The Uses of Coercive Measures in Forensic Psychiatry: A Literature Review

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Abstract

Coercive measures are controversial within healthcare and require closer inspection, particularly within forensic psychiatry, where security-orientated restrictions are commonplace. The uses of coercive measures are often justified as a necessity for maintaining safety. Yet, these interventions are in stark contradiction to the autonomous person-centered philosophies that healthcare professionals are trained with, and that healthcare services purport to provide. The examinations of these practices are timely, particularly in light of international legislations to reduce and even eliminate the uses of such interventions and where studies have suggested that coercive methods might have paradoxical effects in provoking further violent and aggressive behaviours [American Psychiatric Association et al. (Learning from each other: Success stories and ideas for reducing restraint/seclusion in behavioural health. 2003); Goren et al. (Journal of Child and Family Studies 2(1):61–73, 1993); National Mental Health Working Group 2005; NICE (Violence and aggression: short term management in mental health, health and community setting. NICE, 2015); Queensland Government (Policy statement on reducing and where possible

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eliminating restraint and seclusion in Queensland mental health services. http://www.health.gld.gov.uk/mentalhealth/docs/sandrpolicy_081030.pdf, 2008); The MacArthur Research Network (The MacArthur coercion study. http://www.macarthur.virginia.edu/coercion.html, 2004); National Association of State Mental Health Directors (Violence and coercion in mental health settings: Eliminating the use of seclusion and restraint. http://www.nasmhpd.org/general_files/publications/ntac_pubs/networks/SummerFall2002.pdf, 2002)].

This chapter presents a literature review, examining the findings of empirical papers published between January 1980 and June 2015. Particular attention will be given to the rates, frequencies and durations of coercive measures used within forensic psychiatry and the characteristics of those secluded and restrained. The possible predictors and indicators of using coercive measures will be examined, along with and staff and patient attitudes and experiences. In particular, discussions surrounding these findings will draw attention towards the factors that influence the uses of coercive measures and the current challenges and tensions between policy and practice. This chapter suggests that further research is required into exploring what it might mean to reduce the uses of restrictive practices and how this process might be facilitated.

9.1 Definitions

9.1.1 Coercive Measures

The term 'coercive measures' has multiple definitions within the literature, creating confusion and difficulties in drawing comparisons for those wishing to examine this topic (Davison 2005; Jarrett et al. 2008). For the purposes of this literature review, this term will encompass the uses of restraint, seclusion and involuntary medication.

9.1.2 Restraint, Seclusion and Rapid Tranquillisation

The term 'restraint' is defined in two ways: i) the use of physical restraint, where a patient is held by at least one member of staff, and ii) mechanical restraint, where a device, such as a belt, is attached to a patient. Both of these are with the aims of restricting patient movement (Department of Health 2008; National Institute of Clinical Excellence (NICE) 2015). 'Seclusion' will be considered as the placement of a patient alone in a locked room that has been specifically designed for this purpose (Department of Health 2008; NICE 2015). And 'involuntary medication' as the administration of rapid tranquillisation via intramuscular injection against a patient's will (NICE 2015).

9.1.3 Voluntary and Involuntary

As a consequence of on-going discussions surrounding 'truly voluntary' or 'covertly involuntary' uses of oral medication (Currier 2003, p. 60), the decision was made to examine rapid tranquillisation only as a measure of involuntary medication, since the act of administering intramuscular medication against a patient's will eliminates such ambiguities. Furthermore, whilst it is recognised that rapid tranquillisation may be administered either orally or parenterally, all identified papers focused solely on intramuscular administration.

9.1.4 Forensic Psychiatry

Forensic psychiatry has been defined as the sub-speciality of psychiatry that 'deals with patients and problems at the interface of legal and psychiatric systems' (Gunn and Taylor 1993, p. 1). Forensic psychiatric inpatients are generally those who have been deemed 'dangerous, violent or having criminal propensities' (Mason 1993a, p. 413) and who have usually 'interfaced with the law at one level or another' (Mason 2006, p. 3). Thus, those who are considered deviant within mainstream criminal and psychiatric systems require another set of institutional rules and boundaries. Patients who are admitted to forensic psychiatric settings, however, depend largely on the legal framework of the country.

Some countries detain only those patients found not guilty by reason of insanity or of diminished responsibility in forensic psychiatric settings. Other countries also detain those who are not manageable in other settings, or who pose a particular risk to the community (Department of Health 2008; Gunn and Taylor 1993). Secure hospitals may therefore detain mentally disordered offenders as well as non-offenders for assessment, diagnosis, treatment and risk management (Bluglass and Bowden 1990; Chiswick 1995; Mason 2006). To accommodate the variety of patients across different jurisdications, this review will focus upon forensic psychiatry within secure hospital settings, as outlined below.

9.2 Method

A systematic literature search was conducted using the electronic databases ASSIA, BHI, CINAHL, EMBASE, PAIS, PsycINFO, MEDLINE and Sociological Abstracts. All articles published between January 1980 and June 2015 were considered. In the UK, distinctions are made between high, medium and low secure units. However, in other countries lesser distinctions are made between these levels of security. As a result, the term forensic psychiatry was used to cover all of these eventualities. The main headings relating to 'forensic' and ('psychiatry' or 'mental'

or 'nursing') were combined with groups of subheadings relating to categories of coercion, restraint, seclusion, involuntary medication, violence and aggression. The search terms 'forced medication' and 'rapid tranquillisation' were also included alongside 'involuntary medication' since these are often used interchangeably within the literature. 'Involuntary treatment', however, was not used since this term tended to draw out papers on the legal aspects of patient detention in a pilot search.

A total of 67,994 citations were elicited using this method. The inclusion and exclusion criteria for this review were based on study design, themes of the papers and population samples. Papers were included on the basis that they reported empirical findings using either qualitative and/or quantitative methods. These criteria excluded the majority of citations which were opinion papers, reviews, debates and discussion based articles. Papers were also included on the basis of having a focus on healthcare and being conducted within hospital settings as opposed to prison environments. Papers with themes relating to incidence, prevalence and indicators for using coercive measures were included. Papers exploring themes relating to staff and patients attitudes and experiences of coercive measures were also included. Papers reporting solely on the pharmacological aspects of rapid tranquillisation, however, were excluded. With regard to population samples, this review included studies of forensic psychiatric inpatients, while excluding general psychiatric or community forensic psychiatric settings.

