THE EUNOMIA-STUDY: EUROPEAN EVALUATION OF COERCION IN PSYCHIATRY AND HARMONISATION OF BEST CLINICAL PRACTICE

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Coercive psychiatric treatment (involuntary hospitalisation, seclusion, restraint and forced medication) varies widely between European countries with regard to legal background, prevalence and type of involuntary treatment measures and other variables. However, little research and no trans-national comparisons on these variations exist so far. Furthermore, there are no European guidelines for best clinical practice of coercion in psychiatry. EUNOMIA is a three-year research project funded by the European Union, which aims at the analysis of the existing variation in coercive psychiatric treatment. This naturalistic study is conducted in 12 psychiatric inpatient units, in 12 European countries (Bulgaria, Czech Republic, Germany, Greece, Israel, Italy, Lithuania, Poland, Slovakia, Spain, Sweden, and United Kingdom). Two groups of patients are being assessed, at three time points: patients admitted involuntarily and patients who, although admitted voluntarily, feel coerced to admission. Data is gathered on all coercion, their influencing factors and outcomes. Interviews and structured assessment instruments are used to assess perceived coercion during hospitalisation, current symptoms and treatment- and life-satisfaction. All data is being entered into a web-based computerised documentation system. The findings of the study will be integrated with knowledge from legal and ethical experts as well as from users' organisations into national and European guidelines for best clinical practice of coercive psychiatric treatment. Dissemination of the results will be directed towards all professional groups involved in the process of involuntary treatment and users' organisations in order to advocate the harmonisation of best practice across Europe, to strengthen users' involvement and to influence political and legal decisions.

Key words: coercive psychiatric treatment, coercive measures, perceived coercion, mental health act, patients' rights

INTRODUCTION

The satisfaction of users from mental health services alongside with the question of whether psychiatric treatment can be considered successful if patients themselves are dissatisfied, have often been the focus of psychiatric research during the past decade[1]. A frequent source of dissatisfaction and of negative feelings is involuntary psychiatric treatment, which today is acknowledged by researchers as an extremely sensitive and hotly debated ethical issue[2-7].

The term "involuntary psychiatric treatment" refers to both involuntary admission to a Mental Health Unit and also the use during hospitalisation of coercive measures, such as seclusion, mechanical restraint and forced medication.

The procedure of involuntary admission is defined by country-specific legislation and its theoretical basis is either the dangerousness of psychiatric patients to others or to themselves, or the need for treatment. Seclusion is defined as the involuntary placement of an individual alone in a locked room specially set up for this purpose, whereas restraint is the fixation of at least one of the patient's limbs by mechanical devices[8-11]. Finally, forced medication aims at the 'inner' chemical restriction of the patient[8].

Both clinical practice and research[12] have shown that it is impossible to avoid the use of some form of coercive measures in Mental Health Units that admit patients with severe psychiatric disorders. Moreover, it seems that coercive measures work; not only do they prevent injury and reduce agitation, but they are often necessary for patients in order to regain control upon themselves and eventually become engaged in therapy[11].

On the other hand, the use of seclusion and restraint can have substantial deleterious physical and (more often) psychological effects on both patients and staff[13-20]. Moreover, according to research findings, the use of coercive measures can be substantially influenced by non-clinical factors such as cultural biases, staff role perceptions, the attitude of the hospital administration etc[19,21-27].

Public awareness of coercive psychiatric treatment is growing. Although patients often seem to accept their own involuntary treatment[28-31], users' organisations emphasise its negative effects. Patients experience coercive treatment as an extra burden on their already vulnerable mental condition and as a violation of their freedom and human dignity. The use of coercion can also obstruct the formation of a trusting therapeutic relationship, it is related to poorer outcome and it can result in pushing the patient away from mental health services[32]. Psychiatrists have raised concerns that coercive measures may represent a failure of the ongoing psychiatric therapeutic intervention[5].

Another equally sensitive issue in psychiatry is that of perceived coercion. Patients' subjective perception of

coercion does not always correspond to the actual coercive measures imposed upon them or to the legal status of hospitalisation[33]. Therefore, the reduction of coercive measures alone does not necessarily result in greater treatment satisfaction. Equally important for the subjective perception of coercion is the patient's notion of being respectfully included in a fair decision making process as well as the use of negative pressures, such as force and threats[34,35].

