Rate of involuntary admission in Dublin South West: a 5-year retrospective review

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Objective. International figures for involuntary admissions vary widely. Differences in legislation, professionals' ethics and public attitudes towards risk have been known to influence this rate. Comparing involuntary admission rates in different parts of the same country can help control for variability found between international studies. This study assessed the rates of involuntary admissions in the Dublin South West Mental Health Service compared with the rest of Ireland.

Methods. We examined the demographic and clinical profiles of all involuntary patients admitted to the acute psychiatric inpatient unit in Tallaght Hospital between 2007 and 2011. We compared the rate of admission in Tallaght with the rest of Ireland. Data gathered included all patients detained on Form 6 and Form 13 (change of status) looking at age, gender, diagnosis and number of patients who had a Mental Health Tribunal. Form 7 (renewal orders) was also examined.

We calculated the rate per 100 000 population per year of Form 6 admissions, Form 13 and Form 7 (certificate and renewal order by responsible consultant psychiatrist) using figures from the 2006 Census. All data were analysed using SPSS.

Results. The rate of involuntary admission in Tallaght Hospital was significantly lower compared with the rest of Ireland (Form 6: t = -11.2; p < 0.001, Form 13: t = -3.1; p = 0.04, Form 7: t = -13.9; p = 0.001). This difference was evident for all methods of involuntary detention and was also the case for Form 7 (renewal orders). Mental Health Tribunals were held for 59% of patients, a rate comparable with earlier findings described in publications, following the introduction of the new Mental Health Act.

Conclusions. Rates per 100 000 population were lower in Dublin South West compared with the rest of Ireland. The reasons for this are not clear. Further research comparing similar services in Ireland could explain these findings.

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Introduction

In medicine, involuntary admission is a practice unique to psychiatry and is based on the belief that some patients cannot recognise the need for hospital care because of the severity and acute symptoms of their illness (Priebe et al. 2010). Involuntary admission is common, and in 2013 there were 2132 involuntary admissions and 1193 renewal orders to approved centres in Ireland [Mental Health Commission (MHC), 2013]. Throughout the world, there is variability in the rates of involuntary admission due to different legislations and service deliveries across countries (Salize & Dressing, 2004). Indeed, in some countries (e.g. Portugal), involuntary admission as a practice does not exist; therefore, there is no legislation governing it. Zinkler & Priebe (2002) reported that variations in involuntary admission rates across Europe are influenced by professionals' ethics

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and attitudes, socio-demographic variables, the public's preoccupation about the risk arising from mental illness and the respective legal frameworks.

In Ireland, the Mental Health Act (MHA) 2001 was implemented in November 2006, replacing the Mental Treatment Act 1945. Irish legislation governing involuntary admission was standardised bringing practice in line with international human rights standards (Kelly, 2007). Approved centres were established for the reception and detention of all patients. The MHC was established 'to promote, encourage and foster the establishment and maintenance of high standards and good practice in the delivery of mental health services' (Irish Statute Book, 2001, Pt. 3 S. 33). The MHC is informed of all involuntary admissions and renewal orders and arranges legal representation and a Mental Health Tribunal within 21 days of the making of a new order.

A variety of factors have been associated with involuntary admission. In the ASAP study (Amsterdam Studies of Acute Psychiatry), police referral rather than general practitioner (GP) referral was the explanatory

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factor, and the authors found no evidence to support the hypothesis that ethnic background plays an independent role in involuntary admissions (van der Post *et al.* 2012). In a more recent study, involuntary admission was predicted by the severity of psychotic symptoms, aggressive behaviour, male gender, increased age, being single, lower levels of education, lower levels of functioning (GAF score), police contact and referral by physicians who did not know the patient (Hustoft *et al.* 2013).

In Ireland, about 10% of all admissions to approved centres are involuntary and repeated admissions are associated with the male gender, diagnosis of schizophrenia and related disorders and living in a rural community (Cunningham, 2012). There has been a small decrease in the rate of involuntary admission since the introduction of the MHA 2001, but there has been no change in the representativeness of diagnoses of individuals admitted involuntarily. Mental Health Tribunals are held for 57% of those admitted involuntarily (Ramsay *et al.* 2013).

