„CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY,
BUCHAREST
DOCTORAL SCHOOL
MEDICINE

Involuntary admission in the psychiatric system

DOCTORAL THESIS SUMMARY

Doctorate coordinator:
PROF. UNIV. DR. TUDOSE CĂTĂLINA

Doctoral student: PĂUN RADU-MIHAI

2025

Table of contents

I. General part

The general part covers the historical evolution of psychiatric patient care practices, as well as a series of ethical considerations that have been foundational in the development of current legislation regulating involuntary hospitalization, as well as providing an exhaustive overview of the socio-demographic and clinical parameters that influence the process.

Involuntary hospitalization is defined, according to Article 5 of the Romanian Mental Health Law no. 487/2002, as "hospitalization against the patient's will or without their consent." For a person to be admitted involuntarily, it is necessary for an authorized psychiatrist to determine that the individual suffers from a mental disorder which either "poses an imminent danger of harm to themselves or others" or impairs their judgment to such an extent that "failure to admit them would lead to a serious deterioration of their condition or prevent the provision of appropriate treatment." In practice, imminent danger often translates into suicidal behavior, aggression, or severe self-neglect. The purpose of involuntary admission is to ensure appropriate psychiatric treatment and protect the individual from the potential consequences of their condition, as well as to safeguard society by isolating the individual until symptom improvement occurs.

History of Involuntary Hospitalization

The involuntary hospitalization of individuals with mental disorders goes back to the Antiquity, when such illnesses were often interpreted as supernatural phenomena, and treatments were largely ritualistic or religious. In classical Greece and Rome, care was primarily provided by the family, with early treatments being described in Hippocratic texts. Later, during the early Christian and Islamic periods, charitable institutions began to shelter both physically and mentally ill individuals, although medical treatments were limited and the focus remained on spiritual care. During the Middle Ages and the Renaissance, the Church remained the primary authority in managing such cases, while asylums—such as Bedlam in England—became notorious for their harsh treatment of patients.

A major shift occurred in the early modern era, when the Enlightenment and scientific progress prompted the establishment of secular asylums. Reformers like Pinel and Tuke advocated for more humane and structured treatment; however, due to the absence of effective medication, the primary objective remained the isolation of patients from society. In Romania, a medicalized approach to psychiatry began to emerge in the 19th century with the reorganization of asylums and state involvement. Nonetheless, in the first half of the 20th

century, optimism faded as psychiatry dangerously intersected with eugenics and repressive policies, culminating in forced sterilizations and even extermination of individuals with mental disorders under totalitarian regimes. This history reflects a legacy marked by stigmatization, control, and only sporadic moments of genuine humanistic progress.

Ethical Considerations

Involuntary hospitalization entails a restriction of autonomy, seemingly in conflict with the principles of autonomy and beneficence. Medical paternalism thus becomes a necessary but controversial practice, especially considering that psychiatric diagnosis is influenced by cultural factors and inherently subjective. Utilitarian and deontological ethical frameworks provide divergent perspectives: the former justifies involuntary admission through beneficial outcomes, while the latter accepts it only insofar as it protects the rights of others.

Patients' experiences with involuntary hospitalization are heterogeneous. Some retrospectively view the intervention as beneficial, while others perceive it as traumatic—particularly when coercive measures such as physical restraint are employed. The long-term effectiveness of involuntary admission remains debatable, being influenced by the quality of the therapeutic relationship, continuity of care, and the patient's perception of coercion. Overall, involuntary hospitalization remains a morally complex act that must be assessed not only in legal terms, but also in light of individual context and its impact on the patient's dignity and autonomy.

Clinical and Social Factors Associated with Involuntary Hospitalization

The practical aspects of involuntary hospitalization varies significantly across countries, depending on numerous factors. A meta-analysis conducted by Walker et al. identified several risk factors associated with increased likelihood of involuntary admission: male gender, absence of a romantic relationship, unemployment, diagnoses within the spectrum of psychotic or bipolar disorders, history of previous involuntary hospitalizations, lack of insight into the illness, poor treatment adherence, and police involvement during presentation.

II. Personal contributions

Main Research Hypothesis and Objectives

The main hypothesis of this study was that certain categories of patients are significantly more likely to be involuntarily hospitalized. Accordingly, the primary objective was to compare the clinical and socio-demographic parameters between a group of involuntarily admitted patients and a control group of voluntarily admitted patients.

The secondary objectives were as follows: comparison of perceived coercion levels between involuntary and voluntary patients; validation of a Romanian version of the MacArthur Admission Experience Survey; assessment of the frequency of objective coercive measures; identification of parameters associated with the use of objective coercive measures; identification of factors influencing perceived coercion; longitudinal evaluation of the relationship between involuntary hospitalization and the number of readmissions; and identification of factors influencing the number of readmissions.

Study Design

The studies were conducted in accordance with the principles of the 1964 Declaration of Helsinki on ethical principles for medical research involving human subjects and were approved by the Ethics Committee of the "Professor Dr. Alexandru Obregia" Clinical Psychiatric Hospital (100/22.08.2022).

Data collection took place between September 2022 and February 2023 on wards 2 and 14 of the hospital. Participants were selected using simple random sampling and were categorized into two groups based on their legal admission status: the study group (involuntarily admitted) and the control group (voluntarily admitted). Patients who refused to participate or were involuntarily admitted under Article 110 of the Penal Code were excluded. Patient evaluations were conducted by the doctoral student through direct interviews, medical record reviews, and, when necessary, consultation with the attending physician or the participant's family.

