

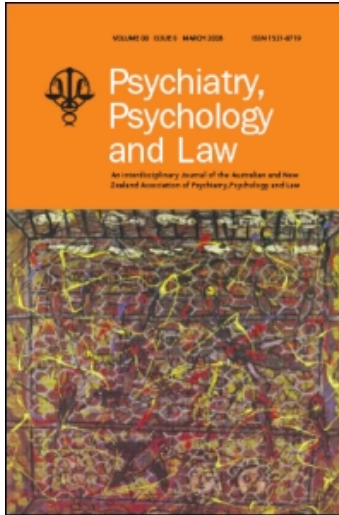
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Lynne S. Webber^a; Frank Lambrick^a; Mandy Donley^a; Moira Buchholtz^a; Jeffrey B. Chan^a; Rod Carracher^a; Gunvant Patel^b

^a Office of the Senior Practitioner, Department of Human Services, Victoria, Australia ^b Forensicare, Melbourne, Victoria, Australia

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Restraint and Seclusion of People on Compulsory Treatment Orders in Victoria, Australia in 2008–2009

Lynne S. Webber^a, Frank Lambrick^a, Mandy Donley^a, Moira Buchholtz^a,
Jeffrey B. Chan^a, Rod Carracher^a and Gunvant Patel^b

^aOffice of the Senior Practitioner, Department of Human Services, Victoria, Australia; ^bForensicare, Melbourne, Victoria, Australia

In Victoria, people with an intellectual disability who have shown behaviour that is a significant risk of serious harm to others may be detained within government-funded disability accommodation by either a court or civil order. The aim of such orders is both to protect the public and at the same time provide treatment to the person with a disability, so that the person will be able to return to live more independently within the community. Little is known about the characteristics or use of restraint and seclusion with this particular group. Thus, the aim of this study was to examine this group's characteristics and compare the use of restraint and seclusion to other people with an intellectual disability who were subjected to restraint and seclusion, but not detained. The practice and policy implications of the results are discussed from an interdisciplinary perspective with recommendations for professionals working in the field.

Key words: challenging behaviour; intellectual disabilities; restraint; restrictive interventions; seclusion; treatment; treatment orders.

People who have an intellectual disability and who either offend or pose a significant risk of serious harm to another person in the State of Victoria may be detained within government-funded disability accommodation for treatment under some form of court or civil order known as compulsory treatment orders. The aim of compulsory treatment orders is to ensure public safety and at the same time, provide treatment to the person with a disability so the person can eventually return to live more independently in the community. The group of people on compulsory treatment orders in Victoria may include people who have committed some form of offence

against other people (e.g., sex offences, arson, violence towards others), or engage in behaviours that place others in the community at significant risk of serious harm such as physical aggression towards others. Given that the legislation underpinning this order is recent, having come into force in July 2007, little is known about the characteristics or needs of this particular group of people, or the restrictive interventions they experience while in detention. This information is critical in order to maximize the likelihood that treatments will be targeted to individual needs and ultimately successfully move people into more independent living in

Correspondence: Dr. Lynne Webber, Research & Development, Office of the Senior Practitioner, Melbourne, Australia. Email: lynne.webber@dhs.vic.gov.au

the community on the cessation of their order.

The Senior Practitioner was established in 2007 by the Disability Act (2006) (Vic) in Victoria to protect the rights of people with a disability who are subjected to restrictive interventions as well as ensure that appropriate standards are complied with. All people who are subjected to restrictive interventions (i.e., defined in Victoria as chemical restraint, mechanical restraint, and seclusion) who receive a disability service in the State of Victoria, including those people on compulsory treatment orders, must be reported to the Senior Practitioner. This provides a unique opportunity to examine closely both the needs and treatment of the group on compulsory treatment orders and evaluate the success of treatment programmes over time. According to the Disability Act (2006), chemical restraint, mechanical restraint, and seclusion can only be used if the person shows risk of harm to self and others and there is no less restrictive option available to prevent harm to self and others. Compulsory treatment orders can only be applied by the Victorian Civil and Administrative Tribunal if the person poses actual, or risk of, serious harm to others.