Despite the existing debate on the issue of involuntary psychiatric treatment, there is still much unexplained variation in the use of coercive measures among countries[36-41]. Although in 2000 the European Working Party on Psychiatry and Human Rights published the "White Paper on the protection of the human rights and dignity of people suffering from mental disorder, especially those placed as involuntary patients in a psychiatric establishment", up to now there are no European guidelines that would regulate the use of coercive treatment. On the other hand, although several studies on predictors and effects of coercive treatment have been published, research in this field remains sporadic and for the practical application of the results trans-national comparisons and integration are necessary. Little research has been carried out in issues such as legislation, clinical practice and cross-national comparisons (e.g. on patients' socio-demographic and clinical characteristics, patients', clinicians', and relatives' views, legislation) regarding the application of coercive measures in member states of the European Union. Although different procedures and legislation make comparisons between countries difficult, this kind of research is necessary for the development of common guidelines for best clinical practice and for legal regulations.
However, as long as inconsistent findings and controversies persist, there will be a growing concern that coercive measures in psychiatry may entail unnecessary infringements of patients' rights.

Within this scope, a research study focusing on coercive psychiatric treatment as it is implemented in different European countries is more useful and better timed than ever. A European multi-centre research project was introduced on December 1st 2002. This was funded by the Fifth European Commission Frame Program (no. of contract QLG4-CT-2002-01036), under the title EUNOMIA (European Evaluation of Coercion in Psychiatry and Harmonisation of Best Clinical Practice).

AIMS OF THE STUDY

EUNOMIA is an initiative of the Department of Psychiatry and Psychotherapy of Dresden University. This specific Department is also the co-ordinating centre of the study.
The aim of this naturalistic study, which is unique regarding its methodology and cross-national comparisons, is the analysis of the existing variations in the use of coercive measures in psychiatry. Following this general research framework, the study is conducted in 12 psychiatric inpatient settings with catchment areas of similar size, in 12 different European countries (Bulgaria, Czech Republic, Germany, Greece, Israel, Italy, Lithuania, Poland, Slovakia, Spain, Sweden, United Kingdom). Between these countries great variations exist regarding legislation, prevalence and documentation of involuntary treatment measures, social and cultural background, users' involvement and other variables.

The specific scientific aims of the study are:

- to include regions of comparable size from all over Europe in order to study as much of the existing variation as possible
- to systematically describe and compare demographic characteristics and mental health services of these regions
- to systematically describe and compare patients hospitalised both voluntarily and involuntarily with regard to variables that might be connected with the use of coercive treatment measures or with patients' perceived coercion
- to explore the connection between coercion during treatment, treatment outcome and future treatment seeking
- to document views of staff, users and family members on coercive measures
- to identify factors that may influence staff to select coercive treatment measures in favour of non-coercive alternatives
- to provide information on the legal basis for the use of coercive measures in psychiatry in the participating countries
- to establish a critical mass for influencing future research in this area as well as legal and political decisions in order to harmonise the clinical practice of coercive measures in psychiatry on both national and European level.

The research questions of the study protocol are:

1. What are the socio-demographic and clinical characteristics of legally involuntarily admitted patients and of voluntarily admitted patients who feel coerced to admission?
2. How frequent and intense is perceived coercion in legally voluntarily and legally involuntarily patients admitted to the participating centres?
3. What coercive treatment measures are applied to these two groups of patients?
4. What is the medium-term outcome for legally involuntarily admitted patients and for voluntarily admitted patients who feel coerced to admission?
5. What are the baseline predictors of a more or less favourable medium-term outcome in the two groups of patients?
6. What is the international variation in questions 1 - 5?

