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Title: Barriers and facilitators to incident reporting in mental healthcare settings: a qualitative study.

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Short Title:

Barriers and facilitators to incident reporting

Key words:

Incident reporting, mental health, patient safety, qualitative

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Article type : Original Article

Title: Barriers and facilitators to incident reporting in mental healthcare settings: a qualitative study.

Key Words:

Patient safety, incident reporting, mental health, qualitative research

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Title: Barriers and facilitators to incident reporting in mental healthcare settings: a qualitative study.

Abstract:

Introduction: Barriers and facilitators to incident reporting have been widely researched in general healthcare. However, it is unclear if the findings are applicable to mental healthcare where care is increasingly complex.

Aim: To investigate if barriers and facilitators affecting incident reporting in mental healthcare are consistent with factors identified in other healthcare settings.

Method: Data were collected from focus groups (n=8) with 52 members of staff from across [a large Mental Health] Trust and analysed with thematic analysis.

Results: Five themes were identified during the analysis. Three themes (i)learning and improvement, (ii)time, and (iii)fear were consistent with the existing wider literature on barriers and facilitators to incident reporting. Two further themes (iv)interaction between patient diagnosis and incidents and (v)aftermath of an incident – prosecution specifically linked to the provision of mental healthcare.

Conclusions: Whilst some barriers and facilitators to incident reporting identified in other settings are also prevalent in the mental healthcare setting, the increased incidence of violent and aggressive behaviour within mental healthcare presents a unique challenge for incident reporting.

Clinical Implications: Although Interventions to improve incident reporting may be adapted/adopted from other settings, there is a need to develop specific interventions to improve reporting of violent and aggressive incidents.

Accessible Summary:

What is known on the subject?

- The barriers and facilitators to incident reporting are becoming well known in general healthcare settings due to a large body of research in this area.
- At present, it is unknown if these factors also affect incident reporting in mental healthcare settings as the same amount of research has not been conducted in these settings.

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What the paper adds to existing knowledge

- Some of the barriers and facilitators to incident reporting in mental healthcare settings are the same as general healthcare settings (i.e. learning and improvement, time and fear).
- Other factors appear to be specific to mental healthcare settings (i.e. the role of patient diagnosis and how incidents involving assault are dealt with).

What are the implications for practice?

- Interventions to improve incident reporting in mental healthcare settings may be adapted from general healthcare settings in some cases.
- Bespoke interventions for mental healthcare settings that focus specifically on violence and aggression should be co-designed with patients and staff.
- Thresholds for incident reporting (i.e. what types of incidents will not be tolerated) need to be set, communicated and adopted Trust wide to ensure parity across staff groups and services.

Relevance Statement:

Barriers and facilitators to incident reporting have been widely researched in general healthcare but less research on this topic in mental healthcare exists. It is unclear if the findings from general healthcare are applicable to mental healthcare where care is increasingly complex. In order to improve incident reporting and therefore safety in mental healthcare, in depth qualitative research on the barriers and facilitator to incident reporting in this setting is required. Mental health nurses will be able to use the results of this study to inform service improvement activities around incident reporting, thereby improving the safety of care for patients and themselves.

Introduction

It is widely recognised that keeping patients safe from harm is fundamental for high quality healthcare (Darzi, 2008). England's National Reporting and Learning System (NRLS) was introduced as part of a national strategy to monitor the incidence of patient safety incidents, help prevent patient harm and improve quality and safety of care across healthcare establishments (NHS Improvement., 2017). For this system to be successful, organisations need to enable staff to record incidents such as adverse events, complaints and near misses, for the wider system to learn from them.

Since the implementation of the NRLS the number of incidents reported has increased over time, with over 1.5 million incidents recorded in 2018 (NHS Improvement., 2018). However, the actual number of incidents may be significantly higher due to underreporting (Noble & Pronovost, 2010). Whilst there is ongoing debate about the optimal number of incident reports to create generalisable learning across multiple institutions (Howell et al., 2017; Macrae, 2016), it remains important to identify the factors that act as barriers and facilitators to incident reporting, so that 'sufficient' levels of reporting can feed into high quality care.

A recent systematic review of 110 papers identified 9 categories within a theoretical framework that describe the barriers and facilitators to incident reporting (see Box 1) (Archer et al., 2017). The included papers consisted of 76 quantitative studies, 21 qualitative studies and 13 mixed-methods studies with data collected in over 20 countries. Studies were conducted in the following settings: general hospital care (n=59), hospital/community pharmacies (n=12), primary/community medicine (n=9), nursing homes (n=3) maternity (n=1), dental institutes (n=1) and mental health hospital care (n=1). In addition, 10 papers sought the views of healthcare staff from mixed settings and 14 papers explored the views of professional groups via a membership organization (e.g. Royal College of Nursing).

INSERT BOX 1 HERE

The theoretical framework gives a comprehensive overview of factors contributing to engagement in incident reporting, particularly in the general hospital setting where over half (53%) of the included research was based. However, it is unclear whether this framework can be extrapolated to other healthcare settings such as mental health, where patient characteristics and treatment processes can be significantly different. Several studies aiming to explore why and how incidents occur have

discussed factors influencing engagement with incident reporting in relation to their findings (Allen, 2013; Renwick et al., 2016). However, in comparison to general healthcare, relatively few have set out to establish the barriers and facilitators to incident reporting explicitly. Indeed, in the systematic review the only study from the mental health setting reported similar barriers to reporting in both general and mental healthcare settings, but found that staff in mental healthcare settings identified additional challenges to reporting because of managing risky and complex patient behavior (Anderson, Kodate, Walters, & Dodds, 2013). Whilst this systematic review may not have identified all literature pertaining to barriers and facilitators to incident reporting in mental health, it does reflect a more general lack of research being conducted in the mental health and patient safety space, which may contribute to the disparity between research in general and mental healthcare settings (D'Lima, Crawford, Darzi, & Archer, 2018).