International figures for involuntary admission vary widely not least due to different legislations in different countries. Comparing admission rates in different parts of the same country can help control for this. It can also help determine whether different levels of service provision such as Home-Based Treatment Teams (HBT) can influence admission rates. However, involuntary admission rates for each approved centre in Ireland are not published annually. With this in mind, we examined the rate of involuntary admission to the Dublin South West Mental Health Service and compared it with the rate of admissions in the rest of Ireland. Further, we examined whether the number of Mental Health Tribunals differed in Dublin South West compared with the rest of Ireland.

Methods

The Dublin South West Mental Health Service has a population of 253 046 (Central Statistics Office, 2006). It is an urban area close to Dublin city. It is divided into four General Adult sectors supported by one catchment area-wide Old Age service and one Rehabilitation/ Assertive Outreach Psychiatry service. Each sector is supported by an HBT and is equipped with a full multidisciplinary team. Inpatient care is provided in a 52-bed acute unit in the Tallaght Hospital. There are no private mental health hospitals within the area.

We gathered data on all patients admitted involuntarily to the acute unit of Tallaght Hospital between 2007 and 2011 from our involuntary admission register. We examined clinical and demographic profiles of patients detained on Form 6 (involuntary admission order for up to 21 days), Form 13 (certificate and

admission order to detain a voluntary patient) and Form 7 (certificate and renewal order), specifically looking at age, gender and diagnosis. Diagnosis was based on the hospital discharge register as recorded by a non-consultant hospital doctor, and was divided into the following six categories: schizophrenia and related disorders, bipolar disorder, depression, alcohol and substance misuse, organic psychiatric disorder and other psychiatric diagnosis.

We calculated the rate per 100 000 population per year of Form 6, Form 13 and Form 7 admissions using figures from the 2006 Census. We compared rates in Tallaght Hospital with the rest of Ireland, obtained from the MHC statistics activity (MHC, 2007–2011), using unpaired *t*-tests. We also calculated the rate per 100 000 of Mental Health Tribunals held in Tallaght Hospital and compared it with the rest of Ireland. All data were analysed using SPSS (2012).

Results

There were 430 involuntary admissions to the Tallaght Hospital between 2007 and 2011. Of these, 296 patients were detained on Form 6, whereas 134 had their status changed from voluntary to involuntary (Form 13) during their inpatient stay. Over the 5 years of the study, 285 Mental Health Tribunals were held and 130 patients' involuntary orders were renewed (Form 7).

Table 1 illustrates the characteristics of the sample. Most patients were male (n = 262; 61%), had a diagnosis of schizophrenia (n = 259; 60%) and just under two-thirds had a Mental Health Tribunal (n = 254; 59%). The diagnostic mix and patient characteristics were similar for patients detained on Form 6 and on Form 13 (Table 1).

Table 2 shows the total number of Form 6, Form 13 and Form 7 detentions for each year in Dublin South West and for the rest of Ireland. Table 3 shows the rate of involuntary admission (Form 6 and Form 13) and renewal orders (Form 7) per 100 000 population. The rate of involuntary admission and renewal order were lower in Tallaght Hospital compared with the rest of Ireland for each year of the study (Form 6: t = -11.2; p < 0.001, Form 13: t = -3.1; p = 0.04, Form 7: t = -13.9; p < 0.001). Similarly, the number of Mental Health Tribunals held per 100 000 population was significantly lower in Tallaght Hospital compared with the rest of Ireland (t = -8.8; p < 0.001).

Discussion

The main finding of this study was that the rate of involuntary detention in Tallaght Hospital was lower than the rest of Ireland. This difference was evident for Form 6 and Form 13 (change of status) admissions and also for patients detained on renewal orders (Form 7).

19 (4%)

28 (7%)

254 (59%)

166 (39%)

10 (2%)

	Form 6 ($n = 296$)	Section 23 ($n = 133$)	Total $(n = 429)$	
Age (years)	41.2 (s.d. 15.7)			
Gender	,			
Male	184 (62%)	78 (58%)	262 (61%)	
Female	112 (38%)	56 (42%)	168 (39%)	
Diagnoses				
Schizophrenia	179 (61%)	80 (60%)	259 (60%)	
Bipolar	46 (16%)	19 (14%)	65 (15%)	
Depression	18 (6%)	13 (10%)	31(7%)	
Substance abuse	18 (6%)	9 (7%)	27 (6%)	

3 (2%)

9 (7%)

78 (58%)

54 (40%)

2 (2%)

Table 1. Demographic profiles of involuntary patients (Form 6 and Section 23) in Tallaght Hospital

Table 2. Involuntary admissions to Dublin South West (DSW) service and rest of Ireland (2007–2011)

