



Use of Restrictive practices on males released from prison and entering acute mental health services

Prepared for the Office of the Chief Psychiatrist

September 2017



RESEARCH TEAM

Dr Chris Quinn: Clinical Nurse Consultant, Forensicare (Project Lead)

Dr Lillian De Bortoli: Research Fellow, Centre for Forensic Behavioural Science

Jo Ryan: Director of Nursing, Forensicare

Adjunct Professor Brian McKenna: Centre for Forensic Behavioural Science

Dr Rachael Fullam: Research Manager, Centre for Forensic Behavioural Science

Acknowledgements

Forensicare was commissioned by the Office of the Chief Psychiatrist, Department of Health and Human Services to carry out this research project. We thank the Office for their kind funding of the project. We would also like to thank Lachlan Rimes, the Senior Information Analyst Mental Health & Drugs Information, Analysis & Reporting Unit at the Department of Health and Human Services, and Karen Jones, the Health Information Manager at Forensicare for their kind assistance in the data retrieval processes.



Executive summary **4**

Introduction **5**

 Imprisonment and mental health 5

 Restrictive practices in inpatient settings in Victoria 5

 Assessment Orders 7

 Inpatient Mental Health Units 7

The current study **8**

 Research aims 8

 Research questions 8

 Methods 8

 Participants and matching 8

 Data Collection / Procedure 8

 Ethical considerations 9

 Consent and confidentiality 9

 Statistical analysis 10

 Results 10

 Sample group 10

 Demographics 11

 Clinical presentation 12

 Restrictive practices 13

Discussion **13**

Conclusions **14**

References **15**



Executive summary

The rate of imprisonment for mental health consumers is up to 25 times greater than that of persons from the general population (Barrenger and Draine, 2013, Huxter, 2013). The return to community following a period of imprisonment for mental health consumers is considered a critical time. There is a lack of understanding about the use of restrictive practices for males who have been released from prison and are subsequently admitted to an inpatient mental health unit. It is unclear whether the use of restrictive practices are more likely for those who have been released from prison compared with male consumers from the community. The research aims to better understand the clinical pathway and use of restrictive practices in males admitted from prison on an Assessment Order to acute inpatient mental health units. Specifically, the use and types of restrictive practices for males admitted on an Assessment Order from prison is compared to admissions involving males on Assessment Orders from the community.

A cross-sectional, comparative study research design was used to meet the aim of this project. On the basis that the prison sample comprised only of males diagnosed with a psychotic disorder, only individuals from the community with a diagnosis of psychosis were included in the analysis to minimise the effect of confounding factors upon the results. This research assists in our understanding of whether the use of restrictive practices following admission to acute mental health inpatient units for men who have recently been in prison is different to those of other males admitted from the community.

The findings from this research indicate that anecdotal concerns relating to males admitted to acute inpatient mental health services from prison require a greater amount of restrictive practices to manage risk is unfounded. Males admitted from prison were no more likely to be subject to restrictive interventions than males admitted from the community. The complex diagnostic picture of the prisoner consumer group may result in challenging behaviours that may threaten the physical and emotional safety of clinicians and other consumers in inpatient settings resulting in the anecdotal concerns. Attitudes by clinicians to consumers who have offending histories are often influenced by misinformation and lack of knowledge where a cycle of alienation and discrimination can occur (Martin and Ryan, 2011).

The researchers employed strong matching criteria to reduce bias, particularly in relation to the diagnosis of the mental illness and legal status. Specifically, only clients with a diagnosis of a psychotic disorder were included in the analysis. Further, the prison cohort sample size was small, and the examination of restrictive practices were only examined from two metropolitan inpatient units during a specific period. This may not represent the use of these practices in other settings at other times. There is no way of knowing whether the consumers from the community group were previously imprisoned and this is a major confounding factor. To overcome this difficulty, it will be necessary to conduct a data-linkage study that will identify individual consumers in the community sample who were previously imprisoned. A larger study over a longer period will improve the ability of researchers to match the community and prison consumer groups on several variables.



Introduction

Imprisonment and mental health

Adult prison populations within Victoria have been growing at alarming rates. In 2006, 3908 adults were imprisoned; in 2016 this population had grown to 6,520 representing a 67% increase over this 10-year period (Sentencing Advisory Council, 2016) equating to a 5% annual increase for the State's adult prison population (Sentencing Advisory Council, 2016). Put differently, in 2006 there were close to 100 prisoners per 100,000 adults in Victoria and in 2016, this increased to 138 per 100,000 adults (Sentencing Advisory Council, 2016). The rates of people experiencing mental illness within this population is grossly over-represented (Huxter, 2013). Within this prison population the rates of mental illness have been estimated at seven times greater than that of the general population (Huxter, 2013). Resulting from this is the labeling of prisons as the psychiatric asylums of the 21st Century (Cutcher et al., 2014).