A significant proportion of the compulsory treatment order population comprises people who have formally come into contact with the criminal justice system. The characteristics, assessment, and treatment approaches for this population has been subject to a growing body of research over recent years. This population tends to function within the mild to borderline levels of intellectual disability. Previous research suggests they are mostly young and male, and have a history of abuse and neglect (Glaser & Deane, 1999; Holland, Clare, & Mukhopadhyay, 2002; Holland, Persson, McClelland, & Berends, 2007). They are most likely to have come from disruptive family backgrounds, with other family members having criminal

backgrounds (Glaser & Deane, 1999; Holland et al., 2002). They have histories of reported childhood difficulties, placements within specialist schooling environments, and high rates of mental illness (Glaser & Deane, 1999; Lindsay, Steele, Smith, Quinn, & Allan, 2006). They often go on to experience high levels of unemployment and generally unstable lifestyles (Glaser & Deane, 1999).

In terms of offence-specific characteristics, Holland et al. (2007) conducted a systematic study on prisoners with an intellectual disability within the Victorian system between 2003 and 2006. Their sample consisted of 346 prisoners of whom 102 had been assessed as having an intellectual disability. They found that the prisoners with an intellectual disability in comparison to the other group had three times the youth detention rate, a greater number of community corrections orders, a greater number of prior sentences, and remand-only periods of imprisonment. They had higher security ratings within the prison system and were more likely to be released with a higher security rating than the other group. They were also more likely to be denied parole or be deferred from their earliest eligibility date. Prisoners with an intellectual disability exhibited a similar range of offences as the other group but had higher rates of property offences and were less likely to have had a drug offence. Finally, this group also had a greater number of prison incidents recorded against them, the most common of which were related to assaults and fights. Based on this research, it appears appropriate that alternative sentencing options could provide a significant advantage to at least a part of this population.

Treatment programmes for offenders with intellectual disability have also undergone significant development over the last 15 years. Structured cognitive behavioural programmes have been developed for the treatment of anger and aggression (Taylor,

Novaco, Gillmer, Robertson, & Thorne, 2005; Taylor, Novaco, & Johnson, 2009), sexual offending (Lindsay, Marshall, Neilson, Quinn, & Smith, 1998a; Lindsay, Neilson, Morrison, & Smith, 1998b; Lindsay & Smith, 1998; Rose, Jenkins, O'Connor, Jones, & Felce, 2002), and fire setting (Taylor, Robertson, Thorne, Belshaw, & Watson, 2006; Taylor, Thorne, Robertson, & Avery, 2002). However, none of these studies have used randomized control trials, although the anger and aggression studies that have employed "waiting list" controls have shown promising results.

Other work that has examined psychosocial interventions for adults with a dual disability has found weak evidence for the effectiveness of psychosocial interventions (Gustafsson et al., 2009). Gustafsson et al. (2009) concluded that while there was some evidence that cognitive-behavioural methods, such as relaxation, assertiveness training with problem-solving and anger management lead to a decrease in aggressive behaviour at the end of treatment, it was often not maintained over time at follow-up. Unfortunately, they found that many studies could not be included in the review because they were low quality in terms of defining challenging behaviours and the data kept.

Apart from psycho-social interventions such as cognitive behavioural treatment, the most common intervention used for aggressive behaviour is pharmacotherapy, mostly through the administration of routine (on a regular basis) or *Pro Re Nata* (PRN (as required)) medication as a form of chemical restraint. Chemical restraint is defined in Victoria by the Disability Act (2006) as any medication that is primarily used to control behaviour that is not being used to treat an underlying physical or mental illness. Psychotropics such as antipsychotics (otherwise known as major tranquilizers) used in the treatment of psychosis are often widely used as chemical restraints (Antonacci,

Manuel, & Davis, 2008; Tsiouris, 2010; Webber, McVilly, Stevenson, & Chan, in press). Webber et al. (in press) reported that half of the people administered chemical restraint by disability services in Victoria in 2007–2008 were administered an antipsychotic medication. However, recent research has shown a lack of evidence-based efficacy of this medication for people with an intellectual disability (Tyrer et al., 2008). Indeed, Tyrer et al. (2008) found that a placebo group, rather than a group on antipsychotics showed the greatest change in behaviour.