Papers were initially limited through processes of de-duplication and to English language publications only (see Fig. 9.1). Remaining citations were further excluded by title and then by abstract. Despite a large number of citations being

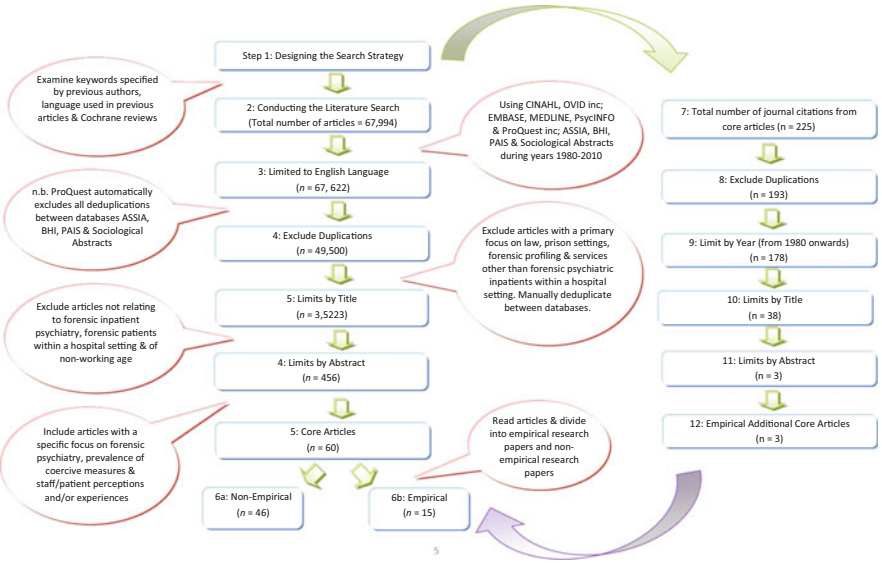

Fig. 9.1 Systematic search strategy

elicited at the start of this review, the majority of articles were excluded on the basis of not being empirical research. Articles were also excluded where they did not have a specific focus on coercive measures, where the sample did not include forensic psychiatric patients, where the context was not within a forensic psychiatric inpatient hospital setting, or where the focus was on legal rather than hospital detention. Following all exclusions by title and by abstract, only 15 empirical research papers remained. The citations from these 15 articles were then reviewed using the criteria outlined in Fig. 9.1. This resulted in a further three articles included for review. It is these 18 papers that will form the basis of the following discussion.

9.3 Findings

9.3.1 Overview of Studies

Of the 18 studies reviewed, 7 were conducted in the United Kingdom, 4 in the United States, 2 in Australia, 2 in Canada, 2 in Croatia and 2 in Finland (see Table 9.1). Six of these studies were conducted within maximum or high level security forensic hospitals and six within mixed level security hospitals. Levels of security were not reported in the remaining six studies. Rather than being a criticism, this is instead an acknowledgment that different levels of security are not necessarily recognised or distinguished in different countries. Where distinctions are made regarding levels of security, such as within the UK, hospitals of high or maximum levels of security tend to be for those patients who are assessed to pose a grave and immediate danger to the public, medium security for those who pose a serious danger to the public and minimum or low security for those who pose a significant danger to themselves or the public (Rutherford & Duggan, 2007).

The aim of twelve studies were to examine the incidence, prevalence and/or factors associated with the use of coercive measures, while a further six studies focused on staff and/or patient attitudes, perceptions and experiences of coercive measures. Eleven of the studies used predominantly numerical forms of hospital data, four used questionnaire or survey designs, two used qualitative interviews and one study used an action research approach. Eleven of the studies included patient data only, three included staff data alone and four incorporated varying degrees of both patient and staff data. Of the eleven studies examining patient data only, nine used mixed sample populations of both male and female patients, whilst two included male patients only.

9.3.2 Prevalence of Coercive Measures

Amongst the papers reviewed, ten papers focus solely on seclusion, three on restraint and seclusion in combination, three on the uses of restraint alone and two on the uses of restraint, seclusion as well as involuntary medication in

Table 9.1 Summary of empirical articles reviewed

Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
Ahmed and Lepnurm (2001) Seclusion	Canada	Multilevel security hospital	Examination of patients who are both admitted and secluded, between August 1996 and February 1999	Retrospective analysis of seclusion data	$n = 660$ ($m = 612$; $f = 48$)	Patterns and factors associated with seclusion • Age • Gender • Frequency • Duration • Reason	Mean age secluded = 31.6 years Mean age not secluded = 35 years Mean duration of seclusion = 90.3 h (min 1 h; max 908 h) $f = 60$ % secluded $m = 25$ % secluded Suicidal threats and self-harm = most frequent reason for seclusion
Beck et al. (2008) Restraint and seclusion	United States	Psychiatric hospital comprising minimum, intermediate and maximum security buildings	Trajectories of seclusion and restraint between September 2001 and September 2006	Retrospective analysis of hospital records	$n = 622$ ($m = 536$; $f = 86$)	To determine whether trajectories exist and to examine patient characteristics between these trajectories • Gender • Age • Diagnosis	Patients were divided into three trajectories based on number of times they experienced seclusion and/or restraint: low (71 %), medium (22 %) and high (7 %)

							Younger patients and female patients tended to fall into medium and high trajectory classes Patients diagnosed with schizophrenia fell into the low trajectory class while patients diagnosed with borderline personality disorder fell into the high trajectory class
Benford Price et al. (2004) Restraint and seclusion	United States	Maximum security inpatient facility	Episodes of restraint and seclusion amongst different racial groups between January 1993 and August 2000	Retrospective correlational study using hospital data	$n = 806$ (gender and age not reported)	Differences in violence Differences in episodes, durations and levels of restraint and/or seclusion amongst different ethnic groups: • Asian • Black	No significant differences in: • number of violent incidents between racial groups • episodes of restraint • types of restraint used • mean durations of seclusion Asian and Black patients were

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Table 9.1 (continued)

Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
						• Hispanic • White	secluded more often than predicted Hispanic and White patients secluded less often than predicted
Exworthy et al. (2001) Seclusion	UK	Three English maximum security hospitals and all medium security units in Southern England	Forensic psychiatrists' attitudes of using seclusion	Questionnaire	$n = 117$ (maximum security = 69; medium security 48)	Attitudes of forensic psychiatrists towards seclusion as: • Treatment • Punishment • Therapeutic	56.4 % agreed or strongly agreed that seclusion was a form of treatment 33.3 % disagreed or strongly disagreed that seclusion was therapeutic 7.7 % objected to seclusion 19.1 % did not view seclusion as punishment
Harris et al. (1989) Restraint, seclusion and rapid tranquillisation	Canada	Maximum security institution for males	Staff and patient perceptions of the 'least	Questionnaire Outlining four different scenarios of disturbed	$n = 78$ 40 patients (20 'experienced' having been secluded $\geq$3 times	• Comparisons of 'experienced' and 'inexperienced' staff and	• Overall, mechanical restraint were viewed as being most restrictive