Some may consider the delivery of mental healthcare to be less technically challenging than other aspects of healthcare (e.g. no surgical procedures, no radio imaging, few intravenous injections). However, the patient population may exhibit behavior that challenges (e.g. harm to self, others or

Some may consider the delivery of mental healthcare to be less technically challenging than other aspects of healthcare (e.g. no surgical procedures, no radio imaging, few intravenous injections). However, the patient population may exhibit behavior that challenges (e.g. harm to self, others or property) as a manifestation of the disorder for which they are being treated, or as a response to aspects of their treatment which uniquely may include detention under the Mental Health Act and/or other restrictive rules and regulations experienced in mental health units (Bowers et al., 2005). As such, there is a need to further investigate the barriers and facilitators affecting incident reporting in mental healthcare settings to (i) establish the representativeness of the existing theoretical framework, and (ii) identify opportunities to improve incident reporting in one specific Trust (see Box 2 for context). The paper presented here details the results of a qualitative focus group study with staff from one mental healthcare Trust.

INSERT BOX 2 HERE

Methods

Setting

This study was conducted in partnership with [a large Mental Health] Trust, a large specialist provider of mental and community healthcare across three boroughs in [Location]. The Trust also provides medium secure mental health services for all of [Location], and high secure mental health services for men from London and the South of England at [xxx Hospital].

Data collection

Data were collected using focus groups to ensure a broad range of views were integrated (Earle, Davies, Greenfield, Ross, & Eiser, 2005). Eight service managers in eight different clinical/administrative areas of the Trust (detailed in Table 1) were asked to advertise the study to their staff; those wanting to participate were asked to contact the manager for more information. Staff were eligible to take part if they had experience of the incident reporting system being used within the Trust. Each focus group was conducted by two researchers employed by Imperial College London (LD, BT, CR) who had received training on best practice for conducting focus groups prior to data collection. Two of the researchers (LD and BT) had conducted focus groups in other settings previously; none of the researchers had met any of the participants prior to the focus group.

At the start of each focus group, the researchers explained the purpose of their study and that they were not employed by [Mental health Trust]. Each focus group followed a semi-structured schedule that explored barriers and facilitators to incident reporting (See Box 3 for example questions). Prompts for this discussion were based on the nine factors underpinning the barriers and facilitators to incident reporting developed by Archer et al (2017; See box 1). Focus groups were audio-recorded on a digital voice recorder and transcribed verbatim by an external transcription company. Transcripts were not shared with participants; however, they were checked by the researchers who had facilitated the focus group and compared with their written notes in order to confirm they were a true reflection.

Ethics

Ethics approval was sought and granted from the Health Research Authority (reference number: 16/HRA/4271). Participants responding to a study advert were provided with an information sheet detailing the study procedure and their right to withdraw. After a cool-off period of at least 24 hours, those wanting to participate gave written informed consent and details of the time/date/location of the focus group were shared. Participants were asked to verbally re-consent at the start of the focus group; after completion, participants were reminded of their right to withdraw their data from the study (within two weeks of the focus group date).

Data analysis

In order to identify, analyse and report patterns, focus group data were subjected to thematic analysis (Braun & Clarke, 2006). Particularly useful when conducting applied research (Braun & Clarke, 2014), thematic analysis provides a flexible approach for researchers who want to do robust and sophisticated analyses of qualitative data (Braun, Clarke, Hayfield, & Terry, 2019). Initial stages

of the analysis were conducted manually by two members of the research team (SA and BT). Firstly, in order to become familiar with the data, the transcripts were read and re-read whilst detailed notes were made. Following this, initial codes capturing interesting and salient features were developed within each focus group and were then compared across the entire data set. Where appropriate, the codes were then mapped onto the theoretical framework of barriers and facilitators to incident reporting, providing a number of theory generated themes. Codes that were not represented by the theoretical framework were bought together into data generated themes. Several additional members of the research team (CR and LD) reviewed the coherence and representativeness of the themes and the relationship between them; this step was included to encourage reflection and promote sensitivity to context and transparency/coherence within the results (Mays & Pope, 1995; Yardley, 2000). Once themes were confirmed, appropriate names and definitions were generated (for the data driven themes) or checked for accuracy (for the theory generated themes) alongside a thematic map. Results **Participants** In total, 52 participants took part in eight focus groups from eight different areas of the Trust

In total, 52 participants took part in eight focus groups from eight different areas of the Trust between the 7th December 2016 and the 1st February 2017; no participants dropped out of the study. Focus groups ranged from 38 minutes (focus group 2) to-84 minutes (focus group 8) in length. The participating areas consisted of three acute mental health wards, one low secure/medium secure ward, two medium secure wards, one high secure ward and one group of management/administrative staff. Focus groups varied in size between 3 (focus group 8) and 9 participants (focus group 7; see Table 1). Twenty-two participants were male and 30 were female. Levels of experience and seniority varied across the sample in terms of job role, and experience of working in mental health ranged from less than one year up to 30 years.

INSERT TABLE 1 HERE

Overview of findings

Five themes were extracted: (i) *learning and improvement*, (ii) *time*, (iii) *fear*, (iv) *interaction between* patient diagnosis and incidents and (v) aftermath of an incident – prosecution. A thematic map is shown in Figure 1.

INSERT FIGURE 1 HERE

Theme one: Learning and Improvement

There was a general frustration about the lack of learning and improvement resulting from incident reporting. There was a clear belief that incident reports and the information gleaned from them should drive improvement in practice. Similarly, participants described that the incident reporting process provides a place for reflection and learning:

People have got a sense of feeling now that when they report incidents, there's a learning from that so there will be a reflection afterwards to see, you know, what went wrong, what can be done better (FG8, Management team, 254-256).