The rate of imprisonment for mental health consumers is up to 25 times greater than that of persons from the general population (Barrenger and Draine, 2013, Huxter, 2013). International research has identified an increased prevalence of mental illness in particular the incidence of psychosis and depression in prison populations (Fazel and Baillargeon, 2011, Fazel and Seewald, 2012). In Victoria, the number of male prisoners experiencing mental illness requiring ongoing treatment has increased from 1,372 in 2009-2010 to 2,104 in 2013-2014, representing a 53% increase compared to an overall increase in male prisoner population of 29% during the same period (Victorian Auditor-General, 2014). The experience of being in prison with heightened security, punishment and control for this vulnerable group of people increases the risk of mental illness relapse or decline (Goomany and Dickinson, 2015).

The return to community following a period of imprisonment for mental health consumers is considered a critical time (Cutcher et al., 2014). At the time of release, it is important that a smooth transition and reintegration into society is facilitated by ensuring access to appropriate support from mental health and social services, housing and employment as well as providing social and community supports upon release (Barrenger and Draine, 2013, Caie, 2012; Cutcher et al., 2014). Increased stressors due to poor planning and a lack of supports post release, may lead to instability which contributes to poorer mental health outcomes, obstacles to recovery, increased stigmatisation, and, an increased risk of further offending (Caie, 2012; Cutcher et al., 2014, McKenna et al., 2015; Mezey et al., 2016; Wang et al., 2012). In cases where individuals released from prison are admitted to an inpatient mental health unit, there is little known about the likely clinical pathway for this group of vulnerable consumers.

Restrictive practices in inpatient settings in Victoria

The Mental Health Act (2014) *Vic.* (referred hereafter as **MHA 2014**) legislates the use of restrictive interventions in Victoria. The MHA 2014 provides that restrictive practices may only be used "after all reasonable and less restrictive options have been tried or considered and have been found to be unsuitable" (s105) and seclusion is only used when it "is necessary to prevent imminent and serious harm to the person or to another person" (s110).



The three main types of practices used in inpatient mental health units (IMHU) are:

- **Physical restraint** involves the skilled, hands-on immobilisation or physical restriction of a person;
- **Mechanical restraint** involves the application of devices to restrict a person's movement; and
- **Seclusion** is the sole confinement of a person to a room or any other enclosed space, from which it is not within the control of the person confined to leave, even if the person agrees to, or requests, such confinement (Department of Health, 2014).

In Australia, seclusion in mental health services is a common practice and tends to occur early in a person's admission. Happell & Gaskin (2011) report that up to 30% of seclusion events occur on the first day of admission with a further 20% on the second day. Seclusion tends to be used more frequently on weekdays than weekends, and less frequently at night (Happell and Gaskin, 2011). In addition, it tends to occur more frequently for men under the age of 50 years and for males who have been subjected to previous seclusion (Bullock et al., 2014). The most frequently secluded diagnostic group are consumers with psychosis (Knutzen et al., 2011, Noda et al., 2013, Soininen et al., 2013). Psychosis is a recognized risk factor for violence (Douglas et al., 2009, Fazel et al., 2016), and risk of harm to others is often the primary reason for seclusion (Knutzen et al., 2011, Noda et al., 2013, Soininen et al., 2013).

The National safety priorities in mental health: a national plan for reducing harm (National Mental Health Working Group, 2005) outlines four priority areas to improve safety which involves reducing the use of, or where possible, eliminating the use of all restrictive practices. More recently, the Chief Psychiatrist argued for reducing restrictive practices (Department of Health, 2014) on the basis that they are not therapeutic and may be harmful. Specifically, restrictive practices are found to be traumatising and may re-traumatise those with trauma histories, may result in serious injury, physical health risks and even death (Bullock et al., 2014, Department of Health, 2014, Hendryx et al., 2010, Ross et al., 2014). Happell and Gaskin (2011) suggest that restrictive practices are coercive experiences for consumers. Consumers feel angry and abandoned by the mental health service and believe that restrictive practices are used as a form of punishment (Bowers et al., 2012).

Despite the Chief Psychiatrist's position about restrictive practices not being therapeutic (Department of Health, 2014) and the potential for harm associated with the practices, clinicians continue to believe that restrictive practices are necessary and essential for managing inpatient aggression (Happell and Gaskin, 2011, Thomas et al., 2009).