Data regarding coercive measures, their influencing factors and their effects is gathered through structured interviews with patients and from clinical documentation. A central database for the documentation and evaluation of all information has been established. The findings of the study will be integrated with knowledge from legal and ethical

Table 1. The centres participating in the Eunomia study

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* Department of Psychiatry, Medical University of Sofia, Sofia, **Bulgaria**
* Department of Psychiatry, 1st Medical School of Charles University, Prague, **Czech Republic**
* Psychiatric Hospital of Thessaloniki, D' Acute Ward, Thessaloniki, **Greece**
* School of Social Work, Tel Aviv University, Tel Aviv, **Israel**
* Department of Psychiatry, Second University of Naples, Naples, **Italy**
* Clinic of Psychiatry, Vilnius University, Vilnius, **Lithouania**
* Department of Psychiatry, Wroclaw Medical University, Wroslaw, **Poland**
* Psychiatric Hospital of Michalovce, Michalovce, **Slovakia**
* Department of Legal Medicine and Psychiatry, University of Granada, Granada, **Spain**
* Unit for Social and Community Psychiatry, Newham Centre for Mental Health, London, **Great Britain**
* Psychiatric Research Centre, Orebro, **Sweden**

experts as well as from users' organisations into national and European guidelines for best clinical practice of coercive psychiatric treatment.

PARTICIPATING CENTRES

The twelve participating centres of the study are being presented on *Table 1.* Overall 17 inpatient wards are included, of which 9 are Psychiatric Wards in General Hospitals (Bulgaria, Czech Republic, Italy, Spain, Sweden, Germany) and 8 belong to independent Psychiatric Hospitals. Greece is represented by the D' Acute Ward of the Psychiatric Hospital of Thessaloniki. This is one of the five Acute Wards of the hospital, admitting new patients every five days. According to data from a previous research project[43], in 1999 272 patients were hospitalised in the ward (a total of 387 admissions). Of these, 34 patients (13.5%) were admitted involuntarily for hospitalisation and 40 (15.9%) were admitted involuntarily for evaluation. The percentages are similar for the total of admissions to the Psychiatric Hospital of Thessaloniki in the same year (76% voluntary admissions, 24% involuntary admissions) and they do not change significantly through time. According to a retrospective study for the years 1988-1993, 23% of the admissions to D' Acute Ward were involuntary[44].

Regarding the special characteristics of the participating centres, 11 wards (among them D' Acute Ward) admit both male and female patients, 4 wards (Bulgaria, Czech Republic, Italy, Poland) admit male patients only and 2 wards (Bulgaria, Czech Republic) female only. Thirteen wards (76%) are 'closed', and 3 (Italy, Great Britain) are 'partly closed'. Interestingly enough, the only 'open' ward is the Greek one. All the Wards at the Psychiatric Hospital of Thessaloniki are open and this reflects its general attitude for the psychiatric inpatient care. However, this attitude is often being criticised by both the staff and the public due to the problems that are raised, e.g. patients often abscond and the only way to prevent this is the use of mechanical restraint.

Table 2. Description of the wards participating in Eunomia

	Number of beds	Beds / Physician	Beds / nurse
DRESDEN	35	6	1
SOFIA	45	6	3
PRAGUE	77	10	2
THESSALONIKI	25	3	2
TEL AVIV	36	7	2
NAPLES	18	3	1
VILNIUS	40	8	4
WROSLAW	29	5	2
MICHALOVCE	10	10	1
GRANADA	30	6	2
LONDON	33	4	1
OREBRO	11	11	2

Table 3. Instruments used for the description of catchment areas

CONSTRUCT	INSTRUMENT
Socio-demographic profile of the catchment area	European Socio-Demographic Schedule (ESDS)[45]
Socio-demographic profile of the catchment area	Parts of the Area Socio-demographic Sheet[46]
Inventory of the mental health services in the catchment area	European Service Mapping Schedule (ESMS)[47]
Description of the participating wards	International Classification of Mental Health Care (ICMHC); instrument by H.J. Salize[48]

Finally, the ratios bed per physician and bed per nurse (*Table 2*) reveal that D' Acute Ward is one of the most adequately staffed centres of the study, with three beds per physician (trainees are included) and two beds per nurse.

STUDY DESIGN

The study consists of three phases: a 9-month preparatory, a 21-month data collection and a 6-month phase for data analysis, preparation of guidelines for best clinical practice and dissemination of result.

