Increased use of security personnel in Irish psychiatric hospitals: 2008–2012

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Objectives. Little is known about the involvement of security personnel in Irish psychiatric care. Content analysis of inspection reports is a feasible way to investigate this under-researched topic. We aimed to (i) Describe the number of approved centres per year in which we observed comments about the presence of security personnel in published reports of inspections conducted from 2008 to 2012 (ii) Report the main themes of all text relating to security personnel published in these inspection reports.

Method. We conducted a content analysis of all 349 inspection reports published between 2008 and 2012.

Results. The number of approved centres in which security personnel were noted increased from 3% to 8% between the years 2008 and 2012. This increase was not statistically significant when the same unique centres were compared between years (p = 0.684). Employment details such as contracted employment relationship, location relative to the approved centre and hours of work appeared inconsistent across centres. Role functions of security personnel differed across centres and ranged from monitoring the entrance of a unit to observing, restraining and secluding patients. Contrasting perceptions of suitability were evident in the inspection reports. The extent to which the training needs of security personnel were met was unclear from the reports.

Conclusions. Activity of security personnel in psychiatric hospitals may not be role appropriate, compliant with legislation or conducive to treatment. Best practice guidelines should be developed in consultation with multiple stakeholders.

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Introduction

The involvement of security personnel in mental health services highlights important issues in psychiatric care including human rights (Bowers et al. 2002), workplace violence (Psychiatric Nurses Association, 2010; European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT), 2011), the sociology of deviance, medico-legal ethics (Rogers & Pilgrim, 2005; Johnston, 2014), risk management and disparities between evidence, policy and practice (White, 2003; McKenna, 2008). Internationally, research has identified concerns about the employment of security personnel in psychiatric settings including inappropriate role-boundaries (Smith et al. 2013), precipitation of patient violence and aggression (Due et al. 2012) and increased levels of manual restraint episodes (Bowers et al. 2012). In 2004, 49% of acute admission wards in the Republic of Ireland had access to security personnel at all times (Cowman & Bowers, 2009) and there has been a perceived increase in the presence of security personnel over time (McKenna, 2008). There is a general lack of clarity about the role of security personnel across all

Irish health services including psychiatric hospitals

(McKenna, 2008). This lack of clarity is reflected by the

fact that no studies on the topic of security personnel in

Irish psychiatric hospitals have been published to date. In

the absence of this data, a content analysis of inspection

reports serves as a preliminary description of the pheno-

Approach

We followed a protocol authored by Berg (2007) which describes differing types of assumptions, debates and techniques within research methodology that are relevant to content analysis. Specifically, we used a

menon that can function as a rationale for more comprehensive research in the future.

We aimed to (i) Describe the number of approved centres per year in which we observed comments about the presence of security personnel in published reports of inspections conducted from 2008 to 2012 (ii) Report the main themes of all text relating to security personnel published in these inspection reports.

Methodology

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collaborative social research rather than an interpretive or social anthropological approach to analysis as we viewed the data 'both as feedback to craft action and as information to understand a situation' (Berg, 2007: 240). We blended qualitative and quantitative techniques because they enabled us to quantify frequencies and describe themes that can be used to shape practical advances in mental health service development. We blended manifest and latent content analysis as our research objectives were to report frequencies and themes of text. Theoretical categories of the data emerged through an 'interplay of experience, induction and deduction' (Berg, 2007: 246).

Context of inspection reports 2008–2012

Under the Irish Mental Health Act, 2001 mental health services are defined as 'services that provide care and treatment to persons suffering from a mental illness or a mental disorder under the clinical direction of a consultant psychiatrist' (Government of Ireland, 2001: 8). The Mental Health Commission, the statutory body that oversees mental health services in Ireland, must maintain a register of approved centres. An approved centre is defined as 'hospitals or other in-patient facilities for the care and treatment of persons suffering from a mental illness or mental disorder' (Government of Ireland, 2001: 43). It is an offence to operate such centres that are not listed on the register.