Participants described that the aims and objectives of incident reporting were sometimes unclear – many participants believed that the main role of incident reports was to establish how mistakes had been made in order to apportion blame. A small number of participants identified that incident reports were vital for preventing safety incidents from happening:

We're missing a lot of stuff – maybe preventative stuff that we could have put in place to prevent the incidents from happening, or the major ones (FG2, General/older adult, 123-126).

Whilst participants acknowledged that local learning from incident reports was useful and, in some cases, easily achieved (e.g. through team debrief), they saw greater opportunities for this information to feed into Trust wide improvements. This was particularly important for managerial staff responsible for patient safety in their clinical area:

We need to move away from each individual little thing and take a more strategic approach at looking at overall issues to try to make whole systems improvements (FG8, Management team, 775-777).

Participants were keen to explore the best ways of translating incident reports into learning and feedback, and thought that there may be lessons to learn from other organisations that do this

particularly well. Participants described that there were examples of good learning and feedback within the Trust and that these could be replicated for other types of events:

So say when somebody gets seriously injured or a near death – or in fact a death, there'll be a separate investigation for that to try and glean where we can learn lessons from that particular incident. And those are – the investigations are done and then the feedback is given to the team and then it's cascaded out to the rest of the Trust (FG1, High secure, 226-229).

In summary, participants acknowledged the potential benefit of incident reports for learning, feedback and reflection; this was widely accepted for exploring past safety incidents and to a lesser extent preventing future incidents. Participants were generally unsure on how best to translate incident reports into appropriate learning and feedback.

Theme two: Time

Participants reported that time was the biggest barrier to reporting incidents and that this was juxtaposed with their desire to learn and improve following incidents (theme 1). Whilst it was acknowledged that safety incidents ranged in complexity and would therefore require varying levels of information, most participants believed that incident reports should be completed immediately due to the level of detail that is needed:

I think there should be no time after. When the incident happens, it should be done there and then, because everything is fresh in your memory, and you can account for what happened. (FG3, General/Old Adult, 386-388).

Participants stated that incident reporting needed to be prioritised within their workload in order to complete an appropriate incident report. Linked to this, many participants described that they wanted to provide an in-depth report and that adequate time was required to deliver this:

When an incident happens, it should be managed there and then, and people should be freed, and resources deployed from other places, to allow the person to sit down properly and complete that (FG3, General/Old Adult, 415-417).

Whilst immediate reporting was preferred by most participants, there were instances where it was inappropriate or unachievable, particularly after a serious incident involving harm to those involved. In these situations, where the immediate focus was on the wellbeing of patients and staff, it was recommended that brief notes be taken from the staff member, with a full report submitted at a later date:

You are meant to write the incident report as well, you're physically and mentally drained and you might not be able to write something substantial (FG4, Low and medium secure, 371-373).

Participants identified that internal processes could be improved to reduce the time taken to produce an accurate incident report. Specifically, participants cited frustration around the need to replicate information existing in other care management systems:

I think in terms of recording incidents obviously we use RiO [electronic patient record for mental healthcare], so you would make an entry on the progress notes. If there was a link between RiO and the IR [incident reporting] system where once you have saved on progress notes and then there was an attachment where you say, you know, 'Send it to IR form' (FG7, General adult, 330-334).

In summary: participants were committed to producing timely and accurate incident reports but were limited in terms of time and resources available. The linking of systems was suggested as an obvious way to streamline reporting.

Theme three: Fear

Participants were concerned about the blame associated with incident reporting, particularly when they believed that the incident did not warrant a report or had already been dealt with by the team. In these cases, the official reporting of an incident was viewed negatively:

They [staff] may also feel that they may get blamed as a result of reporting an incident, hence they may decide not to report it as they will probably feel victimised (FG7, General adult, 276-278).

Additionally, participants voiced concerns around the reaction of colleagues and managers to the patient safety incident that had occurred, particularly if a member of staff was seen to be responsible. Participants talked of the shame and the impact this had on team dynamics:

Especially this medication error happens, people are scared to report it, because apart from blame culture, even your colleagues are ashamed of a massive error. You know, gossip within the team? (FG3, General/Old Adult, 141-143).

Participants also wanted to protect the reputation of their workplace. Some participants shared the belief that administrators and managers within the Trust may avoid incident reporting to preserve the reputation of the Trust. Similarly, they were concerned that high numbers of incident reports may reflect poorly on their ward, and that repeated incident reports may be attributed to the staff that worked there:

I think some wards or some Trusts might be reluctant to put down, for example, staff shortages, because it might reflect to the manager, so, you know, in a bad way (FG5, Medium/enhanced medium secure, 106-107).

Whilst participants had a desire to protect other staff and the department from the negative outcomes associated with incident reporting, they were also concerned about reporting incidents that involved patients, particularly where there may be a negative impact. This was particularly important to staff working in medium and high secure settings where leave may be delayed or restricted as a result:

Then if they think maybe something trivial, they don't want to report them, it's going to impact on their leave. You know? Yeah, sometimes staff may want to ignore it (FG6, Medium secure, 237 -240).

In summary, participants frequently described fear around the impact of incident reporting for themselves, the department and the patients in their care. Whilst they acknowledged that the Trust had gone some way to allay these concerns with a move towards a 'just' culture, more work was needed in this area.

Theme four: Interaction between patient diagnosis and incidents

Participants acknowledged that mental health services face unique challenges with regards to safety and incident reporting. Whilst participants acknowledged that some patients did not respond well to the restrictive environment, their discussion generally focused on the role of symptoms associated with particular mental health diagnoses:

When it's somebody's personality that's the issue, there's very little that you can actually write (FG1, High secure, 143-144).

