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# Exploring and explaining involuntary care: The relationship between psychiatric admission status, gender and other demographic and clinical variables

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ABSTRACT

Involuntary admission and treatment are features of psychiatric care in many countries, but the relationship between involuntary status and gender (among other factors) is not clear. We examined demographic and diagnostic factors associated with involuntary admission in a general adult psychiatry service in a deprived area of Dublin's north inner-city over a 7-year period (2008 to 2014 inclusive). Over this period, there were 1099 admissions, yielding an annual admission rate of 504.8 admissions per 100,000 population per year. When adjusted for deprivation, this rate (387.7) was lower than the national rate (413.9). Consistent with other inner-city areas in Dublin, 14.1% of admissions were involuntary, yielding an involuntary admission rate of 71.2 per 100,000 population per year (deprivation-adjusted rate: 54.8), which is higher than the national rate (39.4). After controlling for age, occupation, marital status and diagnosis, the only independent predictors of admission status were place of origin ($p < 0.001$) and male gender ($p = 0.001$). These findings are consistent with studies showing associations between male gender and involuntary status in the United States, New Zealand, Netherlands, Norway, Belgium, France, and Luxembourg. In contrast, female gender is associated with involuntary status in Switzerland, Brazil, and China. These cross-national differences are likely related to differing legal traditions and different criteria for involuntary admission, possibly related to varying emphases placed on "dangerousness" as a mandatory criterion for involuntary hospitalization. This merits further, cross-national study.



## 1. Introduction

Involuntary psychiatric admission and treatment are features of psychiatric care in many countries. Rates of involuntary admission vary between countries (Health and Social Care Information Centre, 2013): Ireland's rate is 44 involuntary admissions per 100,000 population per year (Daly & Walsh, 2014).

The precise determinants of involuntary admission are not clear. Associations have been identified between involuntary (as opposed to voluntary) status and reduced insight (Kelly et al., 2004), a diagnosis of schizophrenia or other psychotic illness, and severity of mental disorder (Mulder et al., 2008; Riecher, Rössler, Löffler, & Fätkenheuer, 1991; Salize & Dressing, 2004).

Other factors variously associated with involuntary admission status include perception of dangerousness (which is a requirement for involuntary admission in some countries) (Dressing & Salize, 2004), living away from home (Lay, Nordt, & Rössler, 2011) and socio-economic deprivation (Bindman, Tighe, Thornicroft, & Leese, 2002; Riecher et al., 1991), especially low social support (Webber & Huxley, 2004).

There are increased rates of involuntary admission among ethnic minorities in many countries: involuntary admission is associated with Maori rather than European ethnicity in New Zealand (Wheeler, Robinson, & Robinson, 2005) and being a "foreign national" in Switzerland, even after controlling for gender, age, diagnosis, and severity of mental disorder (Lay et al., 2001).

The relationship, if any, between gender and admission status is unclear. Establishing the nature of such a relationship, if it exists, is important for several reasons. First, any such relationship should influence evidence-based mental health service planning and possibly help understand differing pathways to care for women and men with severe mental disorder. Second, there may be issues relating to equality of treatment by mental health services: for example, if

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women and men have different risks of involuntary treatment, is this effect independent of psychiatric diagnosis or is it mediated by diagnosis or any other factor? Third, if gender is found independently to influence risk of involuntary admission then there may be human rights issues arising concerning the nature and implementation of mental health legislation, differential attitudes of mental health services to women and men, or potentially discriminatory practices by other parties (e.g., police).

In England, approximately 66% of patients detained in psychiatric hospitals are male (Health and Social Care Information Centre, 2013), and in Ireland, the gender imbalance, although less pronounced, is similar and consistent (McManus, McDonnell, & Whitty, 2015): men accounted for 57% of involuntary admissions in Ireland in 2009 (Daly & Walsh, 2010), 58% in 2010 (Daly & Walsh, 2011), 59% in 2011 (Daly & Walsh, 2012), 57% in 2012 (Daly & Walsh, 2013), and 58% in 2013 (Daly & Walsh, 2014).

Notwithstanding this excess of males over females at national levels, the research literature is very unclear as to whether or not there is a true, independent association between gender and admission status at individual level: some studies associate involuntary admission with male gender (Houston, Mariotto, & Hays, 2001; Hustoft, Larsen, Auestad, Joa, & Ruud, 2013; Mulder et al., 2008; Myklebust, Sørgaard, & Wynn, 2014; Riecher et al., 1991; Salize & Dressing, 2004; Wheeler et al., 2005); others show no relationship (Kelly et al., 2004; Lay et al., 2011); and some associate involuntary status with female gender (Chang, Ferreira, Ferreira, & Hirata, 2013; Eytan, Chatton, Safran, & Khazaal, 2013; Gou et al., 2014). There are also studies associating other coercive practises (e.g., restraint) with specific patient characteristics (Tarsitani et al., 2013), including male gender (Beghi, Peroni, Gabola, Rossetti, & Cornaggia, 2013; Knutzen et al., 2011).