A. PREPARATORY AND PILOT PHASE (12/2002 – 8/2003)

The preparatory phase of the study began with the setting up of reliable communication links between the 12 participating centres. Approval on ethical and data protection issues was provided to each centre by the local Ethics

Committees. A special working group of legal experts was formed and reports were drawn up on the legal background for involuntary hospitalisation and treatment in the 12 countries. A computerised documentation system with a central database was designed and implemented. Each centre formed a focus group, with the participation of both professionals and representatives of users and their families. The twelve partners agreed on the assessment instruments, which were then translated in the national languages and validated. All researchers and staff were trained in using these instruments, in order to reach high inter-rater and intra-rater reliability. Finally, certain assessment instruments were used for the description of the catchment area of each participating centre, regarding socio-demographic characteristics and mental health services (*Table 3*). The preparation and piloting phase was concluded with a 3-month piloting of all assessment instruments in clinical routine.

B. DATA GATHERING PHASE (09/2003 – 05/2005)

The project at present is in the process of this phase. All participating centres are collecting data according to the study design, using the selected assessment instruments.

During this phase, two groups of patients are being assessed: a. patients admitted to the hospital on an involuntary legal basis (140 patients per centre) and b. legally voluntarily admitted patients who feel coerced to admission (40 patients per centre). For building up the second group, voluntarily admitted patients are approached and screened whether they feel coerced to admission. As an assessment instrument, the so called "Perceived Coercion Scale" from the MacArthur Admission Experience Survey[49] is used. Patients are asked to participate in the study if they report perceived coercion in three or more out of the five questions in this instrument. The definition of the two study groups (voluntarily and involuntarily admitted patients) in each centre is according to the national legislation for mental health. On *Table 4* the inclusion criteria for the study are reported.

Table 4. Criteria for patients to be included in the Eunomia study

* Age between 18 and 65 years old
* Patients after being informed about the project, give their written consent to participate to the study (before T1)
* Patient is not hospitalized in a special unit for only forensic or only intoxicated patients
* Patient is not hospitalized in a special unit for only eating disorders, which automatically means coercive treatment
* Patient has not been diagnosed with dementia (note: diagnoses such as brain trauma, epilepsy, drug-induced psychosis, alcohol intoxication associated with a mental disorder are acceptable for study inclusion)
* Patient has not yet been included in the study
* Patient lives in the catchment area of the participating hospital

Each patient included in the study is assessed at three time-points: T1 (within the first ten days of admission), T2 (four weeks after admission) and T3 (three months after admission independently of their current living situation). Patients' perception of coercion during admission and hospitalisation, current symptom severity, satisfaction with treatment and quality of life are being assessed. The instruments (*Table 5*) have been selected so that they provide a valid and reliable assessment, while accommodating the sometimes-limited mental capacity of the participating patients.

Included in the assessment is the documentation of all individual incidents of the following coercive measures during the first four weeks of hospitalisation:

o Involuntary admission to a Psychiatric Hospital
o Involuntary detention after being admitted voluntarily

Table 5. Instruments for the assessment of patients participating in the Eunomia study

CONSTRUCT	INSTRUMENT
Perceived coercion in voluntarily admitted patients	Screening with perceived coercion items from MacArthur Admission Experience Survey[49]
Characteristics of treatment episode	Records
Socio-demographic and clinical characteristics	Records, interview
Perceived coercion and pressures concerning hospital admission	Parts of the MacArthur Admission Experience Survey + Cantril Ladder of perceived coercion[50,51]
Details of each coercive measure applied in the first 4 weeks after index admission	Routine documentation, additional records
Perceived coercion and pressures during hospitalisation and outcome assessment	Structured interview + Cantril Ladder of perceived coercion (rephrased)
Outcome assessment[2]	Structured interview
Quality of life	Manchester Short Assessment of Quality of Life (MANSA)[52]
Satisfaction with treatment	Client´s Assessment of Treatment (CAT), 7 main items[53]
Compliance with treatment	Structured interview
Perceived coercion (staff rating)	Cantril Ladder of perceived coercion (rephrased)
Patient's aggression (staff rating)	Modified Overt Aggression Scale (MOAS)[54]
Symptom severity and level of functioning	Global Assessment of Functioning scale (GAF)
Symptom severity	Brief Psychiatric Rating Scale (BPRS), 24 item version[55]

o Seclusion / Placement in a locked room
o Restraint / Fixation by holding or/and by mechanical appliance
o Forced medication

Finally, interviews are conducted for the assessment of family members' attitudes towards coercive treatment.