Participants described that the diagnosis of the patient was linked to the probability of reporting. Common behaviours associated with mental health diagnoses were often under reported, as participants believed that they are part of caring for that group of patients:

"Oh this person is not really so well, so what they are probably are saying is because of their mental state," so probably verbal aggression probably is underreported because of the nature of the job that we do (FG4, Low and medium secure, 617-620).

Some participants indicated that the type of unit where the incident occurred and the person experiencing the incident also influenced under-reporting:

I think that what constitutes an incident is different between different people. So, what one person might report, another doesn't see it worthy of reporting type thing, see this and the other person isn't reporting it (FG2, General/older adult, 274-275).

Whilst this may reflect the culture in some departments around incident reporting, other participants implied that tolerance was dependent on the staff group involved and was linked to the level of exposure within a given setting:

There's more response when a doctor gets assaulted, even the service itself, the chances of referring someone to PICU [Psychiatric Intensive Care Unit] straightaway without even assessing them is so quick but if nurses are

being assaulted, you know, it's something that can be tolerated (FG8, Management team, 678-680).

Once participants had established that it was an incident that required reporting, they were more likely to report serious incidents and less likely to report small incidents that occurred frequently, particularly if they were related to a patient's illness:

If we to the letter put an IR in for every incident of verbal aggression, or inappropriate behaviour, that's all I would be doing. Simple as. You know, you have to apply a certain amount of judgement (FG4, Low and medium secure, 73-86).

In summary, whilst mental healthcare settings present a variety of unique safety concerns that require incident reports, the severity of the incident and individual reporting of the event also impacts upon reporting behaviors.

Theme five: Aftermath of a violent incident - prosecution

The reporting of assault and other physical harm towards staff was a prominent theme across the focus groups. As well reporting assault to senior staff and managers, staff are encouraged to report all assaults to the police via appropriate channels (in this setting, this is by ticking a box on the incident reporting form which is then escalated by senior staff/managers). In general, participants felt there was an inequality between the response from the police in relation to patient and staff complaints:

They always investigate when it's the other way around, like towards the patients, but ignore when it's on the staff side (FG2, General/older adult, 528-529).

In addition to the dissatisfaction with learning and improvement reported in theme one, participants described a lack of action by the police as frustrating and resulted in participants feeling that reporting had little effect. This had a direct impact on the level of reporting:

What I've noticed is that stuff, assaults from patients, we tend to not report, because we just feel that police don't do anything (FG3, General/older adult, 168-169).

When the police did respond, participants felt that there were several limitations to actions being taken. Firstly, when reports were made, participants were frustrated by the delay in response from the Clinical Governance department at the Trust – untimely completion and submission of the report impacted upon the Trust's ability to pursue prosecution:

If you want them to be prosecuted, yes you tick it, that one goes through but it takes 14 days normally if they get approved by the Risk [Clinical Governance] Department... by the time you get it to input it, then the Crown Prosecution Department will tell you that it has elapsed, so they cannot prosecute (FG1, High secure, 103-117).

Secondly, in relation to theme four, participants felt that the diagnosis of individuals who were committing the assault acted as a barrier to the effectiveness of the reporting process, as the patients were seen to be 'unwell' (FG1, High secure, 262) in the eyes of a doctor:

Because at the end of the day, it will be the nominated doctor of that individual that needs to support the nurse to say this patient has got capacity. They knew exactly what they were doing (FG8, Management team, 723-725).

Before taking any investigation further, the Police usually require a comment on the mental capacity of the alleged perpetrator, as this must be proven to establish guilty intent. When the doctor assesses that this capacity was compromised, participants who had been the victim of assaults often were left frustrated by the decision to not escalate further. Whilst the discussion around prosecution was predominantly negative, one participant did discuss their experience of reporting within the Trust and the subsequent action taken:

People are being prosecuted and some staff have been compensated for assaults so I think that's quite a big improvement. (FG6, Medium secure, 747-748).

In summary, the difficulties the Trust experienced in working effectively with the Police and the Crown Prosecution Service (CPS) reduced motivation to report incidents. This resulted in participants who had been assaulted feeling unsupported and undervalued.

Discussion

Key findings

This study offers insight into the barriers and facilitators of incident reporting in mental healthcare settings. Whilst the literature on incident reporting in general healthcare is comprehensive (Archer et al., 2017), there is a paucity of research focusing specifically on challenges faced in mental healthcare, demonstrating the disparity in quality and safety research in these settings. The five themes presented here summarise the most salient points arising from the eight focus groups conducted with staff across one NHS provider of mental healthcare. Whilst there was variation between individuals, teams and the settings that they worked in, these themes represent the views of the majority of participants.

The themes of learning and improvement, time and fear are consistent with the theoretical framework presented in the review by Archer et al (2017), suggesting that the framework may go some way to representing barriers and facilitators to incident reporting in mental healthcare settings. The majority of barriers stemmed from organisational policies and procedures surrounding the reporting of/learning from incidents. For example, there was a strong belief that incident reports should be used to drive improvement in practice, which is consistent with previous research (Arfanis & Smith, 2011; Elder, Graham, Brandt, & Hickner, 2007; Waters, Hall, Brown, Espezel, & Palmer, 2012). Whilst there have been calls to develop more sophisticated infrastructures for investigation, learning and sharing to promote system-wide improvement (Macrae, 2016), it appears that the necessary changes are yet to be honed and implemented fully within [xxxxxx] Trust. Similarly, in this study all participants described lack of time as a significant barrier to incident reporting, reinforcing findings from previous studies (Albolino et al., 2010; Arfanis & Smith, 2011; Backstrom, Mjorndal, Dahlqvist, & Nordkvist-Olsson, 2000; Elder et al., 2007). In particular, participants described limited availability of time and resource to work with complicated systems and were particularly frustrated with duplication between RiO (the electronic patient record for mental healthcare) and the in-house reporting system.

