# Patients' Experiences of Restrictive Interventions in Australia: Findings From the 2010 Australian Survey of Psychosis

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**Objective:** The authors used survey data to investigate patients' experiences of restrictive interventions in inpatient settings.

**Methods:** The 2010 Australian Survey of High Impact Psychosis (N=1,825) asked about restrictive interventions experienced during a mental health admission in the previous year (N=428), ranging from restrictions on leaving a ward to seclusion. The authors explored the relationship between perceived benefit (good or limited versus no benefit) and the number of different types of restrictive interventions experienced.

**Results:** Twenty-three percent had recently experienced one or more restrictive interventions; of these, 42% had experienced forced medication and 35% had experienced seclusion. Although most reported some benefit, perceptions of benefit were lower among those who experienced a greater number of interventions.

**Conclusions:** People with psychosis who experienced a greater number of restrictive interventions were less likely to find restrictions justified or beneficial. The cumulative effect of increased numbers of restrictions may also lead to worsening perceptions of benefit.

*Psychiatric Services 2017; 68:966–969; doi: 10.1176/appi.ps.201600300*

Restrictive interventions, such as physical restraint, forced medication, or seclusion, may be used within psychiatric inpatient units in Australia and elsewhere to manage and respond to suicidal, aggressive, or violent behaviors in acutely unwell patients. The decision about whether wards are locked is mostly discretionary and localized in Australia, although there is some indication that maintaining locked wards is an increasingly common practice (1). Less is known about how commonly property is confiscated. While many of these interventions are subject to regulation, monitoring, and reporting, debate continues about whether they succeed in reducing harm to patients and others (2). Increasingly, it is argued that restrictive interventions do not increase safety and actually inflict harm (3–5).

Little research has examined the perceptions of patients with mental health problems who have experienced restrictive interventions. One study showed that patients' perceptions of any benefits in their experiences of restrictive interventions may be related to the manner of administration rather than the restriction itself (6). Other studies showed that less coercive practices, such as locked wards and confiscation of property, were regarded more positively than restraint, seclusion, and forced medication (7,8), although these interventions were still viewed negatively overall (1). Most patients who participated in an Australian survey perceived that physical and mechanical restraint, forced medication, and seclusion cause harm (9), while also reporting that these interventions increased the safety of others (9).

The aims of this study were to investigate the types of restrictive interventions experienced over a 12-month period by Australians living with psychosis, the reported benefits of these interventions, and the relationship between benefit and various factors, including number of different types of restrictive interventions experienced.

## METHODS

The data were gathered within the 2010 Australian Survey of High Impact Psychosis (SHIP). The aim of SHIP was to characterize the experiences of people with psychotic illnesses receiving treatment from public mental health services. The survey was approved by human research ethics committees at each participating catchment site. Written and informed consent was obtained from each participant.

Full details of the survey methods are given elsewhere (10). Briefly, a two-phase design was used to recruit participants. All those who used services in seven catchment areas

in the census month were screened for psychosis, and those with a recorded diagnosis of psychosis and in contact with clinical services only during the previous 11 months were also identified. From those assessed as having psychosis within these two cohorts and eligible for interview (7,955), a random sample of 1,825 interviewees was selected and agreed to participate, stratified by site and age group (18–34 years or 35–64 years). Face-to-face interviews, conducted by trained mental health professionals, occurred between April 2010 and March 2011.

For participants admitted during the previous year, questions on their experience of restrictive interventions, and perceptions of any benefit to them as a result of these interventions, were as follows: "During any of these mental health related admissions did you experience any deprivation of your liberty?"; if yes, the options given to describe the restrictions were "seclusion in a room," "mechanical/physical restraint," "forced medication," "confiscation of property," "restrictions on leaving the ward," and "other, specify." Participants were also asked, "Do you think there was any benefit from or justification for the deprivation of your liberty?"; possible responses were "no benefit or justification," "limited benefit or justification," and "good benefit or justification."

The data reported here are restricted to the sample who experienced restrictive interventions during a mental health admission during the year before the interview. Descriptive statistics were calculated for this sample. Logistic regression was used to explore the relationship between a binary-coded variable representing a perceived benefit of restrictive interventions (good or limited versus no benefit) and the number of different types of restrictive interventions that the participant had experienced. Our model included other variables chosen from the literature and clinical experience (10). These were sex, age (18–34 or 35–64), the interviewer's rating of the participant's insight into the nature of his or her psychotic symptoms (present or absent), *ICD-10* diagnosis of schizophrenia, course of the disorder (single episode with good recovery, multiple episodes with good recovery in between, multiple episodes with partial recovery, continuous chronic illness, or continuous chronic illness with deterioration), length of illness (one year or less, two to five years, six to ten years, 11 to 20 years, or 21 years or more), any experience of stigma or discrimination due to mental illness in the past 12 months, and any childhood trauma prior to onset of psychosis. Analyses were conducted by using Stata 13.1.