The Office of the Inspector of Mental Health Services was established under the Mental Health Act, 2001 (Government of Ireland, 2001). The functions of the Inspector include visiting and inspecting all approved centres at least once per year (Mental Health Commission, 2006). The resulting inspection reports include information about the extent of compliance by approved centres with codes of practice, regulations and rules made under the Mental Health Act, 2001 (Mental Health Commission). Accordingly, the absence or presence of security personnel was not reported systematically in inspection reports.

Selection of inspection reports

We selected all reports of inspections that were conducted between 2008 and 2012 and were available to the general public on the Mental Health Commission website at the time of data collection (Mental Health Commission, 2013).

Procedure

We created a database in IBM SPSS Statistics Version 21 of all unique approved centres from 2008 to 2012 for which an inspection report was available on the website at the time of data collection. For each centre and year,

we specified in the database whether a report was published and whether we observed comments about security personnel. We imported all text that referred to security personnel from inspection reports into QSR NVivo Version 7.0.281.0 SP4 and prepared it for thematic analysis.

Outcomes of procedure

There were two separate procedural outcomes resulting from the two main objectives of the study. The first outcome was an SPSS database listing all unique centres with at least one inspection report from the years 2008 to 2012 according to whether a report was available for a specific year and whether security personnel were referred to at least once. The second outcome was an N-Vivo database of five content tables representing each of the 5 years from 2008 to 2012. Each content table contained any text that referred to security personnel from all inspection reports published during the 5-year period with additional information such as page number and year to facilitate cross-checking during the analysis.

Statistical analysis of SPSS database

We conducted univariate analysis to determine frequency counts and percentages. We conducted bivariate analysis to determine differences between years.

Thematic analysis of N-Vivo database

We conducted a thematic analysis of the content tables with N-Vivo S.S. assigned codes inductively by reading the content tables repeatedly and identifying distinctive concepts in the text as described previously in various qualitative research guides (Braun & Clarke, 2006; Berg, 2007) S.S. submitted a preliminary draft of this report to P.D. and K.C.M. in October 2013 and it was subsequently circulated to the multidisciplinary team of the Inspectorate of Mental Health Services for review. This preliminary draft included the first iteration of coding S.S. refined the themes and codes through reflection and discussion. In January 2014, S.S. conducted the second iteration of coding which resulted in a revised coding scheme. The content tables were coded independently by P.D. using this revised coding scheme to facilitate assessment of inter-rater reliability. We used SPSS to calculate the κ statistic to determine consistency among raters. The academic and professional backgrounds of both raters were appropriate for coding the content. At the time of submitting this article for peer review, P.D. was a consultant psychiatrist and the Inspector of Mental Health Services. S.S. was a clinical scientist attached to the Inspectorate of Mental Health Services and a Ph.D. scholar of psychiatry. S.S. completed undergraduate and postgraduate training in relevant research skills. We resolved disagreements about coding by discussion and categorised the 14 codes into four broad themes. We gratefully acknowledge the comments of the anonymous peer reviewers that helped to clarify the final four themes in January 2015. All authors agreed on the final codes and themes.

Ethics

Ethical approval was not required for this study as it involves the use of anonymised data from a public source that is freely available online. We conducted the research according to the principles of the Declaration of Helsinki. Approved centres were anonymised to maintain the research focus on a national rather than local level of description.

Results

A total of 349 inspection reports that referred to 76 unique approved centres in the Republic of Ireland between the years 2008 and 2012 were available on the Mental Health Commission website at the time of data collection. The number of unique approved centres that were referred to by these inspection reports ranged from 61 to 69 per year (mean = 64.2, s.d. ± 3 centres). The number of inspection reports published on the website ranged from 61 to 78 per year (mean = 70, s.d. ± 6 centres). We display the frequency of inspected approved centres, published reports and inspected approved centres with more than one published report by year in Table 1.