Remand and sentenced correctional facilities are located in Melbourne; one of these is the Metropolitan Assessment Prison (MAP). At MAP, Forensicare provides mental health assessments and treatments for all male prisoners at initial reception and when a prisoner is regarded to be *at risk* of self-harm or harming another person. In addition, it provides treatment and mental health services to prisoners located at the Acute Assessment Unit in outpatient specialist consultations located within the prison.



Assessment Orders

Assessment Orders (AO) are placed on individuals with mental illness who need immediate treatment to prevent serious deterioration in their mental or physical health or to prevent serious self-harm or to another person (s29, MHA 2014).

Upon release, prisoners assessed to require immediate treatment or to be at risk of serious deterioration in their mental health are placed on an AO which provides that, they are detained at the nearest designated mental health service for further mental health assessment (Department of Health, 2014). As the first step in compulsory treatment, AOs allow an authorised psychiatrist to assess the person without consent, within 24 hours (s28, MHA 2014) and to determine whether the individual requires compulsory treatment under a community or inpatient Treatment Order (TO).

Inpatient Mental Health Units

In Melbourne, IMHUs are located at St Vincent's Hospital and the Royal Melbourne Hospital. All admissions in Victoria are subject to the MHA 2014 which aims to provide individuals with the best possible care and treatment in the least restrictive way. Individuals may be admitted to an IMHU as a voluntary consumer who are free to leave at any time, or, a compulsory (involuntary) consumer who must be assessed by a psychiatrist before being discharged.

The Acute Inpatient Service at St Vincent's Hospital (Inner East Mental Health Service Area) is a 44-bed inpatient unit providing short term inpatient treatment to people during the acute phase of mental illness including a six bed Extra Care Unit for people with more intensive care needs (St Vincent's Hospital, 2017).

The Adult Acute Inpatient Unit at Royal Melbourne Hospital (North West Mental Health Service Area) is a 29-bed admission unit for consumers who are experiencing extreme distress, and needing intensive support and treatment (North Western Mental Health, 2017).

Both St Vincent's and Royal Melbourne Hospitals provide voluntary and involuntary short-term inpatient management and treatment during an acute phase of mental illness, until the person has recovered enough to be treated effectively and safely in the community. The use of restrictive practices is strongly legislated (Department of Health, 2014) and the model of care for both inpatient settings align with a commitment to reducing and, where possible, eliminating restrictive practices.

Anecdotal reports from the units at St Vincent's Hospital and Royal Melbourne Hospital indicate that:

- the use of restrictive practices is more frequently implemented for males following a period of recent imprisonment compared to the admissions of other male consumers; and,
- recently imprisoned males experience longer hospital admissions compared to other male consumers.

In light of these reports, it is important to improve our understanding of the clinical pathway and specifically, the use of restrictive practices for males with a recent incarceration.



The current study

The current study will describe and compare restrictive practices for males admitted to acute inpatient mental health units (IMHU) from prison or the community.

Research aims

This study aims to understand whether the use, type and duration of restrictive practices for males admitted from prison is different to that of male consumers admitted from the community.

Research questions

1. Are there differences between the nature of admissions and clinical profiles for males admitted to IMHU following a period of imprisonment compared with males admitted from non-prison locations?
2. Do males admitted to IMHU following a period of imprisonment experience greater use of restrictive practices than males admitted from non-prison locations?
3. Is the use of restrictive practices (seclusion, mechanical restraint and physical restraint) different for males admitted following a period of recent imprisonment compared to males from non-prison locations?

Methods

A cross-sectional comparative study was established to determine whether the use, type and duration of restrictive and seclusion practices is different for males admitted from prison compared with community localities.

Participants and matching

Data were analysed for males admitted to the IMHU at the Royal Melbourne Hospital and St Vincent's Hospital during 2016. Given that concerns related only to males, the current research excludes females.

Individuals were matched on diagnosis and legal status:

- Only participants with a primary diagnosis of psychosis-related mental illness (schizophrenia, schizotypal and delusional disorders) were included in the analysis. The prison sample comprised only of individuals with these diagnoses, which are known to be associated with violence and therefore increasing the likelihood of implementing restrictive practices with these individuals; and,
- Only participants on an AO or a Treatment Order were included in the analysis.

Data Collection / Procedure

The MHA 2014 requires mandatory reporting for the use of restrictive practices for implemented in all IMHUs. This includes information relating to the frequency and duration of the use of physical restraint, mechanical restraint and seclusion for individuals in their care.

Two databases were interrogated to obtain data for this analysis.



Forensicare database

Forensicare maintains a database for all male prisoners in Victoria with whom there has been a contact. Identifiable information including the Statewide number was sourced from Forensicare about prisoners who, at the time of release from prison, were placed on an AO in 2016.