## RESULTS

Of the 1,825 participants, 625 (34%) were admitted as a psychiatric inpatient in the previous 12 months and 428 (23% of all participants, 68% of those admitted) experienced at least one restrictive intervention during their admission (Table 1). Restrictions on leaving the ward were experienced by the most participants (93%), followed by confiscation of property (52%), forced medication (42%), seclusion (35%), and mechanical or physical restraint (18%). Among those who had experienced a restrictive intervention, it was most common to experience just one type (31%); fewer experienced two types (26%). Most participants (61%) reported a good or limited benefit; fewer participants (36%) reported no benefit.

Table 1 also shows the adjusted odds ratios from fitting the logistic regression model to the data. Compared with those who had experienced only one type of restrictive intervention, those who had experienced two types of restrictive intervention had approximately the same odds of perceiving a benefit or justification, but for those who had experienced three or four or more types of restrictive intervention, the odds of perceiving a benefit or justification were lower (adjusted odds ratio [AOR]=.35, 95% confidence interval [CI]=.18–.66, and AOR=.24, CI=.13–.45, respectively). The odds of a perceived benefit from restrictive interventions differed according to interviewers' ratings of the participant's insight into his or her psychotic symptoms. Compared with those who had insight, those lacking insight had lower odds (AOR=.28, CI=.17–.48) of perceiving a benefit or justification from restrictive interventions. No other clinical or demographic factors shown in Table 1 were associated with the outcome.

## DISCUSSION

We sought to understand perceptions of benefit associated with restrictive interventions among a large and well-characterized epidemiological sample of people with psychosis. Our first key finding is that nearly one of four people with psychosis reported having experienced one or more restrictive interventions during a recent mental health admission; one-half of those who experienced restrictive interventions experienced confiscation of property, and four of ten experienced forced medication or seclusion. Our second key finding is that, although the majority reported some benefit or justification, any positive perception diminished among patients who experienced a greater number of restrictive interventions. Our third key finding is that those assessed in the interview as lacking insight perceived less benefit from these interventions than those with insight.

The strength of this study was inclusion of specific questions on restrictive interventions experienced during inpatient stays within a large epidemiological survey of people with psychosis. However, the study had limitations. First, participants were asked whether they had experienced a "deprivation of their liberty" as an inpatient, but this term was not defined beyond the examples given. Participants may have experienced other types of restrictive interventions. Second, the question on perceived benefit of the intervention was asked at a global level, rather than in relation to each specific intervention. Future research could assess benefit in relation to each intervention type. Participants may have been influenced in their responses by the clinician

**TABLE 1. Characteristics of 428 patients who experienced restrictive interventions as predictors of reported benefit of restrictive interventions**

| Characteristic | N | % | AOR[a] | 95% CI | p |
|---|---|---|---|---|---|
| Restrictive intervention | | | | | |
| Restrictions on leaving the ward | 398 | 93 | – | | |
| Confiscation of property | 223 | 52 | – | | |
| Forced medication | 181 | 42 | – | | |
| Seclusion in a room | 150 | 35 | – | | |
| Mechanical/physical restraint | 79 | 18 | – | | |
| Other deprivation | 43 | 10 | – | | |
| Perceived benefit | | | | | |
| Yes | 260 | 61 | – | | |
| No | 153 | 36 | – | | |
| Data missing | 15 | 3 | | | |
| Total number of restrictive practices | | | | | <.001 |
| 1 (reference) | 131 | 31 | | | |
| 2 | 112 | 26 | 1.01 | .53–1.89 | |
| 3 | 78 | 18 | .35 | .18–.66 | |
| ≥4 | 107 | 25 | .24 | .13–.45 | |
| Sex | | | | | .90 |
| Male (reference) | 241 | 56 | | | |
| Female | 187 | 44 | 1.03 | .64–1.66 | |
| Age (years) | | | | | .25 |
| 18–34 (reference) | 229 | 54 | | | |
| 35–65[b] | 199 | 46 | .71 | .40–1.27 | |
| Insight into the nature of their psychotic symptoms | | | | | <.001 |
| Yes (reference) | 305 | 71 | | | |
| No | 123 | 29 | .28 | .17–.48 | |
| Diagnosis of schizophrenia | | | | | .59 |
| Yes (reference) | 180 | 42 | | | |
| No | 248 | 58 | .87 | .53–1.44 | |
| Course of disorder | | | | | .39 |
| Single episode with good recovery (reference) | 40 | 9 | | | |
| Multiple episodes with good recovery in between | 127 | 30 | 1.38 | .45–4.26 | |
| Multiple episodes with partial recovery | 140 | 33 | .96 | .32–2.90 | |
| Continuous chronic illness | 74 | 17 | .90 | .27–2.96 | |
| Continuous chronic illness with deterioration | 47 | 11 | 1.84 | .51–6.66 | |
| Length of illness (years) | | | | | .12 |
| ≤1 (reference) | 37 | 9 | | | |
| 2–5 | 81 | 19 | .49 | .15–1.63 | |
| 6–10 | 88 | 21 | .39 | .12–1.33 | |
| 11–20 | 135 | 32 | .79 | .23–2.71 | |
| ≥21 | 87 | 20 | .43 | .11–1.62 | |
| Experienced stigma or discrimination due to mental illness[c] | | | | | .063 |
| No (reference) | 230 | 54 | | | |
| Yes | 197 | 46 | .64 | .40–1.02 | |
| Childhood trauma prior to onset of psychosis | | | | | .40 |
| No (reference) | 179 | 42 | | | |
| Yes | 249 | 58 | 1.23 | .76–1.96 | |