From the years 2008 to 2012, the number of unique approved centres in which we observed comments about the presence of security personnel in the associated inspection reports ranged from 2 out of 61 (3%) in 2008 to 5 out of 63 (8%) in 2011. Of the 54 unique approved centres that were referred to in inspection

Table 1. Frequency of inspected approved centres, published reports and inspected approved centres with more than one published report by year

Year	Total inspected approved centres (n)	Published reports (n)	Approved centres with more than one published report as a percentage of total inspected approved centres (<i>n</i>)
2012	64	71	10.9% (7)
2011	63	71	11.1% (7)
2010	69	78	13% (9)
2009	64	68	6.3% (4)
2008	61	61	0 (0)

reports published in both 2008 and 2011, the presence of security personnel was noted in two (4%) in 2008 only, four (7%) in 2011 only and zero in both 2008 and 2011. Security personnel were noted in a 2011 inspection report of one approved centre for which no report was published in 2008. A χ^2 test for independence indicated that the increase in the noted presence of security personnel in unique centres that were inspected in both 2008 and 2011 was not statistically significant ($\chi^2 = (1, n = 54) = 0.116$, p = 0.684). We present the number of unique approved centres in which we observed comments about the presence of security personnel in associated inspection reports as a percentage of the total number of unique services per year from 2008 to 2012 in Fig. 1.

We did not observe any comments about security personnel in 330 out of 349 (95%) inspection reports which referred to 62 out of 76 (82%) unique approved centres from 2008 to 2012. We observed comments about security personnel in 19 out of 349 (5%) inspection reports that referred to 14 out of 76 (18%) unique approved centres from 2008 to 2012. We divided these comments into 37 separate text excerpts for the purposes of the thematic analysis.

Of the 14 unique approved centres from 2008 to 2012 in which we observed comments about security personnel in the associated inspection reports, 12 (86%) provided adult mental health services and two (14%) provided child and adolescent mental health services. We observed comments about security personnel in 10 (71%) unique approved centres once during the 5-year period only and more than once in four (29%) unique approved centres. We present the patient age group and specific years in which security personnel were noted in approved centres from 2008 to 2012 in Table 2.

Thematic analysis of content tables

We identified four broad themes: (1) inconsistent employment details, (2) differing role functions, (3) contrasting perceptions of suitability and (4) unmet training needs.

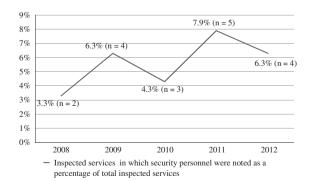


Fig. 1. Inspected services in which security personnel were noted as a percentage of total inspected services.

Table 2. Patient age group and specific years in which security personnel were noted in unique approved centres from 2008 to 2012

Anonymised unique approved centre	Patient age group	Years that security personnel were present		
A	Adult	2008		
В	Child and	2008		
	adolescent			
C	Adult	2009		
D	Adult	2009		
E	Adult	2009, 2010		
F	Adult	2009		
G	Adult	2010, 2011, 2012		
Н	Adult	2010, 2012		
I	Adult	2010, 2011		
J	Adult	2011		
K	Adult	2011		
L	Child and	2011		
adolescent				
M	Adult	2012		
N	Adult	2012		

Inter-rater reliability

Codes have been defined as 'the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon' (Boyatzis, 1998: 63). We used Cohen's κ to determine the level of agreement between S.S. and P.D. about which of the 14 codes from the revised coding scheme should be assigned to the 37 separate text excerpts from the content tables. We present these codes in Table 3. There was 'almost perfect' agreement between the two raters' judgements ($\kappa = 0.969$, p < 0.0001), 95% CI (0.908–1) (Landis & Koch, 1977, p. 165).

Inconsistent employment details

Employment details such as contracted employment relationship, location relative to the approved centre and hours of work appeared inconsistent across units. Security personnel were identified as staff of some approved centres under 'Article 26: Staffing' of the Mental Health Act (Government of Ireland, 2001). In others, security personnel were 'contracted in' by an external agency. Other reports described security personnel as being 'on duty' with no reference to their terms of employment. The location of security personnel differed between centres as they were stationed either inside, outside or at the entrance of the unit or a combination of all three locations. Security personnel were on duty at different times during the day and at

night and some were on duty 'at all times'. The exact start times for day duty were not specified in the inspection reports. The latest noted time that security personnel were on duty until was 01:00 a.m.