In the same manner, the punitive nature of incident reporting is well known and has been the focus of many research papers (Elder et al., 2007; Jeffe et al., 2004; Noble & Pronovost, 2010; Waring, 2005), including one of the few papers on barriers to incident reporting in the mental healthcare setting (Gifford & Anderson, 2010). Indeed, there were similarities between findings from our study and earlier research - participants expressed concern and fear about the impact that reporting may have on patients (e.g. a change in medication that would negatively affect the patient) (Gifford & Anderson, 2010). However, within the study presented here, the topic of fear went beyond concerns about changes to medical treatment. For example, participants expressed a reluctance to report when it delayed approval for unaccompanied access to hospital grounds at [high secure hospital]. Whilst this is directly pertinent only to a few hundred patients in high secure services, the same concerns are relevant to the care pathways of the several thousand 'restricted' patients who require specific Ministry of Justice (MoJ) permission for leave of absence from their detaining hospital. Indeed, the MoJ pro forma application for leave (Ministry of Justice, 2011), specifically asks for details of 'the patient's attitude and behaviour in hospital, including any incidents of verbal and/or physical aggression or violence (towards staff, visitors, patients), periods of seclusion and other antisocial or problematic behaviour' amongst other things. This additional complexity is not examined in the literature on incident reporting in other areas of healthcare.

The focus on violence and aggression dominated the discussion of the participants and two themes resulted from this: *Interaction between patient diagnosis and incidents* and *Aftermath of a violent incident - prosecution*. These themes highlight that the factors identified in the theoretical review (Archer et al., 2017) may not adequately represent the issues faced in mental healthcare settings, due to violence being less frequent in general healthcare settings. Whilst the incidence of violence and aggression is increasing across the NHS (HSJ & Unison, 2018), including in A&E and ambulance services, the proportion of reported incidents is heavily weighted to services that provide mental healthcare, with around 73% of all physical assaults recorded occurring in mental healthcare or learning disability settings (National Institute for Health and Care Excellence., 2015).

Participants described how they tolerated violence and aggression as these are often symptoms of the condition for which the patient is being treated or a response to the restrictive environment (Papadopoulos et al., 2012; Renwick et al., 2016). Where participants described themselves or others as having a high tolerance of these behaviours, reporting was generally lower. Whilst some participants may accept and, in some cases, normalise violent and aggressive behaviour as being 'part and parcel' of working within mental healthcare (Allen, 2013), inconsistent reporting may lead

to an underestimation of the number and seriousness of physical assaults occurring on a local and national level. Reduced reporting of incidents may prevent improvements that protect and support staff appropriately, and has major implications for safer staffing levels (National Quality Board., 2018). Low staffing levels are inherently problematic for the provision of safe care (Baker, Pryjmachuk, & UK, 2016; Keers et al., 2018); fewer staff may also result in reduced time for non-care activities, such as incident reporting, exacerbating the problem. As the number of NHS nurses declined by 12% between 2010 and 2017 (Care Quality Commission, 2017), any interventions that improve the retainment of staff, including those identified as a result of incident reporting, are essential.

In response to the increasing levels of physical assault across the NHS (HSJ & Unison, 2018), the UK government has recently announced a violence reduction strategy (Department of Health and Social Care., 2018) that includes measures to better protect staff and prosecute offenders more easily. It is likely that this will be welcomed by the participants in our study, as they described the lack of action by the police frustrating and that it had a direct negative impact on the level of reporting. These findings are consistent with previous research that indicates only 4% of physical assaults by psychiatric in-patients are reported to the police (Young, Brady, Iqbal, & Browne, 2018). Participants were also despondent about the likelihood of prosecution following an incident – this may be unsurprising as recent NHS wide data from across all settings suggests that only 2% of physical assaults lead to criminal sanctions (e.g. cautions, fines and imprisonment) (NHS Protect., 2016). Whilst guidance on best working practices between staff, Police and the CPS has been produced by experts in the field (Wilson, Murray, Harris, & Brown, 2018), implementation has proved slow.

Strengths and limitations

This study demonstrates several strengths; it includes the views of 52 staff of varying professions and levels of seniority from services across one NHS provider of mental healthcare. To our knowledge, this is the most comprehensive study exploring barriers and facilitators to incident reporting in this important and under-researched setting, yet we acknowledge that the data comes from only one Trust, which has a large forensic service, and that exploration in other Trusts may result in different findings. Additionally, whilst we spoke with a large number of staff in mixed participant groups, we are unable to comment on the representativeness of this group. For example, we may have recruited a sample with particularly positive or negative views of incident reporting which are not representative of the wider body of staff, and we may have failed to engage harder to reach groups of staff (e.g. community mental health staff) that may offer an alternative viewpoint.

Similarly, we were unable to recruit participants from all staff groups, so voices from one profession (e.g. psychiatrists) may not be adequately represented. Some participants said that they would have liked the discussions to include senior management to encourage open dialogue about the topic, however, other participants felt that an absence of senior management allowed them to speak more openly. Senior staff were invited to participate via the open invitation email that was sent to several groups of staff across the Trust, although few volunteered to participate; including an option for an individual interview may have increased participation for these staff groups.

Implications

These findings highlight the challenges faced by this and potentially other mental healthcare providers with regards to the optimisation of incident reporting and any associated learning. As [xxxx] Trust had previously been classified as a low-reporter of incidents, it would be prudent to explore barriers and facilitators to incident reporting in a high-reporting Trust, to identify potential similarities and differences between low and high reporting Trusts. In addition, [xxxx] Trust sought out the opportunity to collaborate for this study in order to identify areas on which to focus interventions to increase incident reporting. As a considerable period of time has elapsed since the findings were shared with the Trust, it would be useful to see what, if any, interventions (and potential improvements) were driven by the outcomes of this research. Exploring the development and efficacy of any interventions in this Trust would add useful insight into mechanisms for improvement in the mental health setting, where interventions in the general healthcare setting may be unsuccessful (Covell & Ritchie, 2009; Martowirono, Jansma, van Luijk, Wagner, & Bijnen, 2012).