Anticonvulsants are the second most commonly used psychotropic medication followed by antidepressants and mood stabilizers such as lithium carbonate. Opioid antagonists such as naltrexone are also used, although their use is highly contradictory since their use is based on the largely unsubstantiated premise that some self-injurious behaviour may involve a kind of physiological response that is similar to addiction (Antonacci et al., 2008; Tsiouris, 2010).

Another medication commonly used for people who have committed sexual offences, both with and without an intellectual disability is anti-libidinal medications, in particular anti-androgens. Anti-androgen medication has been found to influence sexual behaviour by reducing hormone levels associated with sexual urges to reduce the intensity, but not the direction of the behaviour (Brikena & Kafkab, 2007; Hayes, Barbouttis, & Hayes, 2002). For this reason, it is recommended that it should be combined with other therapeutic treatments such as cognitive-behaviour therapy and intensive community supervision for best effect (Brikena & Kafkab, 2007; Hayes et al., 2002).

Overall, the evidence in favour of chemical restraint for controlling behaviours of concern such as aggression is weak (Antonacci et al., 2008; Tsiouris, 2010; Tyrer et al., 2008). Although there

have been numerous calls for care to be taken in the prescribing of psychotropic medications for challenging behaviour in people with an intellectual disability (Benson & Brooks, 2008; Matson & Neal, 2009; Tsiouris, 2010), recent research reviews show that many people with a disability continue to be treated with high doses of multiple psychotropic medications for extended periods of time with little or no data collected to determine treatment efficacy.

One of the problems with chemical restraint is that it does not treat the underlying causes of the behaviour of concern such as harm to self and or others. There are many known contributors to behaviours of concern including the presence of mental illness (Antonacci et al., 2008), abuse and neglect (Thornberry & Olson, 2005), trauma (Focht-New, Clements, Barol, Faulkner, & Pekala Service, 2008), behavioural dysregulation caused by an acquired brain injury (Tsiouris, 2010), communication difficulties (Sullivan, Hooper, & Hatton, 2006), poor service delivery in terms of interdisciplinary support or a restricted and un-enriched environment (Broadhurst & Mansell, 2007; Tsiouris, 2010), and many other reasons such as frustration and protest (Ramcharan, 2009; Tsiouris, 2010). Clearly, understanding the function of the behaviour is important in deciding whether the use of some form of restraint is an appropriate option and not just a short-term solution. There is general agreement that the best practice in the treatment of behaviours of concern should be guided by biopsychosocial assessment and a treatment plan (TP) model (Antonacci et al., 2008; Bouras & Holt, 2007; Tsiouris, 2010). For example, Antonacci et al. (2008), suggest a consideration of: (1) environmental factors, (2) medical comorbidities, (3) side-effects of medications, (4) skill deficits, (5) unmet sensory needs, (6) physiological factors, (7) communication impairments, and (8) potential frustration because of lack of meaningful

activities and choices and personal control. This kind of comprehensive assessment and treatment planning requires the involvement of an interdisciplinary team that would include among other specialists: psychiatrists, psychologists, mental health specialists, speech pathologists, occupational therapists, and disability professionals.

The overall aim of the present study was to compare the use of restrictive interventions for people who were on compulsory treatment orders compared to people with a disability who were not on compulsory treatment orders but who were subjected to restrictive interventions. Two groups of people were used as a comparison to people on compulsory treatment orders: (1) all people who received a disability-funded service in Victoria who were subjected to restrictive interventions (in 2008=2036 people including children and adults); and (2) a comparable subgroup of this total group who were matched for gender and age to those subjected to compulsory treatment orders. As specified in the Disability Act (2006), three kinds of restrictive interventions were examined: chemical restraint, mechanical restraint, and seclusion. Apart from chemical restraint defined above, *mechanical restraint* referred to any device (e.g., gloves, socks, belts, etc.) that was used to prevent, restrict or subdue a person's movement. This precluded devices used for therapeutic purposes or to enable safe transport (e.g., buckle guard on a seat-belt in a car). *Seclusion* referred to the sole confinement of a person with a disability at any hour of the day or night in any room or area on the premises where disability services were being provided. The goal of this article is to describe the use of restrictive interventions on those subjected to compulsory treatment orders when compared to those who also were subjected to restrictive interventions but were not subjected to compulsory treatment orders. This would

facilitate both an understanding of the needs of this particular group and establish a baseline of restrictive intervention use to be compared over time within Victoria, which could also be used by other States and Territories within Australia.