Client Management Interface /Operational Data Store (CMI/ODS)

The CMI/ODS is the Victoria's public mental health system database and is used to store a range of core reporting requirements including caseload analysis, consumer outcome measurements and all client service-level information. In addition to demographic client information, clinical information for primary diagnoses, based on ICD-10 coding at first admission, was also sourced from CMI/ODS (schizophrenia, schizotypal and delusional disorders; affective disorders; anxiety disorders; behavioural syndromes; neurodevelopmental disorders; or dementia and other organic disorders). Information extracted about restrictive interventions included the reasons for, and history of, restrictive practices along with the frequency and duration of the restrictive practice.

There were several steps in the process to developing a database for analysis.

1. Forensicare database was interrogated to create a list of male prisoners placed on an AO at the time of release (including Statewide numbers).
2. The CMI/ODS was interrogated to create a list of all male admissions to the IMHU at the Royal Melbourne Hospital and St Vincent's Hospital during 2016. See Appendix 1 for a complete list of variables extracted. Statewide unit numbers from Forensicare were used to identify those male admissions who were released from prison and were admitted to a target IMHU.

The report received from the Department of Health and Human Services did not contain any identifiable data and comprised information relating to all male admissions along with restrictive practices during the admissions to the two target services during the calendar year of 2016.

Ethical considerations

Approval to conduct the research was obtained from Forensicare's Research Committee and from Swinburne University's Human Research Ethics Committee (SHR Project 2017/045). All researchers involved in this research abide by the principles of justice, beneficence and respect. These principles ensure that no person will be placed in a position of harm and that human rights are protected (Polit and Beck, 2013). Furthermore, the researchers have an obligation to ensure that the research is conducted in an ethical manner along with the responsibility to ensure that their interpretation of the data and the findings were not manipulated.

Consent and confidentiality

A waiver of consent was sought pursuant to s95 of the *Privacy Act 1988*. Researchers were granted a waiver of consent for the following reasons: the large sample size meant it would be logistically impossible for researchers to identify or contact each participant to gain informed consent; the privacy of participants was protected in the protocol as data returned to the researches was de-identified.



Statistical analysis

Statistical analyses were carried out using Statistical Package for Social Sciences (IBM SPSS Statistics), Version 23.0. Associations between group status (prison vs. community) and key categorical variables were examined using Chi-square(χ^2) analyses and reported in numbers and percentages. Fisher's exact p values were used during Chi-square analyses when more than 20% of cells contained expected counts of less than 5. Where more than 25% of cells contained expected counts of less than 5, Chi-square analysis was not performed. Continuous variables such as frequencies and durations of restraints or seclusions that were not normally distributed, were compared across groups using Mann-Whitney U tests. To account for the different lengths of admission, rates per day were used to determine the frequency and the duration of restrictive practices. For normally distributed and continuous data such as age, t-tests are reported using means and standard deviations. Analyses focused on the data from the first admission.

Results

A complete data set comprised 810 males admitted to the IMHUs during 2016. This group comprised 26 males admitted from the prison and a further 784 males admitted from a non-prison location. Of these, 457 males had a primary diagnosis of schizophrenia, schizotypal or delusional disorders. Of these, 26 males were admitted from the prison and 431 males were admitted from a non-prison location.

Sample group

Of the 457 individuals, 294 were admitted under an AO or a TO. Of these, 25 comprised the prison consumer sample and 269 comprised the community consumer sample. The analyses in the remainder of this report were conducted on those individuals who were admitted under an AO or subsequently further assessed and placed on a TO. See Figure 1.

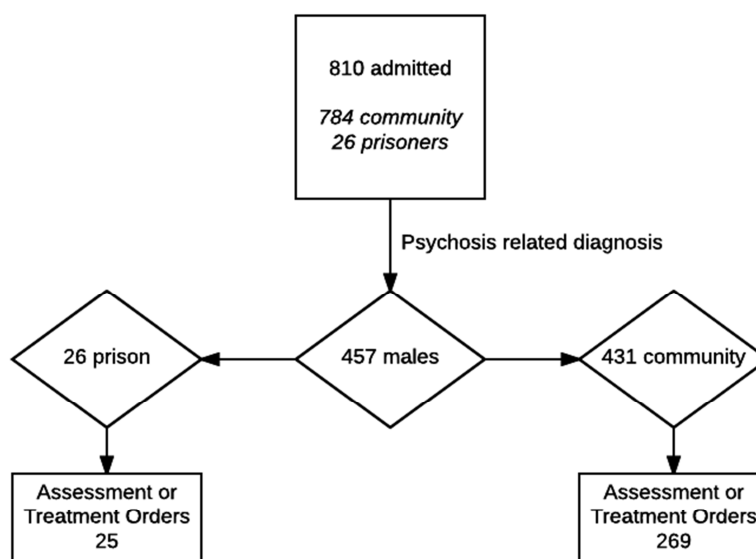


Figure 1. Flow chart of cases selected for analysis



Demographics

The mean age of consumers from the community was significantly older than consumers from the prison ($M_{\text{Prison}} = 34.72, SD = 7.51; M_{\text{Community}} = 38.57, SD = 11.18, t(34.8) = 2.34, p = 0.025$).