			restrictive interventions'	behaviour. Staff and patients asked to rate restrictiveness, effectiveness, experiences, preferences and aversion to nine different restrictive interventions or combinations of restrictive interventions in relation to each scenario	in past year; 20 'inexperienced' having not been secluded in past year) 38 staff (19 'experienced' psychiatric attendants; $m = 18$; $f = 1$; 19 'inexperienced' $m = 9$; $f = 10$; 6 occupational therapists; 5 recreation; 4 psychology; 4 social work)	patients views of restrictive interventions, including physical restraint, mechanical restraint, seclusion, oral and intramuscular rapid tranquillisation • Each intervention was rated for use in four scenarios relating to: – Suicide or self harm – Violence to patient – Violence to staff – Non-compliance	and intrusive, followed by seclusion, rapid tranquillisation via injection, rapid tranquillisation taken orally and physical restraint. • Experienced staff and patients rated restrictive interventions as being less restrictive than those who were 'inexperienced' • Findings indicated general agreement between staff and patients as to which interventions were most/least restrictive • Staff indicated that the effectiveness of interventions declines as the number of

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Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
							restrictive interventions increase • Staff also indicated that 'heavier techniques' would be ineffective in preventing future incidents
Heilbrun et al. (1995) Restraint and seclusion	United States	Public mental hospital comprised of multilevel security	Comparison of physical control between forensic and civil patients in the year 1989	Retrospective analysis of hospital records	$n = 243$ ($m = 118$; $f = 125$) (civil = 124; forensic = 119) (unspecified how many *m* & *f* in civil and forensic groups)	• Overall incidents of physical control – Age – Ethnicity – Diagnosis – Comparisons of seclusion and restraint • Comparisons of seclusion and restraint between forensic and civil patients • Predictors for physical control	Mean age secluded and/or restrained= 31.1 years Of those physically controlled: • 52 % white; 48 % black • 47 % had primary diagnosis of schizophrenia • Seclusion used most frequently (46 %) > seclusion and restraint (32 %) > restraint (22 %) Restraint used

							more often among forensic patients; seclusion used more often amongst civil patients Predictors for forensic group; agitation, self-requested control, verbal hostility Predictors for civil group; property damage, physical aggression
Keski-Valkama et al. (2010) Seclusion	Finland	Two forensic psychiatric hospitals and general psychiatric inpatient units of two hospital districts	Comparison of forensic psychiatric and general psychiatric patients' views of seclusion between September 2003 and August 2004	Structured interviews; one interview post-seclusion and one follow-up interview 6 months after seclusion	$n = 83$ (forensic = 58; general = 25)	Patients experiences and perceptions of seclusion: • Understanding of why they have been secluded • Staff interaction during seclusion • Feelings surrounding seclusion	Forensic patients viewed seclusion as a form of punishment more often than general patients Seclusion is viewed negatively Most patients understand why they have been secluded Patients tend to be dissatisfied with interactions with staff during

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Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
							seclusion Patients' views of seclusion were consistent 6 months after the event
Klinge (1994) Restraint, seclusion and rapid tranquillisation	United States	Maximum security forensic hospital for male offenders	Staff opinions on seclusion and restraint between March and April 1991	40-Item questionnaire	$n = 109$ ($m = 52$; $f = 57$) (5 psychiatrists; 12 psychologists; 10 social workers; 4 unit supervisors; 23 nurses; 9 rehabilitation therapists; 46 level of care technicians)	• Medication versus seclusion and restraint • Seclusion versus restraint • Factors influencing views of restraint: – Gender – Education	63 % preferred medication over restraint or seclusion; 29 % preferred restraint or seclusion over medication; 8 % were uncertain Majority of staff felt restraint was more effective than seclusion Female staff with more education felt seclusion was more effective than restraint More educated staff felt that medication, seclusion and restraint were all over used

Lehane and Morrison (1989) Seclusion	UK	Secure psychiatric hospital for forensic patients and those unmanageable on other units (level of security not stated)	Trends in the use of seclusion from 1985 to 1988	Retrospective examination of official records of seclusion	$n = 748$ ($m = 471$; $f = 277$)	Prevalence of seclusion • Gender • Reasons for seclusion	Males secluded twice as often as females (actual figures not reported) 70 % seclusions as a result of 'difficult or disruptive behaviours'
Maguire et al. (2012) Seclusion	Australia	Forensic mental health hospital (multilevel security)	To develop, implement and evaluate strategies for reducing seclusion and sustaining less coercive practices	Longitudinal analysis of seclusion data (July 2005–June 2009) and standardised questionnaires	$n = 116$ (gender not stated)	Frequencies and durations of seclusion; staff confidence in managing aggression; staff attitudes towards seclusion; staff experiences of hospital environment	Frequencies and durations of seclusion reduced despite no changes in violence and aggression from patients Post-reduction strategies being implemented, there were no changes to staff confidence in managing aggression; however, staff viewed seclusion as being more therapeutic

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Table 9.1 (continued)

Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
Margetić et al. (2013) Restraint	Croatia	Forensic psychiatric hospital	Temperament and characteristics of patients who are mechanically restrained	Questionnaires/ surveys	$n = 56$ (all male)	Temperament and characteristics associated with restraint • Temperament and Characteristic Inventory (TCI) • Positive and Negative Syndrome Scale (PANNS)	Higher levels of 'novelty seeking' characteristics were positively associated with experiences of restraint Greater severity of psychotic symptoms increased the likelihood of being restrained
Margetić et al. (2014) Restraint	Croatia	Forensic psychiatric hospital	Opinions of forensic patients on the use of restraints	Interviews/ Likert scale	$n = 56$ (all male)	Views of patients on the use of mechanical restraint as punishment, the voluntary and involuntary uses of such methods and whether the uses of these methods should be shared with family	Patients were ambiguous surrounding whether the uses of restraint should be shared with family Patients agreed that restraint should be used as punishment where aggression towards others is intentional Patients agreed that restraints should be used when patients request this

Mason (1993a) Seclusion	UK	High security special hospital	Report on the preliminary findings of an exploratory study, investigating staff values, dilemmas and other factors associated with decision-making in the use of seclusion over a 12 week period	Action research	Registered and enrolled nurses working on one of two high dependency wards (actual numbers not stated)	Factors associated with decision making regarding the use of seclusion; experiences and perspectives of two groups of nursing staff from two wards, meeting at fortnightly intervals over a period of 12 weeks	Factors associated with using seclusion: • External pressures emanating from negative perceptions of seclusion practice as well as the forensic psychiatric system • Viewing seclusion as a clinical intervention • Control • 'Macho culture' of forensic psychiatry
Mason (1998) Seclusion	UK	High security special hospital	Gender differences in the use of seclusion over a 1 year period	Retrospective data analysis	$n = 725$ ($m = 625$; $f = 100$)	Comparisons of seclusion by gender • No of male/female patients secluded • No of times male/female patients secluded	823 episodes of seclusion during a 1 year period; attributable to 256 patients Proportionately more females secluded than males Females secluded