Differing role functions

Role functions of security personnel differed across centres and ranged from monitoring the entrance of a unit to observing, restraining and secluding patients. Some security personnel were 'employed to monitor the entrance to the approved centre' in some approved centres. They controlled admission to the units by vetting visitors 'according to a list supplied by nursing staff'. Others were stationed at the entrance and outside the centre 'for security'. In other centres, one or two security personnel monitored specific patients and some patients were permanently under observation by security personnel 'at all times'. One patient who was under permanent observation required urgent transfer to a forensic unit. Security personnel were the main interpersonal contact available to one particular patient and were described as 'personable' in the inspection report. They gave 'a clear account of the patient's routine and their role in providing custodial care' to inspectors. Staff of one approved centre stated that 'the security guard had been involved in both physical restraint and seclusion' of one patient. One individual care plan 'specified that physical restraint was to be applied by the two security personnel when required' for one patient. One security guard was stationed beside a seclusion room with a nurse while a patient was in seclusion during one inspection but it was unclear from the report if the security guard was involved in secluding the patient. In one approved centre, security personnel monitored closed circuit television.

Contrasting perceptions of suitability

Contrasting perceptions of suitability were evident in the inspection reports. The presence of uniformed security personnel within the therapeutic area of an approved centre was described by inspectors as 'not conducive to [..] privacy' and 'counter-therapeutic' for residents. In addition, one report stated that two security personnel being on duty at all times was one feature of overall inadequate risk management. The report claimed that this feature of the unit in combination with other factors highlighted the need for evidence-based risk assessment and management. In contrast to these concerns, staff of one approved centre stated that the use of security personnel for monitoring the entrance of the unit 'had resulted in a more therapeutic ward environment for residents' and 'had

Table 3. Codes used for thematic analysis

Physical location of security personnel at entrance or on unit
The approved centre personnel included security personnel
Exact times that security personnel were on duty is clearly specified
Security personnel were vetting visitors at entrance of unit
Perceived benefits of security personnel explicitly reported by staff
Security personnel were observing specific patient
Presence of security personnel was not conducive to privacy

Security personnel were involved in physical restraint and seclusion of patient

The inspection report notes that there was no evidence that security personnel were trained in seclusion or restraint

Presence of security personnel was counter-therapeutic
Account reported by security personnel to inspectors
Staff reported that security personnel were trained in de-escalation techniques
Security personnel as a contextual feature of overall inadequate risk management
Observation of closed circuit television by security personnel

helped reduce the likelihood of illegal substances being brought onto the approved centre'.

Unmet training needs

The extent to which the training needs of security personnel were met was unclear from the reports. In one approved centre, staff informed inspectors that the security guard had been involved in both physical restraint and seclusion of this resident. However, 'there was no evidence that the security guard had been trained in seclusion and in restraint'. An inspection report of another approved centre stated that one individual care plan specified that physical restraint was to be applied by the two security personnel when required. The service reported that the security personnel had been trained in de-escalation techniques but it was unclear from the report if they had been trained in physical restraint. In one approved centre, security personnel rather than health professionals monitored closed circuit television which was a breach of article 25 (1)(a),(c) of the Mental Health Act (Government of Ireland, 2001). The monitor was 'was visible to passers-by' and the security personnel informed the inspectors that the 'images were being recorded and stored on a tape' which represented a further breach of the article. It was unclear from the report if the security personnel or other staff were aware that this activity constituted a breach of the act.

Discussion

Main findings

The number of approved centres in which security personnel were noted increased from 3% to 8% between the years 2008 and 2012. This increase was not

statistically significant when the same unique centres were compared between years (p = 0.684). Employment details such as contracted employment relationship, location relative to the approved centre and hours of work appeared inconsistent across centres. Role functions of security personnel differed across centres and ranged from monitoring the entrance of a unit to observing, restraining and secluding patients. Contrasting perceptions of suitability were evident in the inspection reports. For example, the presence of uniformed security personnel on the unit was described as counter-therapeutic by inspectors. In a separate report from a different year, staff stated that the use of security personnel for monitoring the entrance had resulted in a more therapeutic ward environment for residents. The extent to which the training needs of security personnel were met was unclear from the reports. For example, one report stated that there was no evidence of training for security personnel that restrained and secluded patients.