16 (5%)

19 (6%)

176 (60%)

112 (38%)

8 (2.7%)

	2007		2008		2009		2010		2011	
Population	DSW	Ireland								
Form 6	61	1439	64	1356	64	1370	50	1356	57	1414
Form 13 (regrade)	28	595	20	564	27	563	36	510	23	563
Form 7 (renewal order)	34	1262	25	1299	28	1135	24	1078	19	1087
Tribunals (held)	71	2248	61	2096	52	1882	51	1724	50	1771

Table 3. Involuntary admissions to Dublin South West (DSW) service and rest of Ireland per 100 000 population (2007–2011)

	2007		2008		2009		2010		2011	
Population per 100 000	DSW	Ireland								
Form 6	24	36	25	34	25	35	20	34	22	35
Form 13 (regrade)	11	14	8	14	11	14	14	13	9	14
Form 7 (renewal order)	13	31	10	32	11	28	9	27	8	27
Tribunals (held)	28	56	24	53	21	47	20	43	20	44

The rate of Mental Health Tribunals per 100 000 population was also lower in Tallaght Hospital, although the proportion of patients admitted who had a tribunal was similar to the findings of Ramsey *et al.* (2013).

The present study focused on the rate of involuntary admission in an urban catchment area and can serve as a reference point to compare with the rates of other approved centres in Ireland. One study found that the provision of social-psychiatric services including flat-sharing communities, day-care centres and labour rehabilitative centres decreased the numbers of

involuntary admissions (Emons *et al.* 2013). On a similar note, examining rates of involuntary admission to different approved centres in Ireland could help our understanding of the non-clinical factors associated with admission. This would help in determining whether different models of care (e.g. HBT, assertive outreach teams) can influence admission rates.

A variety of clinical and demographic factors are associated with involuntary admission. Braitman *et al.* (2014) reported that diagnosis does not affect the decision to hospitalise, whereas agitation, aggression

Organic

Other

Tribunal Yes

No

Transfer

towards others, being married as well as being referred by a doctor or family member increase the rate of involuntary hospitalisation. They also found that low GAF scores are strong predictors of involuntary admission. In a retrospective study, over a 6-year period, Juckel *et al.* (2014) found that elderly patients with dementia were the most frequent patient group admitted involuntarily. However, the availability of a locked ward on an acute unit did not affect involuntary admission rates. A 3-year study carried out by Xiao & Kelly (2012) in an inner city adult psychiatric unit in Ireland showed that involuntary admissions were higher amongst individuals from outside Ireland (33.9%) compared with those from Ireland (12%).

In Ireland, there has been a noted decline, 69% to 61%, in the number of spouses and relatives applying for the involuntary detention of a relative with a resulting rise in Police (Garda Siochana) applications from 16% to 23%. The use of an authorised officer has remained constant at 7% (Ramsay et al. 2013). In a study conducted by Dunne & Moloney (2012), there was a significant difference between GPs and consultant psychiatrists in relation to the criteria used for recommendation or admission to an approved centre, with 40% of GPs believing the patient to be a risk of immediate and serious harm to self or others compared with only 20% of consultant psychiatrists holding the same opinion.

Limitations

It was beyond the scope of this study to examine the clinical factors behind involuntary admission in Tallaght. A further limitation is the lack of a control group, as the numbers of involuntary admissions to individual approved centres are not published by the Health Research Board (HRB) or MHC. In their annual reports, neither the MHC nor the HRB publish separate figures for first admissions and re-admissions. Thus, the rate of involuntary admission in our study reflects the number of completed orders and not numbers of individual patients detained under the MHA 2001. Excluding re-admissions would give a better representation of the rate of involuntary admissions per head of population and remove the risk of results being skewed by the small proportion of patients having frequent re-admissions during the course of their illness.

A further limitation is those patients who do not have an involuntary admission order completed because they agree to stay as a voluntary patient or they are found by the consultant psychiatrist not to fulfil the criteria for detention. Comparing activity in an acute admission with some long-stay approved centres is also a potential limitation, as long-stay units naturally have a higher proportion of patients on renewal orders.

Conclusions

Rates per 100 000 population were lower in Dublin South West compared with the rest of Ireland. The reasons for this are not clear. Comparing involuntary admission between services in Ireland could help identify whether the structure of community mental health teams (e.g. availability of HBT, assertive outreach teams) influences the rate of involuntary admissions.

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