Method

Analyses of a de-identified population database were authorized through the provisions of the Disability Act (2006). Data reported in this article were those reported by government and community service organizations (CSOs) in keeping with their statutory obligations. Reports covered the months from July 2008 to June 2009. The potential group consisted of predominantly people with an intellectual disability registered to receive state-funded disability services, totalling some 23,258 people (Australian Institute of Health and Welfare, 2009), or 0.5% of the population in Victoria. In the months from July 2008 to June 2009, a total of 2036 people were reported to the Senior Practitioner as having been subjected to chemical and or mechanical restraint and or seclusion. A majority of services that were approved to administer restraint and seclusion were shared supported accommodation services (Government (DHS): $N = 541$; CSOs: $N = 414$). A majority of people were reported from residential accommodation services (67%) and respite services (28%). DHS services provided reports for 60% of all people who were subjected to restraint and seclusion and CSOs provided reports for 47% of people reported (these percentages do not add to 100% because some people were reported from both DHS and CSO services because they accessed services from both).

Measures and Procedure

Every time a restrictive intervention was used when a person was in receipt of a

disability service, disability support professionals (i.e., staff providing support services) were required to complete a standard form electronically describing its use. For each episode reported, staff provided the following information: (1) demographic information about the person subjected to the restrictive intervention such as gender, age, and disabilities, (note – no identifying information was available to the researchers, with a departmental officer responsible for de-identifying all data prior to analyses); (2) the type of restrictive intervention (chemical, mechanical or seclusion) (not mutually exclusive); and (3) the type of administration (routine – administered on a ongoing basis, e.g., daily, weekly but reported as a single episode once a month if it had been used at any time in that month; PRN – administered in response to an incident when authorized by the authorized programme officers within a behaviour support plan (BSP) or TP (if the person was on a compulsory treatment order) and reported at the time of use; or emergency (administered in response to an incident, but not preauthorized within a BSP or TP, and reported at the time of use).

Data Analysis

Analyses reported in this article used whole as well as sub-grouping of population data for the period from July 2008 to June 2009: (1) total group subjected to restrictive interventions, referred to as “all” = 2036; (2) total group on compulsory treatment orders referred to as “compulsory treatment order group” = 27; and a sub-group of the total group subjected to restrictive interventions matched for gender and age, referred to as “matched group” = 498. An *Access* database was used for data management. The analyses were limited to descriptive statistics due largely to the manner in which data had been gathered. Chi square analysis was used where applicable; that is,

to examine differences between the compulsory treatment order and the matched groups and where the expected frequency exceeded 5. Where Chi square was not applicable, Fisher's exact was used to determine significance.

Results

During the year from July 2008 to June 2009, there were 27 people who were in receipt of compulsory treatment orders in Victoria (26 males and 1 female) aged between 19 and 57 years of age ($M = 31.5$). When compared to all people who were subjected to restrictive interventions in Victoria, there were more males in the compulsory treatment order group (96%) compared to 65% males of all people reported to be subjected to restrictive interventions (see Table 1). A lower percentage of the compulsory treatment order group had been diagnosed with autism 19% compared to the matched group (43%) ($\chi^2(1, N = 525) = 5.42, p < .05$). A higher percentage of the compulsory treatment order group (52%) had been reported to have a single disability when compared to the matched group (22%) ($\chi^2(1, N = 525) = 10.98, p < .05$).

Chemical and Mechanical Restraint and Seclusion

Similar proportions of the compulsory treatment order group and the matched group were subjected to chemical restraint (compulsory treatment orders = 96%; matched = 98% ($p > .05$)) and mechanical restraint (compulsory treatment orders = 4%; matched = 11% ($p > .05$)). A higher percentage of those on compulsory treatment orders were subjected to seclusion than the matched group (compulsory treatment orders = 44%; matched = 5% ($\Phi = -0.25, p < .05$)). The main reason for the use of restraint and seclusion with

people on compulsory treatment orders was to prevent "harm to others" (100%), compared to 88% of others of the same age and gender ($\Phi = -0.08, p < .05$). There were no differences in the proportions of people from the compulsory treatment order group and the matched group in terms of the number of people subjected to routine, PRN or emergency use of restraint and seclusion.

