Original article

Involuntary admissions to an acute psychiatric ward

Abstract

Background. Involuntary admission to acute psychiatric wards in Norway has not been studied empirically after the introduction of a new Mental Health Act (MHA) 1 January 2001. According to the MHA, observation with coercion can be used to clarify illness. The objectives of this study were to describe scale and circumstances associated with involuntary admissions.

Method. All patients discharged (n = 104) or transferred from an acute ward in the Norwegian county, Hedmark during the first six months of 2005 were included in the study. Information about the patients before and during the stay, including legal issues, was recorded.

Results. 49 patients (47 %) were involuntarily admitted. Within 24 hours 22 (45 %) of these had their status changed from involuntary to voluntary.

11 patients were observed with coercion according to the MHA on an average of 4.5 days.

Conclusion. For about half of those admitted involuntarily the time of coerced observation was less than 24 hours. The out-of-hours emergency service referred more patients than regular GPs and the specialized health service, and it should be clarified whether this may lead to unnecessary involuntary admissions. More specific studies are needed on how to reduce involuntary admissions to psychiatric wards.

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A large number of patients are admitted to acute psychiatric wards in Norway annually (1). Some are discharged after a few hours, but for others it is the beginning of long-term treatment within psychiatric institutions.

A new mental health act (MHA) was implemented 1.1.2001 (2). The purpose of the act is to ensure that mental health care is carried out in a warrantable way and that it is in accordance with basic legal rights. In general the important changes are as follows: all patients involuntarily admitted are to be assessed by a qualified member of staff within 24 hours instead of within the first working day. Previously, the observation time for suspected serious mental disturbance was 3 weeks, but this has been reduced to 10 days. The requirements for admitting patients with serious mental disturbance have barely been changed. Additional criteria have been reduced from 3 to 2 (treatment and/or danger criteria). The requirements for regular documentation have become stricter. In order to further protect individual rights the admittance must be reasonable and purposeful, and the advantages should be described (Box 1). Laws concerning health personnel (3), patient rights (4), and the specialist health service (5) were also introduced on the same day. The act on patient rights is of particular importance and will help promote equal legal rights for patients with mental and somatic disorders.

In a study of an acute ward in Østfold where the patients had been admitted under the previous observation section (§), it was shown that for patients under § 3 the average length of stay was 23 days; for those who had been transferred from involuntary detention to voluntary admission it was 12 days. When the patients were assessed on the day after admittance (as required by the law), as many as 54 % did not meet the

criteria for involuntary detention under observation (6). Involuntary admittance to acute psychiatric institutions in Hedmark county and Ullevaal University Hospital's catchment area has been described in a study from 1997 (7). The proportion of involuntary admittances decreased from 58% to 48% in the period 1987–94 in Hedmark. Involuntary admittances and the use of coercion in mental health care in 2001 and 2003 are described in SINTEF reports (8,9). The Norwegian Board of Health Supervision (10) describes the use of coercion in psychiatry based on cross-sectional studies undertaken by SINTEF Health. About 7% of the patients fulfilled criteria for use of coercive measures or treatment without the patient's agreement, and the total proportion admitted involuntarily was 25 % at the time of recording. All forced admittances to mental health care were included in one variable. The use of coercion differed largely between the health institutions. The project «Breakthrough in psychiatry – use of coercion» was undertaken in the period November 2000 -June 2001. An important subgoal was to identify areas in mental health care with a clear potential for improvement.

The breakthrough project brought a challenge and opportunity to take a systematic look at parts of one's own practice. The aim was better quality and less coercion, and the results were good for project participants (11, 12).

Studies 6–12 give little or no documentation on the use of coercion after implementation of the new law, neither upon admittance nor during in-house treatment.

The aim of this study was to map the extent of coercion and the circumstances surrounding its use in admittances to an acute psychiatric ward. Such a description enables identification and further examination of unfortunate conditions.

Main message

The out-of-hours service plays a greater role than the regular GP and specialist health service in admitting acute psychiatric patients. Within a day, 22 of 49 formal admissions had their MHA section converted to informal. The Mental Health Review Tribunal handled few appeals.