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Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
						• Durations of seclusion • Diagnosis • Time of date secluded • Type of section	more times but for shorter periods; female average time in seclusion = 20 h; male average time in seclusion = 4 days Majority of secluded females were 'psychopathically disordered'; majority of secluded males were 'mentally ill' Most seclusions occurred in the morning, just after release from night time confinement
Paavola and Tiihonen (2010) Seclusion	Finland	Forensic psychiatric hospital	Seasonal variation of seclusion incidents from violent and suicidal acts between	Retrospective examination of hospital records	$n = 385$ ($m = 324$; $f = 61$)	Patterns of seclusion • Diagnosis • Reasons for seclusion • Seasonal variation	36.6 % of secluded patients had a primary diagnosis of schizophrenia 40.7 % of seclusions was

			January 1996 and December 2002				due to the patient being 'dangerous to others' Seclusion rates were highest between July and November
Pannu and Milne (2008) Seclusion	UK	High security forensic psychiatric hospital	Examination of rates of seclusion and associated factors over a 1 year period (annual period not reported)	Retrospective descriptive survey	$n = 131$ ($m = 103$; $f = 28$)	Rates of seclusion and factors associated with seclusion: • Gender • Age • Ethnicity • Diagnosis • Reasons for seclusion	29.6 % of all patients in the hospital were secluded during the 1 year Females experienced more episodes of seclusion than men Men secluded for longer periods Secluded patients tended to be of younger age groups (<39 years) No significant differences between rates of seclusion and ethnicity Patients with a primary diagnosis of mental illness

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Study	Country	Setting	Aims/research questions	Design	Sample/population	Outcomes measures	Findings
							were more likely to be secluded than those with learning disability or personality disorder Most cited reason for seclusion was due to 'attacking staff and threatening behaviour'
Sequeira and Halstead (2004) Restraint, seclusion and rapid tranquillisation	UK	Secure psychiatric hospital	Psychological effects on staff administrating physical restraint	Semi-structured interviews/ thematic content analysis	$n = 17$ ($m = 9$; $f = 8$) (8 nurses; 9 nursing assistants)	Staff experiences before, during and after restraint events	Emotions relating to restraint: • Anxiety • Anger and abuse of interventions • Boredom, frustration and low morale – Role conflict – Distress and crying • Inhibition of emotional distress • Laughing and joking to release stress • Automatic

							responding • Ambivalence about support
Thomas et al. (2009) Seclusion	Australia	Secure inpatient hospital	Factors associated with seclusion between April 2000 and April 2002	Retrospective analysis of hospital records	$n = 193$ ($m = 139$; $f = 54$)	Factors associated with seclusion: • Gender • Age • Reasons for seclusion	47 % of males patients secluded over a 2 year time frame 35 % of female patients secluded Those secluded were significantly younger than those not secluded Aggression was the main reason for seclusion

comparison. These studies reported varying rates, frequencies and durations of restraint and seclusion.

Rates of seclusion have been found to be comparably higher than those of restraint, both by Heilbrun et al. (1995) in the United States and by Paavola and Tiihonen (2010) in Finland. Other studies reported between 29.6 % and 35.3 % of all patients having been secluded over a 1 year period within the UK (Mason 1998; Pannu and Milne 2008), 44 % of patients having been secluded over 2 year period within Australia (Thomas et al. 2009) and 27.7 % of patients having been secluded over a 2½ year period in Canada (Ahmed and Lepnurm 2001). Whilst the proportions of patients involved in episodes of seclusion appear to vary, differences in study duration as well as cross cultural policies for seclusion also need to be taken in consideration.

9.3.3 Demographic Indicators

9.3.3.1 Gender

A total of seven studies were reviewed in relation to gender and the uses of coercive measures. All of these studies were conducted retrospectively using patient and hospital records. Four reported on frequencies of restraint and/or seclusion by gender (Ahmed and Lepnurm 2001; Beck et al. 2008; Paavola and Tiihonen 2010; Pannu and Milne 2008), while a further two studies reported comparisons in durations of using restraint or seclusion by gender (Heilbrun et al. 1995; Pannu and Milne 2008). Only one study reported both frequencies and durations of seclusion by gender (Mason 1998).

Overall, comparisons of these findings suggest that females are likely to be restrained or secluded more often than males (Ahmed and Lepnurm 2001; Mason 1998; Paavola and Tiihonen 2010; Pannu and Milne 2008). Males tend to be restrained for longer periods than females (Heilbrun et al. 1995). However, there are some discrepancies as to whether males (Mason 1998) or females are secluded for longer periods (Pannu and Milne 2008). Findings also suggest that females tend to be restrained or secluded as a result of self-harm, whilst male patients tend to be restrained or secluded a result of harming others (Ahmed and Lepnurm 2001; Paavola and Tiihonen 2010).

9.3.3.2 Age

Four studies report findings on age. All four of these studies present a consensus that younger patients tend to be secluded more often than older patients (Ahmed and Lepnurm 2001; Beck et al. 2008; Pannu and Milne 2008; Thomas et al. 2009). Ahmed and Lepnurm (2001) found the mean age of secluded patients to be 31.6 ± 8.94 years, in comparison with the mean age of non-secluded patients being 35 ± 9.90 years. Similarly, Thomas et al. (2009) found the mean age of secluded patients to be 29.10 ± 8.33 years, in comparison with the mean age of non-secluded patients being 32.58 ± 10.23 years. One study also suggests that younger patients tend to be secluded for longer periods (Pannu and Milne 2008),

whilst another study reports that younger patients tend to be restrained and secluded, in combination, most often (Beck et al. 2008). There have been no studies, however, that reported age in relation to the use of restraint exclusively.

9.3.3.3 Ethnicity

Perhaps surprisingly, there have been few studies examining the use of coercive measures between different ethnic groups (Benford Price et al. 2004; Pannu and Milne 2008). Only two papers from this review examined ethnicity in relation to the uses of coercive measures. Benford Price et al. (2004) found that, within a maximum security facility in the United States, Asian and Black patients were secluded disproportionately more often, while the opposite was found for Hispanic and White patients.

Pannu and Milne (2008) reported similar findings in a high security hospital in the UK, with Asian and Black patients secluded more frequently. Neither of these study findings, however, reached statistical significance (Benford Price et al. 2004; Pannu and Milne 2008). In addition, these two studies used different categories for grouping ethnicity, thus, the scope for comparing these findings is somewhat limited.