Chemical Restraint Types

There was no difference found between the proportion of people on compulsory treatment orders (78%) and the matched group (60%) in number of different types of chemical restraints ($\chi^2(1, N = 525) = 2.68, p > .05$). However, a higher proportion of people on compulsory treatment orders had their medications prescribed by a psychiatrist (compulsory treatment orders = 88%, matched = 34% ($\chi^2(1, N = 525) = 30.95, p < .05$)). A higher proportion of people on compulsory treatment orders were prescribed: (1) anti-libidinal medications than the matched group (compulsory treatment order = 22%, matched = 2%) ($\chi^2(1, N = 525) = 28.91, p < .05$) and (2) antidepressants medications than the matched group (compulsory treatment order = 56%, matched = 32%) ($\chi^2(1, N = 525) = 5.32, p < .05$).

Medication Administrations

People on compulsory treatment orders received more administrations of four types of medications than the matched group: (1) anti-androgens (47% more); (2) anticholinergic (45% more); (3) mood stabilizers (38% more); and (4) antidepressants (33% more). When compared to the matched group, people on compulsory treatment orders also received fewer administrations of two types of medications: (1) benzodiazepines (68% less) and (2) sedatives (87% less).

Table 1. Characteristics of compulsory treatment order clients and others subjected to restrictive interventions in 2008–2009.

Characteristic	Compulsory treatment order clients (n = 27)		Matched group (n = 498)		Total clients Jul 2007–Jun 2008 (n = 2102)	
Age						
Mean age	31.5	(9.3)	31.4	(9.4)	36.0	(15.6)
Younger than 45 years	5	19%	106	21%	579	28%
Gender						
Males	26	96%	486	98%	1,358	65%
Disability type (not mutually exclusive)						
Intellectual disability	27	100%	491	99%	2,040	97%
Autism	5	19%	215	43%	647	31%
Psychiatric disability	7	26%	79	16%	380	18%
Single disability	14	52%	110	22%	545	26%
Multiple Disabilities	13	48%	388	78%	1,557	74%
Type of restraint received (not mutually exclusive)						
Chemical (at least once)	26	96%	473	95%	2,023	96%
– Average months of chemical restraint	10.5	(2.6)	8.6	(3.8)	8.2	(3.9)
Mechanical (at least once)	1	4%	54	11%	190	9%
Seclusion (at least once)	12	44%	46	9%	147	7%
Type of harm (not mutually exclusive)	22	81%	458	92%	1,958	93%
Harm to self						
Harm to others	27	100%	437	88%	1,766	84%
Harm to property	17	63%	361	72%	1,334	63%
Type of administration (not mutually exclusive)	8	30%	122	24%	474	23%
Emergency						
PRN	8	30%	151	30%	573	27%
Routine	27	100%	467	94%	1,974	94%

Discussion

The goal of this article was to describe the characteristics of and use of restrictive interventions on people with a compulsory treatment order in Victoria when compared to those who also were subjected to restrictive interventions but were not subjected to compulsory treatment orders. This would facilitate both understanding of the needs of this particular group and establish a baseline of restrictive intervention use on people on compulsory treatment orders compared to those people not on compulsory treatment orders. The results suggest that the people on compulsory treatment orders are on the whole

more functionally able than other people in Victoria of the same gender and age with a disability who were subjected to restrictive interventions in 2008–2009, in that they were less likely to have a diagnosis of autism, or multiple disabilities when compared to others who were not on compulsory treatment orders.