Comparisons between prison and community samples are displayed in Table 1. Notably, where statistical comparisons were possible, all comparisons between the groups indicate no significant association between demographic variables and sample type (prison vs. community). The majority of the sample was born in Australia, preferred to speak English and were single. Few consumers were of Aboriginal heritage. Most commonly, sample consumers had completed some or all secondary education and were unemployed. The majority of the prison consumer sample lived alone compared with the community consumer sample who most commonly lived with others, however this difference was not significant.

Table 1. Demographics at first admission in 2016

	n ^a	Admission source		P
		Prison n (%)	Community n (%)	
Country of birth	286			
<i>Australia</i>		21 (84.0)	182 (69.7)	0.375
<i>Other</i>		4 (16.0)	79 (30.3)	
Preferred language	294			
<i>English</i>		25 (100.0)	251 (93.3)	0.381
<i>Other</i>		-	18 (6.7)	
Indigenous status	289			
<i>ATSI</i>		2 (8.3)	3 (1.1)	NA ^c
<i>Non-ATSI</i>		22 (91.7)	262 (98.9)	
Current marital status	258			
<i>Married or de facto</i>		1 (4.5)	10 (4.2)	1.0
<i>Single^b</i>		21 (95.5)	226 (95.8)	
Highest level of education	178			
<i>Primary</i>		-	3 (1.8)	NA ^c
<i>Secondary (incomplete)</i>		5 (55.6)	73 (43.2)	
<i>Secondary (complete)</i>		3 (33.3)	48 (28.4)	
<i>Vocational</i>		-	2 (1.2)	
<i>Tertiary</i>		1 (11.1)	42 (24.9)	
<i>Other</i>		-	1 (0.6)	
Employment status	257			
<i>Employed</i>		-	22 (9.3)	NA ^c
<i>Unemployed/pensioner</i>		21 (87.3)	206 (87.3)	
<i>Student</i>		-	7 (3.0)	
<i>Other</i>		-	1 (0.4)	
Living arrangements	253			
<i>Alone</i>		8 (47.1)	40 (37.4)	0.524
<i>With others</i>		7 (41.2)	57 (53.3)	
<i>Other</i>		2 (11.8)	10 (9.3)	

Notes. ^a Data missing for demographics as listed in the table: 8, 0, 5, 36, 116, 37, 41, respectively.

^b Single category includes the following responses: single, divorced, separated.

^c Small cell sizes precluded statistical analyses of these variables



Clinical presentation

Table 2 (below) indicates differences between the prison and community groups for a number of clinical related variables.

Although there were different proportions of prisoner and community admissions to the campuses, prison consumers were more likely to be admitted to the Royal Melbourne Hospital compared with the community sample ($\chi^2(1) = 5.66, p=0.017$). However, the prison sample were no more likely to have an emergency admission type than the community sample ($\chi^2(1) = 3.43, p=0.558$).

Compared with the community sample however, consumers from the prison sample were more likely to have been diagnosed with a personality disorder ($\chi^2(1) = 19.588, p=0.001$) or a substance use disorder ($\chi^2(1) = 8.11, p=0.004$) but no more likely to have been diagnosed with an ID ($\chi^2(1) = 0.030, p = 0.595$) or be at risk of self-harm or harm to others ($\chi^2(1) = 1.37, p = 0.618$; $\chi^2(1) = 0.07, p=0.787$ respectively).

Table 2. Clinical data at first admission.

	Admission source		<i>p</i>
	Prison (n=26) <i>n</i> (%)	Community (n=269) <i>n</i> (%)	
Admission campus			
<i>IWAMHS</i> ¹	21 (84.0)	161 (59.9)	0.017
<i>St Vincent's</i>	4 (16.0)	108 (40.1)	
Admission types			
<i>Emergency</i>	19 (76.0)	181 (67.3)	0.558
<i>Planned</i>	6 (24.0)	76 (28.3)	
<i>Statistical admission</i>	-	12 (4.4)	
Previous admissions	24 (96.0)	216 (80.3)	0.058
Previous restrictive practices	13 (52.0)	124 (46.1)	0.406
Comorbidities			
<i>Personality disorder</i>	10 (40.0)	26 (9.7)	0.001
<i>Intellectual disability</i>	1 (4.0)	9 (3.3)	0.595
<i>Alcohol or substance use disorder</i>	18 (72.0)	114 (42.4)	0.004
Harm to self	-	14 (5.2)	0.618
Harm to others	5 (20.0)	48 (17.6)	0.787