The findings also identify a number of areas that are ripe for immediate action. For example, mental health Trusts should explore whether there are opportunities to streamline data input and minimise duplication across multiple systems. Mental health Trusts should also continue to work alongside staff to improve the safety culture and address the actual or perceived punitive environment. This extends to the impact that an incident report may have on a patient (i.e. change in treatment or delayed access to grounds) or the wider care setting (i.e. ward or department). In addition, feedback mechanisms to support the flow of information between middle managers and ward based staff should be explored to ensure that the primary learning and improvement following IRs takes place at the local level – team, ward or unit. Further to this, senior managers should take responsibility for

organisation-wide learning and improvement where this is appropriate. Resulting improvements and good practice should be communicated to staff in order to promote a learning health system.

In terms of future improvement projects, clear guidelines around the reporting of violence and aggression should be co-designed with a varied staff group (and where appropriate, patient group), which set an institution wide threshold for violence and aggression resulting in an incident report. As part of this, Trusts may want to consider what constitutes an incident, and in what circumstances it be reported. In addition, Trusts should also consider the requirement to report incidents that occur frequently (i.e. many times in one shift). Similarly, in order to support an effective relationship between NHS staff, the police and the wider criminal justice system, routine and well-practiced arrangements for the escalation of incidents should collaboratively designed, implemented and evaluated.

Conclusion

This qualitative study suggests that factors such as learning and improvement, time and fear act as barriers and facilitators to incident reporting in mental healthcare settings; these findings are consistent with the wider body of research across multiple settings. However, the increased incidence of violent and aggressive behavior within mental healthcare presents a unique challenge for incident reporting; those designing bespoke interventions should consider what, when and how these incidents are reported. More broadly, strategies developed to improve reporting in general healthcare settings may need to be refined to increase the number and quality of incidents reported, and in turn, improve the quality of mental healthcare.

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All authors contributed to the design of the study. LD, BT and CR conducted the focus groups. SAr and BT conducted the initial coding. SAr, BT, LD, CR and DD discussed the themes and finalised the analysis. SAr produced the first draft of the paper. SAr, KM, LD, DD and SAd provided several rounds of critique. All authors approved the final submission.

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References

- Albolino, S., Tartaglia, R., Bellandi, T., Amicosante, A. M., Bianchini, E., & Biggeri, A. (2010). Patient safety and incident reporting: survey of Italian healthcare workers. *Qual Saf Health Care, 19 Suppl 3*, i8-12. doi:10.1136/qshc.2009.036376
- Allen, D. E. (2013). Staying safe: re-examining workplace violence in acute psychiatric settings. *J Psychosoc Nurs Ment Health Serv*, *51*(9), 37-41. doi:10.3928/02793695-20130612-04
- Anderson, J. E., Kodate, N., Walters, R., & Dodds, A. (2013). Can incident reporting improve safety?

 Healthcare practitioners' views of the effectiveness of incident reporting. *Int J Qual Health Care*, 25(2), 141-150. doi:10.1093/intqhc/mzs081
- Archer, S., Hull, L., Soukup, T., Mayer, E., Athanasiou, T., Sevdalis, N., & Darzi, A. (2017).

 Development of a theoretical framework of factors affecting patient safety incident reporting: a theoretical review of the literature. *BMJ Open, 7*(12).
- Arfanis, K., & Smith, A. (2011). Informal risk assessment strategies in health care staff: an unrecognized source of resilience? *Journal of Evaluation in Clinical Practice, 18*(6), 1140-1146. doi:10.1111/j.1365-2753.2011.01759.x
- Backstrom, M., Mjorndal, T., Dahlqvist, R., & Nordkvist-Olsson, T. (2000). Attitudes to reporting adverse drug reactions in northern Sweden. *Eur J Clin Pharmacol*, *56*(9-10), 729-732.
- Baker, J., Pryjmachuk, S., & UK, M. H. N. A. (2016). Will safe staffing in Mental Health Nursing become a reality? *Journal of Psychiatric and Mental Health Nursing*, 23(2), 75-76. doi:10.1111/jpm.12282
- Bowers, L., Simpson, A., Alexander, J., Hackney, D., Nijman, H., Grange, A., & Warren, J. (2005). The nature and purpose of acute psychiatric wards: The tompkins acute ward study. *Journal of Mental Health*, 14(6), 625-635. doi:10.1080/09638230500389105
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. doi:10.1191/1478088706qp063oa
- Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers?

 International journal of qualitative studies on health and well-being, 9, 26152-26152.

 doi:10.3402/qhw.v9.26152
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic Analysis. In P. Liamputtong (Ed.),

 Handbook of Research Methods in Health Social Sciences (pp. 843-860). Singapore: Springer

 Singapore.
- Care Quality Commission. (2017). The state of care in mental health services 2014 to 2017.

 Newcastle Upon Tyne.