9.3.4 Clinical Indicators

9.3.4.1 Diagnosis

Only four studies examine patient diagnoses, each in relation to the uses of seclusion. Paavola and Tiihonen (2010), in Finland, report that patients with a primary diagnosis of 'schizophrenia' are secluded most often. In their study, patient diagnoses are categorised as 'schizophrenia', 'schizoaffective disorder', 'personality disorder' or 'other primary diagnoses' (Paavola and Tiihonen 2010). Pannu and Milne (2008), in England, report that patients with a primary diagnosis of 'mental illness' are secluded most often, where diagnoses are categorised as 'mental illness', 'personality disorders' or 'learning disabilities'.

Furthermore, Mason (1998), in England, report that male patients with a diagnosis of 'mental illness' tend to be secluded most often, whilst female patients who are 'psychopathically disordered' tend to be secluded most. Thomas et al. (2009, p. 6) in Australia, simply report that patients who are secluded have a 'more established psychiatric history'. Again, however, comparisons between these studies have been challenging due to inconsistencies in the categorising of patient diagnoses.

9.3.4.2 Length of Admission

A study conducted by Beck et al. (2008) examined the frequencies of restraint and seclusion over a period of five years, using a sample of 622 patients. This study was conducted within a mixed level security State Psychiatric Hospital. This was the only study, of all those reviewed, which examined length of admission in relation to the uses of coercive measures. Findings from this study revealed that patients were

most likely to be restrained or secluded during their first two months of admission and that these patients would be restrained or secluded, on average, between two and six times per month during this period (Beck et al. 2008). Findings from this study suggested that after the first two months of admission, rates of restraint and seclusion were likely to decrease. The durations of using such interventions, however, were not reported.

9.3.4.3 Temperament and Character

Margetić et al. (2013) examined the temperaments and characteristics of patients who had experienced restraint, in comparison with those who had not. The study was conducted using the Temperament and Character Inventory (TCI) (Cloninger et al. 1993) and the Positive and Negative Syndrome Scale (PANSS) (Kay et al. 1987). Fifty six male patients were included in this study conducted in Croatia. Findings demonstrated that patients were more likely to experience restraint if they had a higher 'Novelty Seeking' personality temperament—that is, those who are generally quick-tempered, easily bored, impulsive and quick to disengage (Margetić et al. 2013). Margetić et al. (2013) also found that those who were more likely to be restrained also tended to experience greater severity of psychotic symptoms as measured by the PANNS assessment. The abilities to modify personality traits and associated behaviours were not addressed within this study, although a better understanding of these characteristics, as well as ways of working with these behaviours, were suggested as means of reducing restrictive practices.

9.3.4.4 Indications for the Use of Coercive Measures

Eight papers examined reasons for the uses of coercive measures. Seven of these were reasons in relation to the uses of seclusion only and one in relation to a combination of using both seclusion and restraint. One of these papers focused solely on violence and aggression as indicators for the uses of coercive measures (Thomas et al. 2009); one paper examined dangerousness towards self and others (Paavola and Tiihonen 2010), while a further paper reported findings of 'difficult or disruptive behaviour' being the main reason for using seclusion, without citing other possible alternatives (Lehane and Morrison 1989, p. 55).

The remaining five papers included much more specific categories for analysis, citing both patient and ward characteristics. These included agitation/disorientation, aggression, deterioration in mental state, disruptive/threatening behaviour, suicide/self-harm, timeout, violence towards staff and/or other patients, violence towards property and ward culture, as reasons for using seclusion or restraint (Ahmed and Lepnurm 2001; Heilbrun et al. 1995; Keski-Valkama et al. 2010; Maguire et al. 2012; Pannu and Milne 2008). Findings from these studies suggest violence and aggression (Heilbrun et al. 1995; Keski-Valkama et al. 2010; Pannu and Milne 2008), and suicide and self-harm (Ahmed and Lepnurm 2001) as the main indicators for using seclusion and/or restraint. Such conjectures, however, should be made with some caution given the different legislative frameworks surrounding the use of coercive measures between countries, which result in variances in categorisation.

9.3.5 Patient Perceptions of Coercive Measures

Two papers explored patient views of seclusion. Keski-Valkama et al. (2010) interviewed patients from both forensic and general populations to compare their experiences and perspectives. Harris et al. (1989) explored comparisons between patient and staff views of the least restrictive measures.

9.3.5.1 Experiences of Patients from Forensic and General Populations

Keski-Valkama et al. (2010) conducted interviews with patients. These were conducted, on average, six days after being secluded and again, at follow-up, six months later. Interestingly, forensic patients viewed their experiences of seclusion as punishment more often than patients in general settings. Most patients recognised a need for seclusion, citing actual or threats of violence as a justification, along with agitation/disorientation or the patient's own will. Reasons for the need for seclusion did not differ between forensic and general patients. The majority of patients overall, however, perceived seclusion negatively and around one-third of patients were confused over the reasons why they were secluded, even when interviewed again six months later.

Around half of all patients suggested that alternative methods would have been more effective interventions for them rather than seclusion. The majority of patients believed that resting in one's own room, verbal de-escalation, medication and activities, such as listening to relaxing music, would have helped. Staff–patient interactions and debriefing were found to be limited, and the investigators suggested that continued interaction during periods of seclusion may help to alleviate patient anxieties and promote better relationships and understanding (Keski-Valkama et al. 2010).

9.3.5.2 Patient Perceptions of the Least Restrictive Measures

Harris et al. (1989) included 40 patients in their study. (The views of staff included in the study will be explored in a later section.) These patients were divided into 20 patients who were 'experienced' with coercive measures, having been involved in at least 3 coercive incidents over the previous year, and 20 patients who were 'inexperienced', having not been involved in any coercive incidents over the previous year. All patients were male. Each participant was asked to complete a questionnaire outlining four separate incidents relating to i) self-harm and suicide, ii) violence towards another patient, iii) violence towards staff and iv) non-compliance. Nine coercive techniques were presented, ranging from 'light' to 'heavy'. These techniques were presented singularly, as well as in combination. Techniques presented included the removal of personal clothing, physical restraint, mechanical restraint, seclusion and rapid tranquillisation either by mouth or by intramuscular injection.

Participants were asked to rate each of these techniques in terms of restrictiveness and aversion. Both 'experienced' and 'inexperienced' patients agreed that mechanical restraint was most restrictive, followed by seclusion, rapid tranquillisation via injection, rapid tranquillisation via mouth, loss of personal clothing and finally physical restraint. Overall, 'experienced' patients rated the coercive techniques as being less restrictive than those who were 'inexperienced' (Harris

et al. 1989). 'Experienced' patients also rated 'heavier techniques' as being more acceptable than 'inexperienced' patients. It was unclear whether this was a result of habituation from having experienced coercive measures or whether 'heavier' techniques were actually less unpleasant than they appeared (Harris et al. 1989). Patient exposure to coercive measures therefore appears to have some influence on the perceptions of their use.