Box 1

Mental Health Act (1.1.2001 – 31.12.2006)

- The doctor must personally examine the patient before admission (§ 3-4).
- The medical examination may be compulsory (§ 3-5) at the discretion of the municipal doctor.
- Recommendation for further examination (assessment/observation) (§ 3.6) or coerced mental health care (§ 3.7) and an application from the nearest relative or approved social worker are required.
- The main requirement for involuntary admission is serious mental disorder (or suspected).
- Criteria (compliance must be sought and the admission should be reasonable and useful) and additional criteria met (need for treatment/safety): § 3-3 a and/or b.
- The RMO must examine the patient within 24 hours (§ 1-4).
- The following measures may be taken: further examination (assessment/observation) (§ 3.8) for up to 10 days, forced mental health care (§ 3.1) for up to one year, consent to mental health care (§ 2-2) or voluntary admission (§ 2.1).

Material and method

Hedmark county has about 188 000 inhabitants (census 2005). The Department for short-term acute psychiatry at Innlandet Hospital, Sanderud, covers the entire county. The acute department has 3 wards without section divisions. At the time of the study there were 2 closed wards with 9 beds each and an open acute ward with 6 beds. Admittances at one of the closed wards for acute psychiatric care were studied.

The regional ethics committee approved the study protocol.

The study comprised all patients discharged or referred from the ward in the period 1.1.2005 to 30.6.2005 (n = 104). 126 admittances were recorded in this period. When patients were admitted several times, only the first admittance was recorded; 22 readmittances were therefore excluded. 14 of these patients had personality disturbance and substance dependence. One of them had as many as 7 readmittances in this period. Information about the patients that emerged during the course of treatment was recorded anonymously. The course of treatment was defined as the whole process from referral/ admittance, through examination and treatment, to discharge/further referral. The following was recorded: sex and age, the unit responsible for admittance, diagnosis upon admittance, applicable section of the MHA at admission, whether formal requirements were fulfilled, result of the MHA section assessment, time period of admittance under the various MHA sections, total length of stay, use of emergency law, discharge to coerced mental health care (§ 3.1-2) and diagnoses at discharge. Many of the shortterm stays did not warrant a psychiatric diagnosis; rather they came under the category in ICD-10, which says «Contact with the health service for medical examination». Observation on suspicion of psychiatric illness and behavioural disturbance (Z03.2) is one of the subsections and is used on the discharge of patients not considered to meet the criteria for a psychiatric diagnosis at that point.

Journals and coercion procedures were examined for quality assurance of data. The MHA Commission's procedures were examined with regard to formal patients to check admittance records (referral, recommendation and application) and the Commission's handling of appeals. Forms were filled in right after discharge/transfer of the patients.

This study describes admittances in accordance with the MHA in the period 1.1.2001–31.12.2006. A new MHA with certain changes was implemented 1.1.2007. For example, whereas § 3.1 in the old law

concerned coerced mental health care, it concerns requirements to the medical examination in the new law.

The statistics programme SPSS (version 14) was used for data analysis. The chi-square test was used for making cross tables and for frequency analyses; p < 0.05 was the significance level.

Results

Patient characteristics (n = 104) are presented in table 1. 55 patients were admitted voluntarily and 49 involuntarily, with fairly similar distribution between the sexes. 26 patients were under the effect of substance abuse (drugs and/or alcohol) on admittance and this diagnosis was the reason for their admittance; 6 of these were women and 20 were men (p = 0.002). 55 patients were admitted with psychosis and 37 with affective disorders. Whereas 26 women as opposed to 11 men (p < 0.001) suffered from affective disorders, there was no significant difference between the sexes with regards to psychosis. Suicidal behaviour or self-harm was recorded for 59 patients; 32 women and 27 men. Discharge diagnoses are presented in table 2. The distribution of sections (MHA) used by the authorities to admit patients is summarized in table 3.

The following were discharged within 5 days: 43 patients (66%) referred by the emergency out-of-hours service, 7 patients (30%) by their regular GP and 7 patients (44%) referred by the specialist health services.