- Covell, C. L., & Ritchie, J. A. (2009). Nurses' responses to medication errors: suggestions for the development of organizational strategies to improve reporting. *J Nurs Care Qual, 24*(4), 287-297. doi:10.1097/NCQ.0b013e3181a4d506
- D'Lima, D., Crawford, M. J., Darzi, A., & Archer, S. (2018). Patient safety and quality of care in mental health: a world of its own? *BJPsych Bulletin*, 41(5), 241-243. doi:10.1192/pb.bp.116.055327
- Darzi, A. (2008). High quality care for all: NHS Next Stage Review final report. London: Department of Health, 2008.
- Department of Health and Social Care. (2018). Stronger protection from violence for NHS staff [Press release]. Retrieved from https://www.gov.uk/government/news/stronger-protection-from-violence-for-nhs-staff
- Earle, E. A., Davies, H., Greenfield, D., Ross, R., & Eiser, C. (2005). Follow-up care for childhood cancer survivors: A focus group analysis. *European Journal of Cancer*, *41*(18), 2882-2886. doi:https://doi.org/10.1016/j.ejca.2005.08.028
- Elder, N. C., Graham, D., Brandt, E., & Hickner, J. (2007). Barriers and motivators for making error reports from family medicine offices: a report from the American Academy of Family Physicians National Research Network (AAFP NRN). *J Am Board Fam Med, 20*(2), 115-123. doi:10.3122/jabfm.2007.02.060081
- Gifford, M. L., & Anderson, J. E. (2010). Barriers and motivating factors in reporting incidents of assault in mental health care. *J Am Psychiatr Nurses Assoc, 16*(5), 288-298. doi:10.1177/1078390310384862
- Howell, A.-M., Burns, E. M., Hull, L., Mayer, E., Sevdalis, N., & Darzi, A. (2017). International recommendations for national patient safety incident reporting systems: an expert Delphi consensus-building process. *BMJ Quality & amp; Safety, 26*(2), 150-163. doi:10.1136/bmjqs-2015-004456
- HSJ, & Unison. (2018). *Violence against NHS staff: a special report by HSJ and Unison*. Retrieved from HSJ: https://guides.hsj.co.uk/5713.guide
- Jeffe, D. B., Dunagan, W. C., Garbutt, J., Burroughs, T. E., Gallagher, T. H., Hill, P. R., . . . Fraser, V. J. (2004). Using focus groups to understand physicians' and nurses' perspectives on error reporting in hospitals. *Jt Comm J Qual Saf, 30*(9), 471-479.
- Keers, R. N., Placido, M., Bennett, K., Clayton, K., Brown, P., & Ashcroft, D. M. (2018). What causes medication administration errors in a mental health hospital? A qualitative study with nursing staff. *PLoS One*, *13*(10), e0206233. doi:10.1371/journal.pone.0206233
- Macrae, C. (2016). The problem with incident reporting. *BMJ Quality & amp; Safety, 25*(2), 71-75. doi:10.1136/bmjqs-2015-004732

- Martowirono, K., Jansma, J. D., van Luijk, S. J., Wagner, C., & Bijnen, A. B. (2012). Possible solutions for barriers in incident reporting by residents. *J Eval Clin Pract*, *18*(1), 76-81. doi:10.1111/j.1365-2753.2010.01544.x
- Mays, N., & Pope, C. (1995). Qualitative Research: Rigour and qualitative research. *BMJ*, 311(6997), 109.
- Ministry of Justice. (2011). *Leave application for restricted patients*. London Retrieved from https://www.gov.uk/government/publications/leave-application-for-restricted-patients.
- Violence and aggression: short-term management in mental health, health and community settings (NG10), (2015).
- National Quality Board. (2018). Safe, Sustainable and Productive Staffing: An improvement resource for mental health. Retrieved from London:

 https://improvement.nhs.uk/documents/810/Mental_Health_Setting_Improvement_Resour ce_final.pdf
- NHS Improvement. (2017). Learning from patient safety incidents.
- NHS Improvement. (2018). NRLS national patient safety incident reports: commentary.
- NHS Protect. (2016). *Reported physical assaults on NHS staff figures (2010-2011)*. Retrieved from London: https://www.eastamb.nhs.uk/Governance/disclosure-log/Emergency Ops/2017/FOI 13786 Reported Physical Assaults 2015-16.pdf
- Noble, D. J., & Pronovost, P. J. (2010). Underreporting of patient safety incidents reduces health care's ability to quantify and accurately measure harm reduction. *J Patient Saf, 6*(4), 247-250.
- Papadopoulos, C., Ross, J., Stewart, D., Dack, C., James, K., & Bowers, L. (2012). The antecedents of violence and aggression within psychiatric in-patient settings. *Acta Psychiatrica Scandinavica*, 125(6), 425-439. doi:10.1111/j.1600-0447.2012.01827.x
- Renwick, L., Lavelle, M., Brennan, G., Stewart, D., James, K., Richardson, M., . . . Bowers, L. (2016).

 Physical injury and workplace assault in UK mental health trusts: An analysis of formal reports. *Int J Ment Health Nurs*, *25*(4), 355-366. doi:10.1111/inm.12201
- Waring, J. J. (2005). Beyond blame: cultural barriers to medical incident reporting. *Soc Sci Med,* 60(9), 1927-1935. doi:10.1016/j.socscimed.2004.08.055
- Waters, N. F., Hall, W. A., Brown, H., Espezel, H., & Palmer, L. (2012). Perceptions of Canadian labour and delivery nurses about incident reporting: a qualitative descriptive focus group study. *Int J Nurs Stud*, 49(7), 811-821. doi:10.1016/j.ijnurstu.2012.01.009
- Wilson, S., Murray, K., Harris, M., & Brown, M. (2018). Psychiatric in-patients, violence and the criminal justice system. *The Psychiatrist*, *36*(2), 41-44. doi:10.1192/pb.bp.111.034876

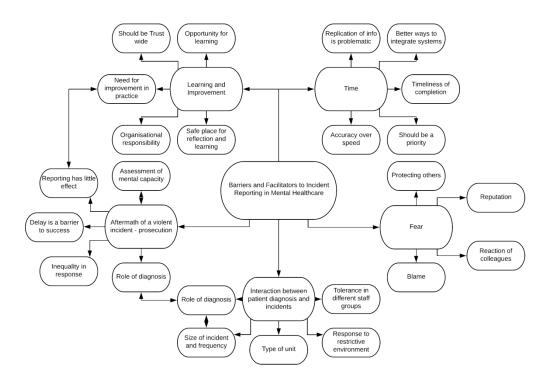
Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology & Health, 15*(2), 215-228. doi:10.1080/08870440008400302