In previous studies, we found no independent relationship between gender and involuntary admission status in Ireland on bi-variable or multi-variable testing, after controlling for age, place of origin, occupation, marital status and diagnosis (Kelly et al., 2015; Ng & Kelly, 2012). Our analyses covered relatively short periods of time; did not focus especially on the issue of gender; and contrasted with national Irish data, which show a consistent male preponderance (Daly & Walsh, 2014). Clearly, further study was needed.

Against this background, the purpose of the present paper is to explore the relationship between gender and admission status at an inpatient adult psychiatry unit in Ireland over a longer period (7 years) and to focus analysis and discussion on the relationships between gender, admission status, and other relevant variables.

In Ireland, mental health legislation has been substantially reformed over the past 15 years, most especially through the Mental Health Act 2001, which revised involuntary admission procedures, established mental health tribunals, and created a Mental Health Commission to promote high standards and protect human rights (Kelly, 2007a). On 1 November 2006, the mental health tribunal system came into operation as the new legislation was implemented in full. More detailed accounts of the 2001 Act are provided elsewhere (Kelly, 2006; Ní Mhaoláin & Kelly, 2009; Jabbar, Kelly, & Casey, 2010; O'Donoghue et al., 2011; Ng & Kelly, 2012; Ramsay, Roche, & O'Donoghue, 2013).

From a human rights perspective, Ireland's 2001 Act is generally comparable to equivalent legislation in, for example, England and has resulted in increased adherence with certain international human rights standards (Kelly, 2011). In common with many other jurisdictions, however, including England, mental health legislation in Ireland remains apparently non-compliant with various aspects of the United Nations' [UN] Convention on the Rights of Persons with Disabilities (CRPD; UN, 2006). More specifically, the CRPD states that "the existence of a disability shall in no case justify a deprivation of liberty" (Article 14(1)(b)), with the consequence that, if certain persons with mental disorder (e.g., some people with chronic schizophrenia) fit the UN definition of "persons with disabilities," then mental health legislation in Ireland, England, and elsewhere is clearly inconsistent with this provision (Bennett 2014; Kelly, 2014).

In addition, in its "General Comment No. 1" on Article 12 of the CRPD ("Equal recognition before the law"), the Committee on the Rights of Persons with Disabilities (2014) is clear that all forms of guardianship, conservatorship and mental health laws that permit forced treatment must be abolished in order to comply with Article 12. Against the background of these readings of Articles 12 and 14, it is clear that interpretation of the CRPD continues to evolve (Dawson, 2015), but it also remains the case that Ireland's 2001 Act has still improved adherence to relevant human rights standards in Ireland, even if there is still progress to be made (and greater clarity to be achieved) regarding the CRPD.

## 2. Methods

### 2.1. Setting

We studied all admissions under the Mater Catchment Area Adult Psychiatry Service at St Aloysius Ward in the Mater Misericordiae University Hospital, Dublin, over a 7-year period, from 1 January 2008 to 31 December 2014. St Aloysius Ward is an acute adult psychiatry inpatient unit with fifteen beds, which is registered as an approved centre under the Mental Health Act 2001 (i.e., provides inpatient treatment for voluntary and involuntary patients).

The Mater Catchment Area Adult Psychiatry Service is provided by the Mater Misericordiae University Hospital (a voluntary hospital, funded but not run by the Irish government), the Health Service Executive (Ireland's governmental provider of free mental health care) and St Vincent's Hospital, Fairview (another voluntary hospital). This service covers an inner-city catchment area of 31,100 people. Ireland's public mental health service is arranged on a strict catchment area basis, so that all public (non-fee-paying) psychiatry admissions of individuals resident within the geographical catchment area of this service *must* occur in this admission unit.

### 2.2. Data collection

For all admissions to the Mater Catchment Area Adult Psychiatry Service at St Aloysius Ward between 1 January 2008 and 31 December 2014, we recorded gender, date of birth, country of origin, occupation, marital status, date of admission, and date of discharge. We recorded clinical discharge diagnosis using the *International Classification of Diseases, Volume 10* (World Health Organization, 1992).

For patients whose status was involuntary for part or all of their admission, we recorded the date their status became involuntary and the criteria upon which this was based, as outlined in section 3(1) of the Mental Health Act 2001, as follows: (a) "because of the illness, disability or dementia, there is a serious likelihood of the person concerned causing immediate and serious harm to himself or herself or to other persons"; (b) "because of the severity of the illness, disability or dementia, the judgement of the person concerned is so impaired that failure to admit the person to an approved centre would be likely to lead to a serious deterioration in his or her condition or would prevent the administration of appropriate treatment that could be given only by such admission, and the reception, detention and treatment of the person concerned in an approved centre would be likely to benefit or alleviate the condition of that person to a material extent"; or (c) both (a) and (b).

We recorded the date involuntary status was terminated and method by which it was terminated, categorized as follows: (a) detention order revoked by responsible consultant psychiatrist, (b) detention order revoked by mental health tribunal, (c) detention order expired and not renewed, (d) patient transferred to another hospital while still detained, or (e) detention order remained valid as of 31 December 2014 (study end point).

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