Finding the right MHA section within 24 hours

Of 30 patients (15 men and women) with suspected serious mental disorder, admitted for observation and assessment under § 3.6, 18 (60%) were transferred to voluntary detention within 24 hours. 13 of these left the ward the same day; 5 chose to remain as informal patients. Two patients were transferred to coerced mental health care directly upon assessment (§ 3.1-1) and 9 were placed under compulsory observation (§ 3.8) in an institution. One patient was transferred to a somatic hospital without a section assessment, as this was an act of necessity. 15 patients (10 men) were placed under compulsory mental health care in accordance with MHA § 3.7. In 4 cases this was converted to voluntary detention within 24 hours. Three patients left the ward immediately and one chose to remain. Two patients were placed under compulsory observation (§ 3.8-1). The remaining 9 were transferred to § 3.1-1, which is coerced mental health care in an institution. Three patients had this status already and one signed an agreement for «voluntary detention» (§ 2.2) for up to 3 weeks and was kept for 11 days and then discharged. 11 patients met the criteria for compulsory observation and assessment (§ 3.8-1). These patients were observed for

Table 1 Patient characteristics (N = 104)						
Variables	mean	median	SD	range		
Men (%)	51	-	-	-		
Age (years)	36.4	34.0	13.0	17-76		
Patients 20-50 years (%)	82	-	-	-		
First admissions (%)	32	-	-	-		
Variation in number of admissions	-	-	-	1-57		
Variation in time detained (days)	-	-	-	1-249		
Number of admissions	8.9	4.0	8.9	-		
Detention time all patients	15.5	5.0	32.7	-		
Detention period for involuntary admissions	23.4	5.0	45.0	-		
Detention period for voluntary admissions	8.5	5.0	11.5	-		

an average of 4.5 days. After the observation period, 2 patients were placed under coerced mental health care (§ 3.1-1), 7 were discharged and 2 remained on the ward as informal, i.e. voluntary patients.

The MHA Commission checked all the involuntary admissions during the period. Form filling errors were found in 4 cases: the application form had not been signed within 24 hours in 2 cases, and there was a substitution error with MHA § 3.6 and 3.7 for 2 patients. Seven patients brought their case before the Commission. Three patients had their appeal rejected, 3 appeals were withdrawn by the patients and one had to wait for the next meeting. The latter was by then discharged and did not meet the Commission. No patient was discharged under § 3.1-2 (coerced aftercare) in the study period.

Discussion

Suicidal behaviour/self-destructiveness, psychosis, affective disorders (mania, serious depression) and substance abuse were the main problems on admittance (tab 2). A look at the discharge diagnoses for involuntary admittances in Østfold (6) shows that 14% were admitted with a diagnosis related to substance abuse, 8% with schizophrenia, 16% with affective disorders, 11% with personality and behavioural disturbances, and 18% with a need-for-observation diagnosis. The studies are not however directly comparable. Our study comprises all admitted patients, but the Østfold study only included patients admitted under the former § 3 (observation section).

47 % were admitted involuntarily. Similar results are found in a previous study from the same hospital (7). The national average in 2005, according to SAMDATA (project aimed at providing, analysing and publishing data within mental health care, substance abuse and specialist health care), was 41 % (9). SAMDATA does however not consider acute psychiatry specifically or include internal transfers. After a professional assessment was done within 24 hours, 25 % were still under compulsory detention both in this study and according to a study by SINTEF Health. SINTEF's study, however, included all institutional psychiatry (8). Within 24 hours 22 of 49 involuntary admittances (45%) had been converted to the voluntary section. 18 of 30 patients (60%), admitted for coerced observation, had their MHA section lifted after the statutory assessment. In the Østfold study (6) 54 % of the patients had their section lifted after assessment. The fact that more than half of those admitted for observation had their section lifted the day after, according to both studies, ought to lead to a systematic appraisal of the circumstances surrounding admittances. Four of 15 patients (27%) admitted for coerced mental health care had their section lifted on assessment. There may have been no basis for using coercion or the