Similar rates of chemical and mechanical restraint use were found between the compulsory treatment order group and the matched group. Those on a compulsory treatment order were more likely to experience the use of seclusion than those who were not on a compulsory treatment order. Reasons for the higher rate of seclusion in compulsory treatment orders are not clear

and could be examined in future research. It is possible that higher rates of seclusion may be due to the availability of seclusion rooms in compulsory treatment order facilities, or due to the intensive nature of the environment in these facilities and its impact on these individuals. It is also possible that people reporting about restrictive intervention use on people on compulsory treatment orders are more likely to report the use of seclusion because they have a better understanding of what constitutes seclusion than other service providers. In addition, it is also possible that use of seclusion in these facilities is related to the type of behaviour of concern shown by people on compulsory treatment orders (all people on compulsory treatment orders were reported to show harm to others). Findings of our previous research (Webber et al., in press) showed that use of seclusion was positively correlated with reported harm to others, and all the people on compulsory treatment orders were reported to show behaviours that were categorized as "harm to others." It might be questioned why people on compulsory treatment orders are reported to show harm to others more often than other people not on compulsory treatment orders. Two factors leading to higher rates of harm to others that might be operating are the intensity of the client mix (mostly males with histories of aggression) and enclosed supervised environments. These factors could be examined in future research projects.

Although the proportion of people who were prescribed chemical restraint was not different between those on compulsory treatment orders and the matched group, the types of medications used as chemical restraint differed. Perhaps not surprisingly there was a higher rate of people who were administered anti-libidinal medications in the group on compulsory treatment orders (this finding is not surprising because several of the people on compulsory

treatment orders have been charged with sex offences). This finding is consistent with previous research which also found that anti-libidinal medications are used routinely to treat sex offenders (Hayes et al., 2002). People on compulsory treatment orders were more likely to be prescribed antidepressants than the matched group. This finding may be due to the greater oversight provided by psychiatrists and could be examined in future research.

People on compulsory treatment orders also received more administrations of some kinds of medications (antidepressants, mood stabilizers, and anticholinergics) but fewer administrations of sedative type medications were used when compared to the matched group. The higher use of antidepressants and lower use of sedatives may be a result of greater specialist care from psychiatrists. An exploration of the impact of psychiatric involvement could be examined in greater detail in future research. It is possible the specialist care received from psychiatrists may differ from one psychiatrist to another since most psychiatrists in Australia do not have, as other countries such as the United Kingdom, routine sub-specialty training opportunities in the area of intellectual disability. That is, most psychiatrists within the public and private sectors will have infrequent contact with people with a disability and may not build up familiarity with assessment and treatment approaches. There are a number of problems identified from the lack of a systematic approach to psychiatric management for the group on compulsory treatment orders. First, diagnostic clarity is poor with both inappropriate diagnosis and under-recognition of mental illness. Second, multiple prescribers with differing perspectives are often involved, for example, GP's, paediatricians, and psychiatrists. Third, monitoring of side-effects may be inadequate, for example, metabolic syndrome due to atypical antipsychotics, movement disorders from

typical antipsychotics, serum levels for mood stabilizers, and bone density for anti-androgen medications. Fourth, mental health services are resistive to take on case management for people with a dual disability because they lack familiarity and training in intellectual disability. Finally, disability support workers have minimal training in mental health and are not well equipped to recognize and monitor changes in mental health and responses to interventions. It is also likely that the group on compulsory treatment orders also received more specialist support from psychologists and other specialist allied health workers and the unique contribution of the expertise of each should be examined in future research.

There are three main limitations of this study that should be taken into consideration when interpreting these findings. First, the number of people on compulsory treatment orders in Victoria within disability services is a small group of people; all but one were males, therefore these data are not representative of the characteristics and experiences of females who are on compulsory treatment orders. However, the data are representative of people on compulsory treatment orders in Victoria since they included all people on compulsory treatment orders and provide a description of the characteristics and restrictive intervention use in compulsory treatment orders when compared to a group matched in age and gender.

Second, the data collected here were what had been reported by different disability service providers and therefore suffer from all the problems of self-report data. Although the quality of data input is controlled somewhat through the use of an electronic data input system which permits a certain amount of data cleaning, the system has few ways to deal with under-reporting of restrictive interventions unless there have been historical reports from the past.

Third, the type of data collected from service providers is frequency data and can only be analyzed using statistical analyses known to be fairly insensitive to small changes in data. Due to the type of data it is simply not possible to examine interactions between data (e.g., the relative impact of different restrictive interventions on behaviours of concern over time). These interactions could be followed up in other research.