Further, the prison sample were no more likely than the community sample to have had a prior admission to an IMHU ($\chi^2(1) = 3.76, p=0.058$) or to have been subject to prior restraint ($\chi^2(1) = 0.32, p=0.406$). In relation to the first admission, there was similarly no difference between the samples for the length of stay (in days) ($M_{\text{Prison}} = 11.7$; $M_{\text{Community}} = 6.89$; $U = 2669.50, p=0.088$).

¹ Inner West Area Mental Health Services



Restrictive practices

Table 3 demonstrates the proportion of each group that were subject to restrictive practices during their admission. Overall, individuals in the prison sample were no more likely to be subject to a restrictive intervention (physical, mechanical or seclusion) than the community sample ($\chi^2(1) = .99$, $p=0.993$). Very few patients in each sample experienced any type of restrictive intervention during the admission, and there were no significant associations between each the likelihood of being subject to each intervention subtype and sample².

Table 3. Proportion of patients in each group who were subject to restrictive practices during their first admission.

	Admission source		<i>p</i>
	Prison (n=26)	Community (n=269)	
	<i>n</i> (%)	<i>n</i> (%)	
Physical restraint	2 (8.0)	31 (11.5)	1.00
Mechanical restraint	0 (0)	2 (0.7)	NA ^a
Seclusion	3 (12.0)	50 (18.6)	0.588
Any restrictive intervention	5 (20.0)	54 (20.1)	0.993

^aSmall cell counts precluded statistical examination

Discussion

Consumers with recent imprisonment are well known to area mental health services with previous admissions that exceed those of other admitted males. The researchers though have been conservative in identifying a trend effect related to prior admissions and length of stay in the prison sample. In a larger study with a more balanced sample size significance may have been found. The anecdotal concerns that male consumers admitted to acute inpatient mental health services from prison require a greater amount of restrictive practices to manage risk is unfounded. The consumers in the prison sample were no more likely to be subject to physical restraint, mechanical restraint or seclusion when compared to the community consumer sample. The complex diagnostic picture of the prisoner consumer group may result in challenging behaviours that may threaten the physical and emotional safety of clinicians and other consumers in inpatient settings resulting in the anecdotal concerns. Attitudes by clinicians to consumers who have offending histories are often influenced by misinformation and lack of knowledge where a cycle of alienation and discrimination can occur (Martin and Ryan, 2011). Certainly, the complexity of a greater likelihood of having a secondary

² Small cell counts precluded an examination of mechanical restraint



diagnosis of personality disorder and alcohol or substance use disorder would have a bearing on length of stay and may have an influence on the attitudes of clinicians towards these consumers.

The policy where males with no current address at time of separation from MAP fall into the catchment area of Royal Melbourne Hospital accounts for the disproportionate numbers of males from prison admitted there and may have a bearing on the reported concerns from the clinicians at this inpatient setting. Exploring models of care such as forensic assertive community treatment (FACT) teams in the United States provide forensic intensive case management should be considered. There is mounting evidence suggesting that FACT teams can reduce hospitalisations for consumers on separation from prison (Cuddeback et al., 2008, Lamberti et al., 2011), and may ease the perception of inpatient burden for clinicians.

The researchers employed strong matching criteria to reduce bias, however other factors may have had a bearing on the research that were not measured for. The prison consumer cohort sample size was small, and the examination of restrictive practices were only examined from two metropolitan inpatient units during a specific time period and may not represent the use of these practices in other settings at other times.

Conclusions

In this study, the use of restrictive practices for males from prison and the community admitted on Assessment Orders with a diagnosis of psychosis at two metropolitan inpatient units were examined. The comparisons between the community and prison consumer groups indicate no significant difference in the implementation of any form of restrictive practice including seclusion. The findings did show that males admitted from prison were more likely to have a secondary diagnosis of personality disorder accompanied with an alcohol or other substance use disorder. It is difficult to control for these variables given the small prison consumer group. Given the limited documentation of personality disorder diagnoses, it is unlikely that this variable is reflective of the true prevalence of personality disorders in the group.