Comparison with previous literature

A cross-sectional study conducted across 136 acute psychiatric wards in England from 2004 to 2005 found that access to security personnel predicted higher levels of restraint episodes across wards (Bowers *et al.* 2012). The authors recommended that services should reduce their reliance on security personnel in order to reduce the frequency of coercive interventions on psychiatric wards and stated that security personnel do 'not have specialist expertise or training in the recognition and management of patients with mental illness' (Bowers *et al.* 2012: 38). This description of security personnel is supported by our finding that there was no evidence that security personnel who secluded and restrained

patients were adequately trained. This finding is particularly remarkable because the use of poorly trained security guards in healthcare settings has been previously expressed as a concern by an expert review of a report on restraint related deaths in United Kingdom state custody (Aiken *et al.* 2011).

Security personnel in South African psychiatric institutions act as informal interpreters of patients for clinicians where language barriers are common (Kilian *et al.* 2010). While well-intentioned, this practice is problematic because key psychiatric terms tend to be misinterpreted, which could lead to misdiagnosis and compromised interventions (Kilian *et al.* 2010; Smith *et al.* 2013). Similarly, our findings indicate that the apparently well-intentioned activity of some security personnel while on duty in psychiatric hospitals may not be role appropriate, compliant with legislation or conducive to treatment.

A survey of 37 acute admission psychiatric wards in the Republic of Ireland in 2002/2003 found that security personnel were stationed at the entrance of four (11%) wards (Cowman & Bowers, 2009). We found that the number of approved centres in which security personnel were noted as a percentage of the total number of inspected approved centres ranged from 2 out of 61 (3%) to 5 out of 63 per year (8%) from 2008 to 2012. This could reflect a real-world decrease in the number of security personnel stationed in approved centres between 2002/2003 and 2012. Alternatively, this reduction may be owing to two differences in design between both studies. First, the 2002/2003 figures were drawn from a sample size of 37 in comparison to 76 unique approved centres between the years 2008 and 2012. Second, the 2002/2003 survey reported whether security personnel were either present or absent at all units that were included in the survey. In comparison, the inspection reports did not specify whether security personnel were absent or present systematically across all approved centres. In any case, it is possible that approved centres have access to security personnel even if they are not stationed in the approved centres or noted in the inspection reports. This hypothesis is supported by the survey conducted in 2002/2003 which also found that 18 out of 37 (49%) wards had access to security personnel at all times (Cowman & Bowers, 2009).

A Health Service Executive policy document noted a perceived increase in the number of security personnel present in health services including psychiatric hospitals (McKenna, 2008). This perceived increase was not supported by our findings as the noted increase in security personnel in approved centres from 3% to 8% between the years 2008 and 2012 was not statistically significant when the same unique centres were compared between years. The policy document also

reported a general lack of clarity about the role function of security personnel within diverse service settings. This is consistent with the result of the thematic analysis reported in this study, as the roles and activities of security appeared to vary across centres.

Strengths and limitations

This study involves analysis of all inspection reports of approved centres published in the Republic of Ireland from 2008 to 2012. A limitation of this study is that demographic and other data about security personnel was not reported systematically in all inspection reports because the systematic collection and analysis of survey data for the purposes of academic research is not a specified function of the Inspectorate under the Mental Health Act, 2001 (Mental Health Commission, 2006).

Research implications

As the extent of activity and training of security personnel in Irish psychiatric care over time is unclear, a longitudinal survey should collect data on activity and training of security personnel across services. As the role functions of security personnel are ambiguous, content analysis studies of relevant organisational documents should collect data on job descriptions, terms of employment, service policies and service level agreements between agencies. As we found contrasting perceptions of suitability, qualitative studies should collect data on the opinions and perspectives of stakeholders (including service users and their families) on the involvement of security personnel in psychiatric care.

Policy implications

There is an urgent need to publish best practice guidelines about the involvement of security personnel in psychiatric care. These guidelines should address various aspects of involving security personnel in psychiatric care including procurement, service policies, training needs, roles and responsibilities, reporting relationships and the function of security services within the context of multidisciplinary team working and risk management in psychiatric care. The development of these guidelines should include a systematic review of relevant literature, a synthesis of research evidence and a consultation process involving representatives of all stakeholder groups.