On a continuous basis, all twelve centres enter the gathered data into the computerised documentation system and all entries are being checked regularly.

C. ANALYSIS AND DISSEMINATION PHASE (06/2005 – 11/2005)

During this phase the statistical analysis of all data will be completed and the research questions will be answered. The findings of the study will be integrated with material deriving from the legal experts' reports and with users' views into specific guidelines for the best clinical practice of coercive measures in psychiatry. The results of the study will be presented at national and international scientific conferences and will be published in leading scientific journals. All national and European bodies involved in the elaboration of the legal frame for mental health as well as the World Health Organisation will also be informed.

Dissemination of the findings will be directed towards all professional groups involved in the process of involuntary treatment and at users' organisations in order to advocate the harmonisation of best clinical practice across Europe, to strengthen users' involvement and to influence political and legal decisions.

CONCLUSION

Psychiatric reform is still an ongoing process in all European countries. Common aims are the deinstitutionalisation of chronic patients with mental health problems, the reduction of beds in psychiatric hospitals and the development of mental health services in the community. Fundamental principles in this process are the strengthening of patients' autonomy, the recognition of their needs, the improvement of their quality of life and the flexibility of all therapeutic interventions.

So far there has been little research at a European level on the quality of care and on the effects of therapeutic interventions in one of the most vulnerable groups of psychiatric patients, namely those who are admitted involuntarily or feel coerced to admission and who are subjected to coercive measures during their hospitalisation. Moreover, although these people form a very vulnerable population group in terms of possible infringements of autonomy, dignity, freedom and human rights, they are not protected adequately by national or European guidelines for best psychiatric treatment.

The EUNOMIA study aims at the establishment of a vast empirical database for the detailed analysis at a European level of the existing variation in the use of coercion in psychiatry. The recording of patients' subjective experiences and the involvement of users' organisations aim at strengthening their autonomy and human rights. Finally, it is expected that through the development of European Guidelines and dissemination to governmental, legal and professional bodies EUNOMIA will contribute to the establishment of a common clinical practice regarding coercive measures in psychiatry for all present and future member states of the European Union. More information about EUNOMIA can be found at the project's site: **www.eunomia-study.net**

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REFERENCES

1. Glass CR, Arnkoff DB. Consumers´ perspectives on helpful and hindering factors in mental health treatment. Journal of Clinical Psychology 2000; 56(11):1467-1480.
2. Allen M, Smith VF. Opening Pandora's box: the practical and legal dangers of involuntary outpatient commitment. Psychiatric Services 2001; 52(3):342-346.
3. Appelbaum PS. Law & psychiatry: seclusion and restraint: Congress reacts to reports of abuse. Psychiatric Services 1999; 50(7):881-885
4. Bennett NS, Lidz CW, Monahan J, et al. Inclusion, motivation, and good faith: the morality of coercion in mental hospital admission. Behavioural Sciences and the Law 1993; 11: 295-306.
5. Nilstun T, Syse A. The right to accept and the right to refuse. Acta Psychiatrica Scandinavica 2000; Suppl 101:31-34.
6. Westrin CG, Nilstun T. Psychiatric ethics and health services research. Concepts and research strategies. Acta Psychiatrica Scandinavica 2000; Suppl 101:47-50.
7. Workman RH, McCullough LB, Molinari V, et al. Clinical and ethical implications of impaired executive control functions for patient autonomy. Psychiatric Services 2000; 51(3):359-363.
8. Currier GW, Allen MH. Emergency psychiatry: physical and chemical restraint in the psychiatric emergency service. Psychiatric Services 2000; 51(6):717-719.
9. Mason T. Seclusion: definitional interpretations. Journal of Forensic Psychiatry 1992; 3(2):261-270.
10. Thompson P. The use of seclusion in psychiatric hospitals in the Newcastle area. British Journal of Psychiatry 1986; 149:471-474.
11. Way BB. The use of restraint and seclusion in New York State psychiatric centres. International Journal of Law and Psychiatry 1986; 8:383-393.
12. Fisher WA. Restraint and seclusion: a review of literature. American Journal of Psychiatry 1994;151(11):1584-1590.
13. Binder RL, McCoy SM. A study of patients' attitudes toward placement in seclusion. Hospital and Community Psychiatry 1983;

34(11):1052-1054.