Young, C., Brady, J., Iqbal, N., & Browne, F. (2018). Prosecution of physical assaults by psychiatric inpatients in Northern Ireland. *Psychiatric Bulletin*, 33(11), 416-419. doi:10.1192/pb.bp.108.023713

Table 1 – participant demographics

Focus group	Setting and patient gender	Job Title	Experienc e (years)	Gender
Focus group 1	High secure – men	Qualified ward based nurse	11-20	Female
	only	Unqualified ward based nurse	1-4	Female
		Qualified ward based nurse	11-20	Female
		Qualified ward based nurse	11-20	Male
SI 90		Senior Qualified ward based nurse	5-10	Male
000		Unqualified ward based nurse	11-20	Male
<u> </u>		Senior specialist violence management trainer	5-10	Male
Focus group 2	General adult and	Student nurse	Unknown	Female
	older adult - men and women	Student nurse	1-4	Female
		Student nurse	<1	Female
85 80		Senior Qualified ward based nurse	1-4	Female
oca		Unqualified ward based nurse	5-10	Male
<u> </u>		Senior non-ward based nurse	11-20	Male
	General adult and	Qualified ward based nurse	5-10	Female
<u>س</u>	older adult - men	Qualified ward based nurse	1-4	Female
dnc	and women	Qualified ward based nurse	1-4	Female
Focus group 3		Qualified ward based nurse	21+	Female
cns		Qualified ward based nurse	<1	Male
F06		Qualified ward based nurse	21+	Male
		Qualified ward based nurse	5-10	Female
	Low and medium secure - men only	Unqualified ward based nurse	5-10	Female
		Unqualified ward based nurse	5-10	Female
4		Unqualified ward based nurse	<1	Female
dno		Senior qualified ward based nurse	11-20	Female
us group 4		Qualified ward based nurse	11-20	Female
		Non-clinical manager	21+	Male
Foc		Senior non-ward based nurse	5-10	Male
		Unqualified ward based nurse	21+	Male
		Senior qualified ward based nurse	Unknown	Male
Focus group 5	Medium secure	Unqualified ward based nurse	5-10	Female
	and enhanced medium secure - women only	Qualified ward based nurse	1-4	Female
		Qualified ward based nurse	<1	Female
		Senior qualified ward based nurse	11-20	Male
Focus group 6	Medium secure -	Qualified ward based nurse	11-20	Female
	men only	Qualified ward based nurse	5-10	Female
		Non-clinical manager	1-4	Female
		Student Nurse	1-4	Female
cns		Qualified ward based nurse	21+	Male
F0		Unqualified ward based nurse	11-20	Male
		Unqualified ward based nurse	11 -20	Male

	General adult -	Qualified ward based nurse	<1	Male
Focus group 7	men and women	Qualified ward based nurse	1-4	Female
		Qualified ward based nurse	1-4	Female
		Unqualified ward based nurse	5-10	Female
		Senior qualified ward based nurse	5-10	Male
		Senior qualified ward based nurse	5-10	Male
		Senior qualified ward based nurse	5-10	Male
		Qualified ward based nurse	1-4	Female
		Clinician manager	11-20	Male
s d	Management	Clinical manger	11-20	Female
Focus group 8	team	Clinical manager	5-10	Female
F 20		Senior non-ward based nurse	5- 10	Male



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Box 1 - Theoretical framework of factors determining engagement in patient safety incident

reporting

Category	Descriptions & Examples	
Organisational	Organisational values, beliefs and policies around incident reporting. This also encompasses any organisational factor which may act as a barrier or facilitator to reporting behavior, such as structure (e.g. size of hospital) and organisational culture.	
Work Environment	Features of the work environment that act as barriers or facilitators to engagement in incident reporting. Examples of such factors include level of activity, staffing levels and visual prompts.	
Process and systems of Reporting	Any characteristics or features of the reporting system/process which enables or hinders incident reporting. This includes the complexity of the reporting system, the level of information required and the mode of incident reporting (e.g. paper based or electronic).	
Team factors	Any factor related to the functioning of different professionals within a group which influences incident reporting behavior. For example, support and encouragement by team members to report incidents, and levels of teamwork and communication.	
Knowledge and Skills	The acquisition and development of knowledge and skills that enables incident reporting. This includes participation in specific (e.g. form completion) and general (e.g. identifying which incidents warrant reporting) training/educational activities.	
Individual HCP Characteristics	Characteristics of the HCP that may contribute in some way to engagement in incident reporting. Examples of such factors include seniority, personality and attitudes.	
Professional Ethics	The accepted standards of personal and professional behavior, values and guiding principles that promote incident reporting. For example, the adoption of sound and consistent ethical practices, such as duty of care.	
Fear of adverse consequences	Any unpleasant emotion (e.g. guilt) or outcome (e.g. litigation) associated with individual HCPs' incident reporting behavior. A reduction in the likelihood of experiencing fear (e.g. the existence of a non-punitive policy) results in increased incident reporting participation.	
Incident Characteristics	Characteristics of the patient safety incident which may make HCP's more or less likely to report. These include frequency of error, level of harm and the cause of error.	

Note: HCP=Healthcare Professional

Box 2 - Context of current study

Historically, [large Mental Health] Trust has been one of the lower reporting Trusts in terms of incident reports. Whilst recent improvements have been made, levels of reporting remain relatively low (CQC, 2017). The Trust believed that a better understanding of the barriers and facilitators to incident reporting was needed before designing further interventions to increase incident reporting.

Box 3 – Sample questions for focus group

Opening questions

- Tell me about how incident reporting works in this setting?
- How does it compare to other settings you've worked in?
- Tell me a bit about any similarities or differences between physical health and mental health settings?

Questions for discussion and exploration

- To what extent do you feel engaged with incident reporting?
- What factors influence whether or not you report an incident?