9.3.5.3 Patient Opinions and Legislative Issues

Margetić et al. (2014) asked patients to rate levels of agreement towards the following four statements (1) Should the patients' family be informed about the uses of mechanical restraint, (2) Should the physician ask the patient whether to inform the family about the uses of restraints, (3) Can the uses of restraints be a kind of punishment for intentionally aggressive behaviour toward people in their environment and (4) Should restraints be used if the patient requests to be restrained. Findings revealed that patients were ambiguous as to whether or not their families should be informed or whether they wished to be consulted about this decision. This largely depended upon the patients' relationships with their families and their mental state at the point of being restrained. Surprisingly, this study found that patients strongly agreed that restraints should be used as punishment where aggression is intentional and that restraints should be used where requested. These are in contention with current guidelines outlining that restraints should not be used for the purposes of punishment (Margetić et al. 2014; NICE 2015). In addition, this finding raises the question of whether restraint should be classed as 'coercion' when requested by the patient in order to feel safe (Margetić et al. 2014).

9.3.6 Staff Perceptions of Coercive Measures

The literature on staff perceptions points towards tensions between those who 'authorise and govern' and those 'who conduct', or are 'expected to conduct' coercive measures. Inherent conflicts appear to emerge between personal ethics and professional roles. Rather than being able to draw homogenous conclusions from these studies, what instead appears to emerge are the heterogonous views of staff, which may be influenced by personal and professional beliefs, gender and education.

Six studies explored staff perceptions of using coercive measures. Four studies adopted questionnaire designs; one to survey the attitudes of doctors regarding the use of seclusion in the UK (Exworthy et al. 2001), one to explore staff opinions and preferences of using seclusion, restraint and medication in the United States (Klinge 1994), one to explore staff perceptions of the least restrictive measures in Canada (Harris et al. 1989) and another to explore staff attitudes and perceptions pre- and post-measures aimed at reducing seclusion in Australia (Maguire et al. 2012). A further two studies adopted interview methods. One study used semi-structured interviews to explore the psychological effects of nursing staff using restraint and

seclusion in the UK (Sequeira and Halstead 2004) and a further study used focus group interviews (Mason 1993a).

9.3.6.1 Attitudes of Doctors Regarding the Use of Seclusion in the UK

Exworthy et al. (2001) used a postal survey to explore consultants, specialist registrars and non-training grade doctors views of seclusion. Within the UK, specialist registrars are doctors training to become consultants in their chosen specialty, and non-training grade doctors are those doctors who have chosen not to continue training to consultant or full GP status. From 150 questionnaires that were sent out, 117 were returned, giving a 78 % response rate. Findings indicated that seclusion was generally not perceived as a form of punishment. The majority of respondents supported the continued use of seclusion to prevent harm to others, even though there was ambiguity surrounding whether or not seclusion has any therapeutic benefits. Some respondents viewed seclusion as an 'adjunct' to other responses when managing aggressive behaviour, whilst other respondents were concerned that seclusion may disengage staff and patients. Interestingly, respondents who had roles in authorising the use of seclusion were significantly more likely to view seclusion as having some therapeutic benefits, than those who did not have roles in authorising seclusion. Professional role associated with seclusion therefore appears to influence attitude. Possible reasons for this, however, were not explored further within this particular study.

9.3.6.2 Staff Opinions and Preferences of Using Seclusion, Restraint and Medication in the USA

In the study conducted by Klinge (1994), staff opinions on the uses of restraint, seclusion and medication were obtained through the distribution of a 40-item questionnaire, within a maximum security in the USA. Respondents included psychiatrists, psychologists, social workers, rehabilitation therapists, nurses and level-of-care staff. 129 questionnaires were distributed, and 109 completed questionnaires were returned, giving an 85 % response rate. Of those who responded, 63 % preferred the use of medication over seclusion or restraint, and 65 % stated they would use seclusion over restraint where medication was not an option.

Reasons for using medication over any other coercive intervention were that medication was less physically restrictive, that medication would allow patients to continue participating in interactions in communal areas with staff and other patients and that medication had longer lasting effects. Reasons for not choosing medication, however, were that seclusion and restraint led to immediate control, medication administered by injection can be particularly invasive and that restraint and/or seclusion provide more opportunities for the patient to regain control on their own. The main reason for using seclusion was that this intervention was effective in allowing the patient to release more energy; whilst rationales for restraint were that this intervention is more effective in reducing injury to all involved. Staff with greater levels of education believed that coercive interventions were overused. Female staff believed that patients experienced restraint or seclusion as positive

attention whilst male staff believed this was a negative experience for patients. The investigators from this study concluded that both gender and education affected staff perceptions and decision-making. Reasons for such decisions appear to be based on perceptions of invasiveness, with staff appearing to opt for what they perceive to be the least restrictive measures possible (Klinge 1994).

9.3.6.3 Staff Perceptions of the Least Restrictive Measures in Canada

In a study conducted by Harris et al. (1989), the views of staff working with males in a maximum security hospital were explored, with regards to the least restrictive interventions. Thirty-eight staff were included in the study, divided into nineteen who were 'experienced' front-line psychiatric attendants and 20 who were 'inexperienced'. Staff in the 'inexperienced' group, included 6 occupations therapists, 5 recreation staff, 4 psychologists and 4 social workers. All but one of the experienced staff were male, while ten of the 'inexperienced' staff were female. The design of this study has been outlined above, with the exception of the staff questionnaire being phrased in relation to a staff perspective, as well as including additional questions on the effectiveness of such interventions in preventing further incidents.

Both experienced and inexperienced staff viewed mechanical restraint as being most restrictive, followed by seclusion. 'Experienced' staff rated rapid tranquillisation via injection as being next most restrictive followed by loss of personal clothing, whilst the opposite was found for 'inexperienced' staff. Agreement resumed for both 'experienced' and 'inexperienced' staff that rapid tranquillisation via mouth was the third least restrictive followed by physical restraint being the least restrictive.

Overall, no significant differences were found between staff of both genders (Harris et al. 1989). 'Experienced' staff rated the coercive techniques as less restrictive than those who were 'inexperienced' (Harris et al. 1989). 'Experienced' staff also rated 'heavier techniques' as more acceptable than 'inexperienced' participants (Harris et al. 1989). Staff, however, indicated that the effectiveness of 'heavier' techniques declined as the number of containment measures increased, indicating a point of saturation in the effectiveness of using multiple restrictive techniques (Harris et al. 1989). Staff were pessimistic regarding the effectiveness of 'heavier' techniques as preventing future incidents (Harris et al. 1989). It is unclear, however, whether differences between 'experienced' and 'inexperienced' staff were due to exposure to coercive interventions or to professional roles.