14. Borum R, Swartz M, Riley S, et al. Consumer perceptions of involuntary outpatient commitment. Psychiatric Services 1999 ;50(11) :1489-1491.
15. Eriksson KI, Westrin CG. Coercive measures in psychiatric care. Reports and reactions of patients and other people involved. Acta Psychiatrica Scandinavica 1995; 92(3):225-230.
16. Greenberg WM, Moore-Duncan L, Herron R. Patients´ attitudes toward having been forcibly medicated. Bull Am Acad Psychiatry Law 1996; 24(4):513-524.
17. Mann LS, Wise TN, Shay L. A prospective study of psychiatric patients' attitudes toward the seclusion room experience. General Hospital Psychiatry 1993; 15:177-182.
18. Norris MK, Kennedy CW. The view from within: How patients perceive the seclusion process. Journal of Psychosocial Nursing 1992; 30(3):7-13.
19. Olofsson B, Norberg A. Experiences of coercion in psychiatric care as narrated by patients, nurses and physicians. Journal of Advanced Nursing 2001; 33(1):89-97.
20. Poulsen HD, Engberg M. Validation of psychiatric patients´ statements on coercive measures. Acta Psychiatrica Scandinavica 2001; 103(1):60-65.
21. Betemps EJ, Somoza E, Buncher CR. Hospital characteristics, diagnoses, and staff reasons associated with use of seclusion and restraint. Hospital and Community Psychiatry 1993; 44(4):367-371.
22. de Cangas JPC. Nursing staff and unit characteristics: do they affect the use of seclusion? Perspectives in Psychiatric Care 1993; 29(3):15-22.
23. Engleman NB, Jobes DA, Berman AL, Langbein LI. Clinicians´ decision making about involuntary commitment. Psychiatric Services 1998; 49(7):941-945.
24. Holzworth RJ, Wills CE. Nurses´ judgments regarding seclusion and restraint of psychiatric patients: a social judgment analysis. Research in Nursing and Health 1999; 22(3):189-201.
25. Riecher A, Rössler W, Löffler W, Fätkenheuer B. Factors influencing compulsory admission of psychiatric patients. Psychological Medicine 1991; 21:197-208.
26. Way BB, Banks SM. Use of seclusion and restraint in public psychiatric hospitals: Patient characteristics and facility effects. Hospital and Community Psychiatry 1990; 41(1):75-81.
27. Way BB, Banks S. Clinical factors related to admission and release decisions in psychiatric emergency services. Psychiatric Services 2001; 52(2):214-218.
28. Cascardi M, Poythress NG, Ritterband L. Stability of psychiatric patients' perceptions of their admission experience. Journal of Clinical Psychology 1997; 53(8):833-839.
29. Gardner W, Lidz CW, Hoge SK et al. Patients´ revisions of their beliefs about the need for hospitalisation. Am J Psychiatry 1999; 156(9):1385-1391.
30. Hiday VA, Swartz MS, Swanson J, Wagner HR. Patient perceptions of coercion in mental hospital admission. International Journal of Law and Psychiatry 1997; 20(2):227-241.
31. Hoge SK, Lidz CW, Eisenberg M et al. Perceptions of coercion in the admission of voluntary and involuntary psychiatric patients. International Journal of Law and Psychiatry 1997; 20 (2):167-181.
32. Kaltiala-Heino R, Laippala P, Salokangas RKR. Impact of coercion on treatment outcome. International Journal of Law and Psychiatry 1997; 20(3): 311-322.
33. Cascardi M, Poythress NG. Correlates of perceived coercion during psychiatric hospital admission. International Journal of Law and Psychiatry 1997; 20 (4):445-458.
34. Hoge SK, Lidz CW, Eisenberg M et al. Family, clinician, and patient perceptions of coercion in mental hospital admission. International Journal of Law and Psychiatry 1998; 21 (2):131-146.
35. Lidz CW, Hoge SK, Gardner WP et al. Perceived coercion in mental hospital admission: Pressures and Process. Archives of General Psychiatry 1995; 52: 1034-1039.
36. Betemps EJ, Buncher CR, Oden M. Length of time spent in seclusion and restraint by patients at 82 VA medical centres. Hospital and Community Psychiatry 1992; 43(9):912-914.
37. Carpenter MD, Hannon VR, McCleery G, Wanderling JA. Variations in seclusion and restraint practices by hospital location. Hospital and Community Psychiatry 1988; 39(4):418-423.
38. Kaltiala-Heino R, Korkeila J, Tuohimäki C, Tuori T, Lehtinen V. Coercion and restrictions in psychiatric inpatient treatment. European Psychiatry 2000; 15(3):213-219.
39. Monahan J, Hoge SK, Lidz CW et al. Coercion and commitment: understanding involuntary mental hospital admission. International Journal of Law and Psychiatry 1995; 18(3):249-263.
40. Okin RL. Variation among state hospitals in use of seclusion and restraint. Hospital and Community Psychiatry 1985; 36 (6):648-652.
41. Segal SP, Laurie TA, Segal MJ. Factors in the use of coercive detention in civil commitment evaluations in psychiatric emergency services. Psychiatric Services 2001; 52:514-520.
42. Nicholson RA, Ekenstam C, Norwood S. Coercion and the outcome of psychiatric hospitalisation. International Journal of Law and Psychiatry 1996; 19 (2):201-217.
43. Georgiadou E, Mastrogianni A, Syngelakis M, Karastergiou A. Involuntary hospitalization: Legal frame and its application. Hellenic General Hospital Psychiatry 2003; 1(1):24-29 (in Greek)
44. Valoumas G, Mastrogianni A, Karastergiou A, Zambioglou G, Kallinis H, Alagiozidou E. Psychiatric care in an Acute Ward at the Psychiatric Hospital of Thessaloniki: II. Voluntary and involuntary admissions. 13th Panhellenic Congress of Psychiatry, 1994 (Oral presentation). Abstracts Issue:70 (in Greek)
45. Beecham J, Johnson S and the EPCAT Group The European Socio-Demographic Schedule (ESDS); rationale, principles and development. Acta Psychiatrica Scandinavica 2000; 102 Suppl 405:33-46.
46. Knudsen HC. Area sociodemographic characteristics. EU-Biomed II: Schizophrenia, Needs and Costs 1996. Copenhagen.
47. Johnson S, Kuhlmann R and the EPCAT Group. The European Service Mapping Schedule (ESMS): development of an instrument for the description and classification of mental health services. Acta Psychiatrica Scandinavica 2000; 102 Suppl 405:14-23.
48. de Jong A. Development of the International Classification of