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Conflicts of Interest

Mr Shannon reports funding from the Mental Health Commission during the conduct of the study. From 2011 to 2014, Mr Shannon worked as a clinical scientist on the multidisciplinary team of the Inspectorate of Mental Health Services who wrote the reports under analysis.

Disclaimer

The views expressed in the submitted article are not an official position of the affiliated institutions or funders.

References

- Aiken F, Duxbury J, Duxbury C, Harbison I (2011). Review of the medical theories and research relating to restraint related deaths. Caring Solutions (UK) Ltd in conjunction with the University of Central Lancashire. (http://iapdeat hsincustody.independent.gov.uk/news/review-of-medical -theories-on-restraint-deaths-published/). Accessed 18 March 2015.
- Berg BL (2007). Qualitative Research Methods for the Social Sciences. Allyn and Bacon: Boston, MA.
- Bowers L, Crowhurst N, Alexander J, Callaghan P, Eales S, Guy S, McCann E, Ryan C (2002). Safety and security policies on psychiatric acute admission wards: results from a London-wide survey. *Journal of Psychiatric and Mental Health Nursing* 9, 427–433.
- Bowers L, van der Merwe M, Paterson B, Stewart D (2012). Manual restraint and shows of force: the city-128 study. International Journal of Mental Health Nursing 21, 30–40.
- Boyatzis RE (1998). Transforming Qualitative Information: Thematic Analysis and Code Development. Sage: Thousand Oaks, CA.
- **Braun V, Clarke V** (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* **3**, 77–101.
- Cowman S, Bowers L (2009). Safety and security in acute admission psychiatric wards in Ireland and London: a comparative study. *Journal of Clinical Nursing* 18, 1346–1353.
- **Due C, Connellan K, Riggs DW** (2012). Surveillance, security and violence in a mental health ward: an ethnographic casestudy of an Australian purpose-built unit. *Surveillance & Society* **10**, 292–302.

- European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) (2011). Report to the Government of Ireland on the visit to Ireland carried out by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) from 25 January to 5 February 2010. (http://www.cpt.coe.int/en/states/irl. htm). Accessed 18 March 2015.
- **Government of Ireland** (2001). *Mental Health Act* 2001. Dublin: Stationery Office.
- Johnston M (2014). "Telling masculine tales": tracing my embodied experience as a psychiatric ward security guard through ethnographic narrative writing. Sociology Mind 4, 161–173
- Kilian S, Swartz L, Joska J (2010). Competence of interpreters in a South African psychiatric hospital in translating key psychiatric terms. *Psychiatric Services* 61, 309–312.
- **Landis JR, Koch GG** (1977). The measurement of observer agreement for categorical data. *Biometrics* **33**, 159–174.
- McKenna K (2008). Linking Safety and Service: Together Creating Safer Places of Service. Health Service Executive: Ireland.
- Mental Health Commission (2014). Inspectorate of Mental Health Services (http://www.mhcirl.ie/Inspectorate _of_Mental_Health_Services/). Accessed 23 January 2014.
- Mental Health Commission (2006). Mental Health Commission's e-learning programme on the Mental Health Act 2001 (http://mhc.thelearningcentre.ie/default.asp). Accessed 18 April 2014.
- Mental Health Commission (2013). Approved centre inspection reports (http://www.mhcirl.ie/ Inspectorate_of_Mental_Health_Services/AC_IRs/). Accessed 26 September 2013–30 September 2013.
- **Psychiatric Nurses Association** (2010). A Mental Health Service in Crisis. Psychiatric Nurses Association: Ireland.
- Rogers A, Pilgrim D (2005). A Sociology of Mental Health and Illness. Open University Press: Berkshire.
- Smith J, Swartz L, Kilian S, Chiliza B (2013). Mediating words, mediating worlds: interpreting as hidden care work in a South African psychiatric institution. *Transcultural Psychiatry* **50**, 493–514.
- White DE (2003). Psychiatric hospital challenges for healthcare security officers. *Journal of Healthcare Protection Management* 19, 54–64.