Table 2 Primary discharge diagnosis categorized according to ICD-10

	,			Tota	al
n = 49	%	n = 55	%	n = 104	%
6	12.2	8	14.5	14	13.5
17	34.7	11	20.0	28	26.9
9	18.4	23	41.8	32	30.8
7	14.3	2	3.6	9	8.7
6	12.2	4	7.3	10	9.6
4	8.1	7	12.7	11	10.6
	admis n = 49 6 17 9 7	6 12.2 17 34.7 9 18.4 7 14.3 6 12.2	admission admis n = 49 % n = 55 6 12.2 8 17 34.7 11 9 18.4 23 7 14.3 2 6 12.2 4	admission n = 49 % n = 55 % 6 12.2 8 14.5 17 34.7 11 20.0 9 18.4 23 41.8 7 14.3 2 3.6 6 12.2 4 7.3	admission admission Total n = 49 % n = 55 % n = 104 6 12.2 8 14.5 14 17 34.7 11 20.0 28 9 18.4 23 41.8 32 7 14.3 2 3.6 9 6 12.2 4 7.3 10

¹ Organic mental disorders; behavioural disturbances in adults; neurotic, burden-related and somatoform disorders; mental handicap; developmental deficits; somatic diagnoses

Table 3 Admissions (N=104) according to MHA section by authority responsible for admission [%]

Section (MHA)	Out-of-hours service	Regular general practioner	Specialist health service ¹	Total				
§ 2.1 (voluntary admission)	36 (65)	11 (20)	8 (15)	55 (100)				
§ 2.2 (consent to coerced mental health care for up to 3 weeks)		1 (100)		1 (100)				
§ 3.6 (involuntary admission for observation)	21 (70)	6 (20)	3 (10)	30 (100)				
§ 3.7 (involuntary admission for compulsory care)	7 (47)	5 (33)	3 (20)	15 (100)				
§ 3.1-2 (admitted from compulsory aftercare)	1 (100)			1 (100)				
§ 3.1-1 from another department (compulsory care)			1 (100)	1 (100)				
§ 3.1-1 after absence without leave (compulsory care)			1 (100)	1 (100)				
Total	65 (63)	23 (22)	16 (15)	104 (100)				
¹ Includes District Psychiatric Centre (DPC) and somatic care								

situation may have changed within the first 24 hours.

If it is the case that there was no basis for using coercion, this represents a serious problem. We often observe that the situation changes within 24 hours on an acute psychiatric ward. On arrival, many of the patients had thoughts of suicide, were high on drugs or thought to be psychotic. It is very important in acute psychiatric treatment to give patients a sense of security, peace and quiet, sleep, care and conversation. Often, this will be sufficient for the situation to change. It is a goal that mental illness should be discovered by the patient's regular GP and treated at the lowest possible level in the specialist health service. The reason why more are admitted from the out-of-hours service may be that the pressure of symptoms combined with possible substance abuse is higher in the evening and at night when the opportunities for action are limited. It might also be because the out-of-hours doctors do not know the patients so well. A regular doctor who cooperates with others and knows the patient well can find other solutions than hospitalization. It will also be important to see how much time out-of-hours doctors spend with the patients compared to the time spent by their regular GP and the specialist health service. More patients had shorter stays in hospital when admitted by out-of-hours doctors and this may indicate that the available time for assessment and treatment was short. This aspect should be studied further. 70% of patients admitted under the observation and assessment section of the MHA (§ 3.6), and nearly half the patients admitted for coerced mental health care (§ 3.7) are admitted via the outof-hours service (Table 3). Would there be more voluntary admissions if regular GPs and the specialist health service were able to a greater degree to manage patients with acute conditions during working hours in the daytime? Sufficient access to local psychiatric nurses on evening and night duty, an appointment with the regular GP or a specialist the following day and an emergency team in operation should be good preventative measures against the unnecessary use of coercion. It is important to do studies on the actual admittances themselves and to test out suggested measures empirically before concluding that the use of coercion on admittance can be reduced and the measures are working as intended.

11 patients were observed with an average observation time of 4.5 days. The aim of the ward was to assess at all times whether or not it was really necessary to use coercion. The average detention time in the Østfold study was 23 days for patients under the observation section (6). How much of this time was coerced observation is not given so a direct comparison is difficult. Reasons for a short coerced observation period may be several, for example, the new MHA (2) has reduced the observation time from three weeks to 10 days; and there is an increased awareness of the need to reduce the use of coercion (11,12). Earlier reports (8-10) also show a marked variation in the use of coercion among the different health institutions. We have not found other studies that look at the length of time taken for observation and assessment. Relatively few of our patients (16%) were still involuntary after the assessment was complete. This finding requires further study. It is possible that one of the objectives of the new MHA has been achieved, which was to reduce the extent of coerced observation. The material is too small to draw definite conclusions and further investigation is needed. It should be assessed whether it should be mandatory to record the data assessed in this study on a regular basis. Records of these data would improve our knowledge of the actual use of coercion in all of Norway's health institutions. One problem is that all psychiatric patients (wherever admitted or treated) are grouped together. Assessments of the use of coercion must consider which institution admitted them and the nature of the illness. 17 patients who remained involuntary had serious psychotic disorders. Five of these received follow-up in the municipalities