[a] Adjusted odds ratios (AORs) were adjusted for all variables in which there is a value for AOR.
[b] The sample was limited to persons ages 18–64, but one participant had turned 65 by time of the interview.
[c] Data were missing for one participant.

interviewers. Finally, assessment of insight was undertaken by the interviewer without opportunity for any further substantiation.

Nearly one-quarter of SHIP interviewees had experienced at least one type of restrictive intervention during a mental health admission in the previous year. It is not possible to directly compare this finding with other studies. The number of studies is small, and the studies are varied because of differences in the definition of restrictive interventions, the population subgroups under investigation, and the methods used. Nonetheless, in our study, among those who had experienced restrictive interventions, the use of forced medication and seclusion appeared to be more prevalent than the use of restraints. Both seclusion and restraint are regulated in Australia, but the use of forced medication is a gray area, which is attributable to the difficulties in distinguishing between medication use for treatment purposes versus chemical restraint. Recovery-oriented policies and practices aim to reduce and, where possible, eliminate the use of these restrictive interventions. In order to achieve this, more work is needed to understand how these interventions are used in practice, including identifying those groups who are disproportionally affected by restrictive interventions (11).

We found a negative association between the number of restrictive interventions a person had experienced and any perceived benefit. This may be explained by the different combinations of interventions people were exposed to. Given the higher frequency of the least coercive interventions, it seems likely that people who reported some benefit had experienced restrictions on leaving the ward or confiscation of property, whereas it appears that those who perceived the least benefit from restrictive interventions had experienced the more coercive interventions (forced medication, seclusion in a room, and restraint). If so, the implications are that more coercive restrictive interventions are perceived less favorably by patients or that the cumulative effect of a number of restrictions leads to worsening perceptions of benefit. Future research should explore experiences associated with different combinations of restrictive interventions and whether there is a cumulative effect.

More generally, the fact that two-thirds of people who experienced a restrictive intervention perceived some justification or some

benefit from the intervention is surprising and at odds with much of the literature (1,12,13). Most studies report that those who experienced restrictive interventions found them punitive, traumatic, and unnecessary (1,12,13), although reports that they were necessary, helpful, and beneficial exist (14). It is plausible, as one study suggested, that respondents' negative perceptions about the restrictive interventions may be accompanied by beliefs that they derived a benefit or that the interventions were justified (15). Our findings are also consistent with a recent large survey of Australians, in which the vast majority of patients reported that seclusion and restraint can be harmful, but they also endorsed some benefits (9).

Insight was the only other variable that predicted whether an individual would perceive benefit from the restrictive interventions they experienced. The determination of insight was made at the time the person was interviewed and so could have occurred up to 12 months after the interventions. This finding corresponds with previous reports that people are more likely to view restrictive interventions positively if they are asked about them months afterward (14). It is surprising that none of the other tested variables contributed to the model, including length of illness, suggesting that perceptions of benefit are not developed over time in the evolution of psychotic illnesses or are not related to other characteristics. It is noteworthy that childhood trauma prior to onset of psychosis did not contribute to the model, despite increasing recognition that restrictive interventions may be experienced as retraumatizing for those who have experienced childhood abuse (15).

## CONCLUSIONS

Restrictive interventions vary in relation to the degree of coercion, the extent to which they are defined and regulated, and how they are perceived. We found evidence of endorsement of some benefit from or justification for restrictive interventions by patients with psychosis, although those who experienced more restrictive interventions were less likely to endorse this view. The cumulative effect of increased numbers of restrictions may also have led to worsening perceptions of benefit. Future research into patients' views in relation to each intervention type, different combinations of restrictive interventions, and how these interventions are used in practice is warranted.

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This study was funded by the Australian Government Department of Health and Ageing. This article is based on data collected in the framework of the 2010 Australian National Survey of High Impact Psychosis under the direction of Vera Morgan, Ph.D., M.Soc.Sc., Assen Jablensky, M.D., D.Med.Sc., and Anna Waterreus, Grad.Dip. The authors thank the hundreds of mental health professionals who participated in the preparation and conduct of the survey and the many Australians with psychotic disorders who gave their time and whose responses form the basis of this article.

The authors report no financial relationships with commercial interests.

Received July 1, 2016; revision received October 16 and December 18, 2016; accepted January 25, 2017; published online May 1, 2017.

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