9.3.6.4 Staff Attitudes and Perceptions Pre- and Post-measures Aimed at Reducing Seclusion in Australia

Maguire et al. (2012) conducted a study into staff attitudes of seclusion pre- and post a national project aimed at reducing the uses of seclusion at a hospital in Australia. The study included three questionnaires. i) the Confidence in Managing Inpatient Aggression Survey (Martin and Daffern 2006) asks staff to rate their own and colleagues perceptions of safety and confidence in dealing with aggressive patients within the hospital. ii) the Heyman Staff Attitudes towards Seclusion Survey (Heyman 1987), asks staff to rate the validity of certain behaviours leading to the uses of seclusion, as well as rating seclusion as being therapeutic, punitive or

necessary for safety. And iii) the Essen Climate Evaluation Schema (Schalast et al. 2008) requires staff to rate the social and therapeutic atmosphere of their wards. Numbers of staff taking part in completing these questionnaires were not reported. However, the study does report that all clinical staff were surveyed on five wards where seclusion was used.

Findings indicated that following the project aimed to reduce seclusion, frequencies and durations of seclusion were reduced within the hospital. However, the number of patients who were secluded remained similar. Despite reductions in the numbers of seclusion episodes, there were no significant differences in staff confidence. Staff did, however, rate seclusion as being more therapeutic after implementation of the project. The reason attributed to this, wree staff being less complacent with regards the uses of seclusion following national scrutiny and initiatives.

9.3.6.5 Psychological Effects of Nursing Staff Using Restraint and Seclusion in the UK

Sequeira and Halstead (2004) conducted 17 semi-structured interviews with nursing staff. Each of the interviews were conducted within 96 hours of the staff members being involved in restraining and secluding a patient. The sample included eight qualified nurses and nine nursing assistants aged between 18 and 50 years. Eight interviewees were women and nine interviewees were men.

Overall, staff reported feelings of anger and anxiety surrounding the uses of restraint and seclusion. Staff reported anxieties with regard to hurting the patient, getting hurt themselves, as well as others getting hurt in the process. Feelings of anxiety were reported to decrease with familiarity. However, many staff reported continued anger and frustration towards patients who either do not respond to less restrictive interventions or who injure others. Interviewees cited low morale as being associated with the repeated use of coercive interventions. In addition, female nurses in particular expressed conflicts between the uses of restraint and seclusion with their role as a nurse. Those conducting coercive measures appear to have negative experiences of using these interventions. Some staff describe being 'hardened' to using restraint and seclusion and were ambivalent regarding the idea of receiving additional support.

9.3.6.6 Conflicts Resulting from Decision Making in the Use of Seclusion

Mason (1993a), reporting on the findings of an action research project, identified five areas of conflict resulting from decision making surrounding the uses of seclusion. These included: (1) negative perceptions of both seclusion as well as the forensic psychiatry as a discipline, (2) seclusion as a necessary clinical intervention, (3) control elicited through seclusion, (4) dangerousness as a rationale for using seclusion and (5) a perpetuation of seclusion practices resulting from a 'macho culture' (Mason 1993a). These findings appear to relate to the cultures and philosophies of working within the organisation as well as between the personal and professional views of staff.

9.4 Discussion

The uses of coercive measures are considered controversial practices within healthcare. Paramount to these controversies are the juxtapositions between the restrictions placed upon individuals and the ethos' of patient autonomy and respect for individual human rights. A number of international guidelines have called for the reduction, and even elimination, of the uses of coercive measures (American Psychiatric Association et al. 2003; National Mental Health Working Group 2005; NICE 2015; Queensland Government 2008). Those opposing coercive measures view these as infringements of liberty (The MacArthur Research Network 2004; National Association of State Mental Health Directors 2002). The uses of coercive measures have been described as 'an embarrassing reality for psychiatry' (Soloff 1979, p. 302).

The ethical and moral debates surrounding the uses of coercive measures are hightlighted particularly within the context of forensic forensic hospitals. These environments are already restrictive. Tensions between care and containment are a continual challenge and balances between safety and security are constantly sought. Coercive measures are suggested to have paradoxical effects in provoking further violent and aggressive behaviours, counter to the behaviours they purport to contain, manage and control (Daffern et al. 2003; Goren et al. 1993; Morrison et al. 2002; Patterson and Forgatch 1985; Thomas et al. 2009). With few alternative interventions currently available, these practices pose great dilemmas for those working in secure hospitals, and who are responsible for the care, treatment and safety of both psychiatric patients and the public.

Despite such dissonance, limited empirical research has been conducted in this area. Findings from general psychiatry indicate that there has been little consistency in research findings relating to the prevalence of coercive measures (Raboch et al. 2010; Steinert and Lepping 2009; Steinert et al. 2009). Cross-cultural comparisons indicate widespread differences in the numbers of patients, and number of times, patients are subject to coercive measures (Steinert et al. 2009). Similarly, differences have been found in the frequencies, durations and types of coercive interventions used (Raboch et al. 2010; Steinert et al. 2009).

Such variations have been apparent in the practice of coercive measures both within and between different psychiatric settings, indicating a lack of standardisation (Raboch et al. 2010; Steinert and Lepping 2009; Steinert et al. 2009). Where empirical findings on the prevalence and factors associated with coercive measures in psychiatry has been limited, even lesser attention has been given to the uses of coercive measures within the specialist division of forensic psychiatry.

What is apparent from this literature review, is a lack of empirical research on the uses coercive measures, specifically within forensic psychiatry. Different definitions and methods used between studies restricts the scope for meaningful comparisons. Several observations however, are worth noting. Variations have been found with regard to rates and frequencies of coercive measures. These have ranged from 27.7 % to 44 % of patients having being secluded with forensic psychiatric

settings (Ahmed and Lepnurm 2001; Pannu and Milne 2008; Thomas et al. 2009). Such a difference in range appears consistent with findings from the general psychiatric literature where rates of coercive measures are reported to range from 21 % to 59 %, (Raboch et al. 2010). Due to such vast variations in findings across all studies, it remains unclear whether coercive measures are used more commonly in forensic or general psychiatric services, and specifically whether the frequency of using coercive measures are influenced more heavily by patient or context.