Notwithstanding the above limitations and consistent with previous research in Victoria (Glaser & Deane, 1999), the results of the data suggest that people on compulsory treatment orders are more likely to be males who are more functionally able than other people with disabilities who are subjected to restrictive interventions in Victoria. The group on compulsory treatment orders is more likely to show harm to others and more likely to be secluded than others who experience restrictive interventions but who are not on compulsory treatment orders. In addition, they are more likely to receive specialist care, at least from psychiatrists, than others who experience restrictive interventions. While they are just as likely to be administered some form of chemical restraint as others who experience restrictive interventions, they are likely to be subjected to different types of chemical restraint including more anti-libidinal, anticholinergic, and antidepressants and less sedatives. The greater use of anticholinergic (used to counter side-effects of psychotropics), antidepressant, and less sedative use is consistent with better medical care and is probably a result of greater psychiatric oversight received by those on compulsory treatment orders. The findings are consistent with a recent review by Tsiouris (2010) who claims that the findings from the research literature are clear and the course taken by medical practitioners and clinicians should be assessment of behaviours, psychiatric

diagnosis if applicable, and treatment, starting on low doses and increasing if needed. In the absence of medical conditions and when other known variables trigger and maintain aggressive behaviours, Tsiouris recommends that psychotropics are not indicated. Indeed, Tsiouris argues that the unnecessary prescription of medications is not in accordance with the Hippocratic Oath of “do no harm.”

Policy and Practice Implications

Based on the characteristics and needs of the group that is subject to compulsory treatment orders, better treatment for this group may be accomplished through the following consideration:

- Psychiatrist reviews for all individuals with intellectual disabilities who are on psychotropic medication at prescribed minimum periods. As part of a comprehensive multi-faceted assessment process, prescription of psychotropic medications should be regularly reviewed by a psychiatrist, and a second opinion sought where necessary, particularly in circumstances where no positive outcomes have been obtained by the person over a period of time.
- The development of a recruitment strategy for psychiatrists and allied mental health staff to promote and attract interest in working in the area of intellectual disability.
- Comprehensive training of psychiatric registrars in intellectual disability through services such as the Centre for Developmental Disability Health Victoria and the Victorian Dual Disability Service, and within existing area mental health services.
- Conjoint appointments in intellectual disability and mental health to promote research into practice, education, and awareness of disability

support workers about the needs of people who have a disability who are subjected to restraint and seclusion. This type of support to disability workers may help to reduce behaviours of concern and the resulting use of restrictive practices.

- Standard pharmacy practices and procedures should be adhered to for this population as they are for the general public (e.g., side-effect explanation information). The provision of standard monitoring protocols for side-effects of medications may help to reduce some behaviours of concern that are in fact side-effects of chemical restraint.
- Consistent with the Convention on the Rights of Persons with Disabilities (2006), independent or proxy consent (next-of-kin or legal guardian) (where this is unavailable from the client) to allow for prescribing, administration, and monitoring of medications.
- Anti-libidinal medication be prescribed and monitored by a psychiatrist and only be used as an adjunct in therapy or when psycho-social interventions have repeatedly failed or are not practicable, in combination with the use of evidence-based sex offender treatment approaches designed for this population (e.g., Rose et al., 2002).
- The need for the practice of seclusion should be reviewed regularly by examining the environmental impact and possible changes to the environment by reducing levels of inactivity, boredom, and frustration.
- The development of a strategy to promote a greater understanding of the impact of trauma and its relationship to current functioning in individuals. It is well recognized that chemical restraint alone will not alleviate the impact of trauma in the

long term. What is needed is psychological therapy that addresses the underlying reasons for behaviours of concern.

This study provides information about a group of people who are on compulsory treatment orders. Clearly, more research is needed into the impact of restrictive interventions, particularly the use of seclusion and alternatives to seclusion, on changes in behaviours of concern over time. Our available data to date (Webber et al., in press) suggest that restrictive interventions do not lead to reduction in the occurrence of behaviours of concern except in the short term (i.e., while applied) and that what is needed is a better understanding of the functions of behaviours of concern and the individual needs of the person and interventions that address those functions and needs.

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