The study has limitations. There were limited number of males in the prison consumer sample. This may be addressed by increasing the period of study to more than 12 months. There is no way of knowing whether the consumers from the community group were previously imprisoned and this is a major confounding factor. To overcome this difficulty, it will be necessary to conduct a data-linkage study that will identify individual consumers in the community sample who were previously imprisoned. A larger study over a longer period will improve the ability of researchers to match the community and prison consumer groups on several variables. Other factors could be responsible for the anecdotal concerns around males admitted to the inpatient mental health units with a recent history of imprisonment. Further research is recommended to explore the interpersonal relationships and caring culture between clinicians and admitted consumers with a recent history of imprisonment.



References

Mental Health Act 2014,. Victoria.

- Barrenger, S.L., Draine, J., 2013. "You Don't Get No Help": The Role of Community Context in Effectiveness of Evidence-Based Treatments for People with Mental Illness Leaving Prison for High Risk Environments. *American Journal of Psychiatric Rehabilitation* 16 (2), 154-178.
- Bowers, L., Ross, J., Nijman, H., Muir-Cochrane, E., Noorthoorn, E., Stewart, D., 2012. The scope for replacing seclusion with time out in acute inpatient psychiatry in England. *Journal of Advanced Nursing* 68 (4), 826-835.
- Bullock, R., McKenna, B., Kelly, T., Furness, T., Tacey, M., 2014. When reduction strategies are put in place and mental health consumers are still secluded: An analysis of clinical and sociodemographic characteristics. *International Journal of Mental Health Nursing* 23 (6), 506-512.
- Caie, J., 2012. Climbing the walls: prison mental health and community engagement. *British Journal of Nursing* 21 (11), 658-662.
- Cuddeback, G.S., Morrissey, J.P., Cusack, K.J., Cuddeback, G.S., Morrissey, J.P., Cusack, K.J., 2008. How many forensic assertive community treatment teams do we need? *Psychiatric Services* 59 (2), 205-208.
- Cutcher, Z., Degenhardt, L., Alati, R., Kinner, S.A., 2014. Poor health and social outcomes for ex-prisoners with a history of mental disorder: a longitudinal study. *Australian & New Zealand Journal of Public Health* 38 (5), 424-429.
- Department of Health, 2014. The Mental Health Bill 2014 An explanatory guide
- Department of Health, 2014. Restrictive intervention in designated mental health services. Chief Psychiatrist Guideline. State Government of Victoria, Melbourne.
- Douglas, K.S., Guy, L.S., Hart, S.D., 2009. Psychosis as a risk factor for violence to others: A meta-analysis. *Psychological Bulletin* 135 (5), 679-706.
- Fazel, S., Baillargeon, J., 2011. The health of prisoners. *Lancet* 377 (9769), 956-965.
- Fazel, S., Seewald, K., 2012. Severe mental illness in 33 588 prisoners worldwide: Systematic review and meta-regression analysis. *The British Journal of Psychiatry* 200 (5), 364-373.
- Fazel, S., Wolf, A., Fimińska, Z., Larsson, H., 2016. Mortality, Rehospitalisation and Violent Crime in Forensic Psychiatric Patients Discharged from Hospital: Rates and Risk Factors. *PLoS ONE* 11 (5), 1-14.
- Goomany, A., Dickinson, T., 2015. The influence of prison climate on the mental health of adult prisoners: a literature review. *Journal of Psychiatric & Mental Health Nursing* 22 (6), 413-422.
- Happell, B., Gaskin, C.J., 2011. Exploring patterns of seclusion use in Australian mental health services. *Archives of Psychiatric Nursing* 25 (5), e1-e8.
- Hendryx, M., Trusevich, Y., Coyle, F., Short, R., Roll, J., 2010. The Distribution and Frequency of Seclusion and/or Restraint among Psychiatric Inpatients. *Journal of Behavioral Health Services & Research* 37 (2), 272-281.
- Huxter, M.J., 2013. Prisons: the psychiatric institution of last resort? *Journal of Psychiatric & Mental Health Nursing* 20 (8), 735-743.