Differences in the uses of coercive measures might arise as a result of sociocultural variations, including how each type of coercive measure is perceived (Bowers et al. 2007; Klinge 1994; Soloff 1984). Variations in cultural norms and preferences, as well as differences in local, national and international policies, may each contribute towards such wide-ranging figures ((Bowers et al. 2007; Maguire et al. 2012; Raboch et al. 2010; Soloff 1984; Steinert and Lepping 2009; Steinert et al. 2009). Indeed, there are varying legislations for the uses of coercive measures between countries. These depend on the type of coercive measure, the techniques involved and the circumstances, which each dictate when a patient may be restricted (Steinert and Lepping 2009). In the UK, for instance, mechanical restraints are only used in exceptional circumstances and do not permit patients to be tied to furniture (Department of Health 2008). In other countries, such as Finland, however, mechanical restraint most often involves the tying of patients to a bed (Raboch et al. 2010; Steinert and Lepping 2009). Such differences in legislation, restraint methods and practices are likely to alter perceptions of acceptability, as well as perceptions of what might be deemed the 'least restrictive' intervention (Bowers et al. 2007; Raboch et al. 2010; Steinert and Lepping 2009).

Perhaps implicit to such variations are differences in the methods and meanings associated with the terms seclusion and restraint. Studies have consistently reported variations in definitions of these terms, such that physical restraint techniques and training may vary between services (Ching et al. 2010; Davison 2005; Parkes 1996). Seclusion may or may not be recorded depending on whether the door is open or locked (Ching et al. 2010; Davison 2005; Mason 1993b). Whether or not episodes of seclusion are recorded may also depend on whether the intervention was elected by the patient or staff (Ahmed and Lepnurm 2001; Mason 1993b), whether seclusion was viewed as 'time out' or quiet time alone (Ahmed and Lepnurm 2001; Mason 1993b) and whether the patient was isolated within their own room or a room specifically designed for seclusion purposes (Mason 1993b). Furthermore, the concepts of seclusion, night time confinement and longer term segregation are not always clearly defined (Ahmed and Lepnurm 2001; Department of Health 2008; Mason 1993b). Such differences in interpretations, meanings and understandings of these terms will ultimately alter reports on the prevalence of coercive measures between settings.

9.4.1 Demographic and Clinical Indicators

Age, gender and length of admission all appear to have some influence on the prevalence of using coercive measures. Findings reveal that younger, newly admitted patients are likely to be secluded, or secluded and restrained in combination, more often than those patients who are older and who have been admitted for a longer period (Ahmed and Lepnurm 2001; Beck et al. 2008; Pannu and Milne 2008; Thomas et al. 2009). There are perhaps several reasons for this. Patients who are newly admitted are likely to be most acutely unwell. Both patients and staff are most likely to feel threatened during this initial period of admission, since staff are still getting to know the patient, while patients are still getting to know the staff and ward routine. Staff are perhaps most likely to feel threatened by those who are younger and most physically fit, while patients on admission are still learning the rules and boundaries of their new environments (Ahmed and Lepnurm 2001). More research, however, is required to substantiate these hypotheses. Further research is also required regarding age, gender and length of admission in relation to the uses of restraint alone.

Categorisations of ethnicity, diagnoses and indicators for the uses of restraint and seclusion have been particularly inconsistent. While some differences have been found between studies, these are largely inconclusive. If findings are to be comparable between studies, greater standardisation is required in how variables are arranged categorically. Since many of the studies were conducted retrospectively, perhaps this also points towards the need to standardise hospital data. Similar styles of data recording would enable cross-analyses to be conducted more effectively.

Whilst there has been some research conducted into reducing violence and aggression as means to reduce coercive measures (Ching et al. 2010; Daffern et al. 2003; Davison 2005; Fluttert et al. 2010), the uses of coercive measures have not been confined to violence and aggression alone. Violence, aggression, suicide and self-harm have all been reported as primary indicators for the uses of coercive measures (Heilbrun et al. 1995; Keski-Valkama et al. 2010; Pannu and Milne 2008). Other indicators have also been cited to a lesser degree, all of which require further exploration (Heilbrun et al. 1995; Keski-Valkama et al. 2010; Pannu and Milne 2008).

Little attention has been given to whether certain types of behaviour are more likely to lead to certain types of coercive interventions being used. Similarly, little attention has been given to whether specific interventions might be more effective in managing harm to self and others. Given the controversies surrounding the uses of coercive measures, such research would be important in providing necessary rationales and justifications for using coercive interventions.

9.4.2 Patient and Staff Perceptions

Only two studies explore patient experiences of coercive measures. This finding, in itself, is revealing of the direction further research might follow. Whilst it is particularly interesting to note that forensic patients perceive coercive measures to be more punitive than general psychiatric patients, there has been a lack of exploration as to why this might be. Similarly, while 'experienced' patients appear more accepting of coercive interventions than 'inexperienced' patients, reasons for this need to be explored. Furthermore, through exploring patient attitudes and experiences, patient preferences may be taken into account in the event of coercive interventions being required.

With regard to staff experiences and perceptions, those who authorise coercive measures are more likely to percieve the therapeutic benefits of these interventions. Those who employ coercive interventions, however, tend to view such practices with fear, anxiety, anger and even resentment (Exworthy et al. 2001; Klinge 1994; Sequeira and Halstead 2004; Whittington and Mason 1995). These findings reveal tensions between those who 'authorise and govern' with those who 'do' or are 'expected to do'.

Findings from this review indicate that conflicts emerge between personal values and professional expectations. Perspectives on coercive measures are far more complex than simply being either for or against (Whittington & Mason, 1995). Further research is required to better understand the experiences leading to, and resulting from, the uses of coercive measures. Greater understanding is also required towards the impacts and influences these experiences may have on policies and practice.

9.4.3 Review Limitations

The search strategy for this literature review was limited to healthcare and sociological databases and so articles relating to this subject, but not included within these databases, will inevitably have been missed. The search terms used for this review were carefully selected in formulating this search strategy. However, these search terms will ultimately influence those articles extracted and the subject matter within. This study has also been limited to hospital inpatient settings only, and so the practices of coercive measures amongst forensic patients within prison or community settings will have been excluded. Moreover, it is recognised that different definitions of coercive measures exist, as do different forensic psychiatric settings both within and between countries, further compounding the already complex nature of this review (Mason 1993b; Raboch et al. 2010; Steinert and Lepping 2009).

9.5 Conclusions and Implications for Further Theoretical Development

Limited research has been found on the uses of coercive measures within forensic psychiatry. The majority of research has focused on the uses of seclusion and restraint, while little attention has been given to the uses of involuntary medication as a coercive intervention. Younger patients and those who are newly admitted tend to be secluded most often. A common theme throughout many of these studies, however, has been a lack of coherence between research methods and, more significantly, a lack of research into this important area. Without such research, a lack of evidence will persist, with constant questions emerging as to why coercive measures are used and how they are justified.

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