Mental Health Care (ICMHC). Acta Psychiatrica Scandinavica 2000 ; 102 Suppl 405:8-13.
49. Gardner W, Hoge SK, Bennett N et al. Two scales for measuring patients' perceptions for coercion during mental hospital admission. Behavioural Sciences and the Law 1993; 11:307-322.
50. Cantril H. The pattern of human concern. New Jersey: Rutgers University Press 1965.
51. H_yer G, Kjellin L, Engberg M et al Paternalism and autonomy - a presentation of a Nordic study on the use of coercion in the mental health care system. International Journal of Law and Psychiatry 2002; 25:93-108.
52. Priebe S, Huxley P, Knight S, Evans S. Application of the Manchester Short Assessment of Quality of Life (MANSA). International Journal of Social Psychiatry 1999; 45:7-12.
53. Priebe S, Gruyters T, Heinze M, Hoffmann C, Jaekel A. Subjektive Evaluationskriterien in der psychiatrischen Versorgung - Erhebungsmethoden für Forschung und Praxis. Psychiatrische Praxis 1995; 22:140-144.
54. Yudofsky SC, Silver JM, Jackson W, Endicott J, Williams D. The overt aggression scale for the objective rating of verbal and physical aggression. American Journal of Psychiatry 1986; 143(1):35-39.
55. Overall JE, Gorham DR. BPRS. Brief Psychiatric Rating Scale. In: Guy, W. (Ed.): ECDEU Assessment Manual for Psychopharmacology 1976. Rev Ed. Rockville. Maryland, 217-222.

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