education.

Conclusions

Fall reporting is generally poor-lacking in sufficient detail for learning, and falls are underreported. Increasing awareness of falls has improved the quality of reporting over the time of this study. Understanding the temporal and spatial patterns of falls could help in planning care and staffing levels in order to reduce falls, but is specific to each setting. Patients experiencing falls in mental health settings have a range of health comorbidities. Nursing staff in particular describe the need for more specialist education to support them to provide optimal care for those at risk of falling.

Each fall is perceived to be different, and alongside the drive to deliver patient-centred care, leads to a feeling among staff of a poor fit between what they do every day and fall policy/assessment tools that are thought to be too generic to be useful. Consequently policy documents were rarely used.

Risk taking challenges staff to balance the risk of falls due to the patient's fluctuating mental health condition, with the need to maintain physical function and independence, medication, environment and an increasing concern with possible legal repercussions of practice.

Patient and public involvement

We were able to successfully engage with a very active friends group associated with one of the study wards (comprising former patients and family carers). We had discussed the study with this group while developing the research bid, and incorporated helpful suggestions from them. This group has provided additional advice throughout the study, including suggestions of additional analysis of data (e.g. looking for any differences between male and female patients). We have met with them several times during the study to update them and provide opportunities for discussion. The group also agreed to participate in a focus group, which was useful in informing development of the patient interview topic guide. This group continues to work with us to develop information for patients in the form of a patient information leaflet. They support one of the findings of the study that shows the need for relevant patient information for mental health patients, and have encouraged us to ensure this is accessible for patients and family carers and brief. They have also advised us regarding content.

We had hoped to extend this engagement to other similar groups across the Trust, as when we submitted the bid, we were aware of similar groups attached to the other study wards. However, these groups have not been sustained since we obtained funding. One ward had a group, but no-one attended. We attempted to link with a dementia support group attached to one of the study sites, but this was a support group for carers, with no links to the study wards, so the group felt they could not offer anything to the study.

In addition we have continued to have the support of the Public Involvement in Research Group (PIRG) in the Centre for Research in Primary and Community Care at the University of Hertfordshire, and have had a representative from this group on the external Steering Group for the study providing active engagement with the study team, and providing ongoing input to the study. This has included providing advice on suitable lay language and readability, developing a flow chart to explain functions and roles of the study team and external steering group, terms of reference for the study group, as well as commenting on the data we collected, ongoing analysis etc. The PIRG provided invaluable advice and comments on study documentation prior to submission to the ethics committee as well as commenting on the study design.

Data sharing statement

See link

[https://www.nihr.ac.uk/documents/nihr-position-on-the-sharing-of-research-data/12253] for the NIHR position of the sharing of research data. The NIHR strongly supports the sharing of data in the most appropriate way, to help deliver research that maximises benefits to patients and the wider public, the health and care system and which contributes to economic growth in the UK. All requests for data should be directed to the award holder and managed by the award holder.

Disclaimer

This project is funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-1208-18211). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

This project was carried out between December 2010 and 31 August 2013. This final report has not been peer-reviewed. The report was examined by the Programme Director at the time of submission to assess completeness against the stated aims.