after treatment and could be discharged. The remaining 12 had serious mental disease with loss of ADL (activities in daily life) functions requiring long-term treatment in psychotic and rehabilitation wards.

One of the main functions of the MHA Commission is to monitor whether the Responsible Medical Officer (RMO) follows the MHA in accordance with its intentions and thereby they have an important role in safeguarding patient rights. Seven patients used their right to complain; no appeals were upheld. A few chose to withdraw their complaint or let it rest till a later meeting. The fact that few patients had their complaint upheld can be interpreted in various ways. It may be that the RMO has made an assessment in line with how the Commission interprets the MHA. There were few form-filling errors on admittance, which indicates good acquaintance with the new law.

The strength of the study is that it comprises all patients discharged in the period. The author has made most of the MHA section assessments, met up with the Commission and been the RMO for all the patients. The variable comprising discharge diagnoses may be a weakness. One may wonder if the sample is representative for acute psychiatric wards in the entire country, but some studies (6-10) indicate that the investigated ward is not atypical. Further studies should however be undertaken in other places as previous studies do not give an adequate picture of the situation throughout Norway.

Conclusion

A large proportion of the patients admitted involuntarily had their section converted to informal during the first day, and the average coerced observation time was short. The out-of-hours service played a greater role than regular GPs and the specialist health service in managing patients with acute psychiatric disorders, and further investigation is needed to conclude on whether this causes more involuntary admittances. More patients had a shorter stay when admitted by a

doctor in the out-of-hours services. The study does not show if there was a valid reason for using coercion on admittance. Studies are therefore needed on the admittance itself and the RMOs' assessments before this question can be answered.

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Literature

- Sosial- og helsedirektoratet. Situasjonen i akutttjenesten i psykisk helsevern for voksne. Oslo: Sosial- og helsedirektoratet, 2005.
- Lov om etablering og gjennomføring av psykisk helsevern (psykisk helsevernloven) av 2.7.1999
 pr. 62
- 3. Lov om helsepersonell m.v. (helsepersonelloven) av 2.7.1999 nr. 64 med endringer, sist ved lov av 21. desember 2000 nr. 127.
- 4. Lov om pasientrettigheter (pasientrettighetsloven) av 2.7.1999 nr. 63 med endringer, sist ved lov av 21. desember 2000 nr. 127.
- 5. Lov om spesialisthelsetjenesten m.m. av 2.7.1999 nr. 61.
- Gjelstad K, Løvdahl H, Ruud T et al. Tvangsinnleggelser til psykiatrisk observasjon – blir de opphevet dagen etter? Tidsskr Nor Lægeforen 2003; 123: 917 – 20.
- Brabrand J, Friis S. Tvangsinnleggelser i akuttpsykiatriske institusjoner. Tidsskr Nor Lægeforen 1997; 117: 1737–9.
- 8. Pedersen PB, Hatling T, Bjørngaard JH. Bruk av tvangsmidler i psykisk helsevern i 2001 og 2003. Trondheim: SINTEF Helse, 2004.
- Pedersen P, red. SAMDATA psykisk helsevern. Sektorrapport 2005, kapittel 17: 217–25. Rapport 2/06. Trondheim: SINTEF Helse, 2006.
- Rapport fra Helsetilsynet 4/2006. Bruk av tvang i psykisk helsevern. www.helsetilsynet.no (17.4.2007).
- 11. Høye I. Lovende fra gjennombruddsprosjektet i psykiatri. Tidsskr Nor Lægeforen 2001; 121: 863.
- Mathiesen J, red. Rapport fra gjennombruddsprosjekt psykiatri – bruk av tvang. Skriftserie for leger. Oslo: Den norske lægeforening, 2002.

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