- Knutzen, M., Mjosund, N.H., Eidhammer, G., Lorentzen, S., Opjordsmoen, S., Sandvik, L., Friis, S., 2011. Characteristics of psychiatric inpatients who experienced restraint and those who did not: A case-control study. *Psychiatric Services* 62 (5), 492-497.
- Lamberti, J.S., Deem, A., Weisman, R.L., LaDuke, C., 2011. The role of probation in forensic assertive community treatment. *Psychiatric Services (Washington, D.C.)* 62 (4), 418-421.
- Martin, T., Ryan, J., 2011. Forensic mental health nursing. In: Edward, K.I., Munro, I., Robins, A. and Welch, A. (Ed.), *Mental health nursing dimensions of praxis*. Oxford University Press, Victoria, pp. 443-462.
- McKenna, B., Furness, T. & Maguire, T. 2014. *A Literature Review and Policy Analysis on the Practice of Restrictive Interventions*. Melbourne: State of Victoria
- McKenna, B., Skipworth, J., Tapsell, R., Madell, D., Pillai, K., Simpson, A., Cavney, J., Rouse, P., 2015. A prison mental health in-reach model informed by assertive community treatment principles: evaluation of its impact on planning during the pre-release period, community mental health service engagement and reoffending. *Criminal Behaviour & Mental Health* 25 (5), 429-439.
- Mezey, G., Youngman, H., Kretzschmar, I., White, S., 2016. Stigma and discrimination in mentally disordered offender patients—A comparison with a non-forensic population. *Journal of Forensic Psychiatry & Psychology* 27 (4), 517-529.
- National Mental Health Working Group, 2005. *National safety priorities in mental health: a national plan for reducing harm*. Commonwealth of Australia, Canberra.
- Noda, T., Sugiyama, N., Sato, M., Ito, H., Sailas, E., Putkonen, H., Kontio, R., Joffe, G., 2013. Influence of patient characteristics on duration of seclusion/restraint in acute psychiatric settings in Japan. *Psychiatry & Clinical Neurosciences* 67 (6), 405-411.
- North Western Mental Health, 2017. *Adult Acute Inpatient Units*.
- Ross, D., Campbell, J., Dyer, A., 2014. Fostering Trauma-Free Mental Health Workplace Cultures and Reducing Seclusion and Restraint. *Social Alternatives* 33 (3), 37-45.
- Sentencing Advisory Council, 2016. *Victoria's Prison Population 2005 to 2016*. State Government Victoria, Melbourne.
- Soininen, P., Putkonen, H., Joffe, G., Korkeila, J., Puukka, P., Pitkänen, A., Välimäki, M., 2013. Does experienced seclusion or restraint affect psychiatric patients' subjective quality of life at discharge? *International Journal of Mental Health Systems* 7 (1), 28.
- St Vincent's Hospital, 2017. *Mental Health Services*.
- Thomas, S.D.M., Daffern, M., Martin, T., Ogloff, J.R.P., Thomson, L.D.G., Ferguson, M., 2009. Factors associated with seclusion in a statewide forensic psychiatric service in Australia over a 2-year period. *International Journal of Mental Health Nursing* 18 (1), 2-9.
- Victorian Auditor-General, 2014. *Mental Health Strategies for the Justice System*.
- Wang, E.A., Hong, C.S., Shavit, S., Sanders, R., Kessell, E., Kushel, M.B., 2012. Engaging individuals recently released from prison into primary care: A randomized trial. *American Journal of Public Health* 102 (9), e22-e29.



Appendix 1

Socio-demographic information						
Male		Country of birth				
Age turned this year (July 2015-June 2016)?						
English is a second language	Yes	No		Don't know		
Indigenous	Yes	No		Don't know		
Education			Current Employment			
Secondary school completed prior year 10			Student			
Secondary school completed to year 10			Homemaker/child care			
Secondary school completed to year 12			Retired			
Tertiary attendance			Unemployed			
Tertiary qualification			Part time work			
Other			Full time work			
			Other (specify)			
Living arrangement (on admission)			Admission source			
Alone			Community			
Alone with children			Emergency department			
With partner			Transfer from other Unit			
Family / friends			Prison			
Shared housing			Other (specify)			
Supported housing			Involvement of police on admission			
No fixed abode						
Other						
Clinical information						
Legal status on admission (state)						
Previous admissions to any mental health hospital	Yes	No		Don't know		
Spent time in prison for any offence	Yes	No		Don't know		
Primary diagnosis			Axis 2 diagnosis			
Major depressive disorder			Personality disorder (Specify)			
Bipolar disorder			Intellectual disability			
Schizophrenia			Don't know			
Schizoaffective disorder			Alcohol / substance use on admission			
Anxiety disorder			Alcohol disorder			
Other (specify)			Substance use disorder			
Undiagnosed			Nil		Don't know	
Restrictive Interventions (RI)						
RI reason: Risk of harm to self	Yes	No		Don't know		
RI reason: Risk of harm to others	Yes	No		Don't know		
Past history of RI	Yes	No		Don't know		
Physical restraint						
Physical restraint during admission	Yes	No		Don't know		
Frequency of physical restraint this admission (state number)						
Total time in minutes for all occasions of physical restraint						
Mechanical restraint						
Mechanical restraint during admission	Yes	No		Don't know		
Frequency of mechanical restraint this admission (state number)						
Total time in minutes for all occasions of mechanical restraint						
Seclusion						
Seclusion during admission	Yes	No		Don't know		
Frequency of seclusion during this admission (state number)						
Total time in minutes for all occasions of seclusion during admission						