Variables of Interest and Assessment Instruments

Demographic data of interest included age, sex, marital status, monthly income, living and working conditions, and educational level. These were collected using a standardized evaluation questionnaire administered at the end of the involuntary

hospitalization for involuntarily admitted patients, and at admission for voluntarily admitted patients.

Clinical parameters included: diagnosis at admission, illness duration, treatment compliance, illness severity, aggression level, and perceived coercion. Healthcare utilization variables included mode of hospital presentation, length of stay, duration between initial and subsequent admissions, number of readmissions, and total number of hospitalization days in the previous year.

Illness severity was measured using the Clinical Global Impressions-Severity scale (CGI-S), aggression using the Modified Overt Aggression Scale (MOAS), and perceived coercion using a Romanian-translated version of the MacArthur Admission Experience Survey.

Statistical Analysis

All analyses were performed using IBM SPSS Statistics v26 (Armonk, NY: IBM Corp). A significance level of $p < .05$ was considered for all studies.

Descriptive analysis was used to assess the social, demographic, and clinical characteristics of the patients. Categorical variables with two categories were analyzed using the Chi-Square test, while those with more than two categories were analyzed using binary logistic regression. Continuous variables were first tested for normality using the Shapiro-Wilk test and then analyzed using the Mann-Whitney U test (for non-normally distributed data) or the Student's t-test (for normally distributed data).

For the validation of the MacArthur Admission Experience Survey, the known-groups method was used, based on the assumption that involuntarily admitted patients would report higher perceived coercion levels than voluntary ones. Item-to-total correlations were calculated using Spearman coefficients. Factor analysis of the R-AES items was approached in two steps: first using a bifactor model, then a three-factor model. Oblique rotation with a delta value of 0 was used. Internal consistency of the R-AES subgroups was assessed using Cronbach’s alpha.

Risk Factors for Involuntary Admission in a Romanian Patient Sample

The study sample included 177 patients, of whom 88 (49.7%) were involuntarily admitted and 89 (50.3%) voluntarily admitted. Among the socio-demographic variables, urban residence ($p = .031$), lower monthly income ($p = .004$), and unemployment ($p = .027$) were identified as risk factors for involuntary hospitalization.

Clinically, patients with mania or mixed states had a 5.079-fold increased risk (95% CI = 1.834–14.065, p = .002) of involuntary admission, and those with psychosis had a 5.844-fold increased risk (95% CI = 2.642–12.928, p < .001), compared to patients with depression (reference group). Illness severity, as measured by CGI-S, and aggression levels assessed via MOAS, were significantly higher in the involuntarily admitted group (p < .001 for both).

There were also significant differences regarding the mode of hospital presentation. Patients brought in by ambulance (95% CI = 5.95–63.51, p < .001) or police (95% CI = 14.69–240.17, p < .001) were significantly more likely to be admitted involuntarily compared to those who arrived on their own.

These findings are consistent with existing literature and are particularly valuable as they represent the first data on this topic from a country within the former Soviet sphere of influence.

Perceived Coercion Among Psychiatric Patients: Validation of the Romanian Version of the MacArthur Admission Experience Survey

Coercive measures—defined as interventions applied against a patient's autonomous opposition or will—are frequently employed in involuntary hospitalizations. These include formal/objective measures such as physical restraint, seclusion, or forced medication, as well as informal/subjective measures such as persuasion, interpersonal pressure, or threats. While most countries restrict formal coercion to cases involving a clear danger to self or others, informal coercion is harder to define and regulate. Many patients, even those not subjected to objective coercion, report experiencing subjective coercion, which can impair the therapeutic alliance and reduce treatment adherence, ultimately impacting long-term outcomes.

The MacArthur Admission Experience Survey (AES) is a 16-item questionnaire assessing perceived coercion among psychiatric patients. This tool was chosen due to its widespread use in coercion-related studies and its previous translations and validations in four other languages.

The study included 142 respondents, 61 involuntarily and 81 voluntarily admitted. The total R-AES score had a mean of 3.18, SD of 4.24, range 0–14, skewness of 1.26, and kurtosis of 0.28. Item-total correlations ranged from .53 to .86, indicating the scale's heterogeneity. Internal consistency was satisfactory, with a Cronbach’s alpha of .92. A three

factor model was selected, with factors explaining 52.6%, 10.5%, and 6% of the variance, respectively.

Higher R-AES scores were associated with younger age ($p = .019$), frequent hospitalizations ($p = .040$), and non-adherence to treatment ($p = .031$). Patients brought in by police or ambulance scored significantly higher than those brought by family or self-referred ($p < .001$). Patients with psychosis ($p = .003$) or mania ($p = .008$) reported higher levels of perceived coercion than those with other diagnoses.

The Romanian version of the AES proved to be a useful tool for assessing perceived coercion among psychiatric patients and may serve as a foundation for future discussions regarding the Romanian mental healthcare system and its impact on patients' lives.

The Revolving Door Phenomenon in Romanian Mental Health Care

Revolving-door (RD) patients are defined as those who are re-hospitalized more than three times within a two-year period. The hospital readmission rate is a key performance indicator of any healthcare system. Thus, the revolving door phenomenon, adopted alongside Western care models, represents a major concern. Identifying the factors associated with repeated hospitalizations helps raise awareness and better understand the phenomenon's characteristics.

Out of 144 individuals, 58 met RD criteria and comprised the study group, while the remaining 88 served as controls. The main determinant of RD status after one year of follow-up was a history of frequent hospitalizations ($p < .001$). Conversely, involuntary hospitalization appeared to reduce the probability of subsequent multiple readmissions (95% CI = .155–.991, $p = .048$).

Objective Coercive Measures in Psychiatry

In the literature, mechanical restraint, seclusion, and forced medication are regarded as primary objective coercive measures (OCMs). Among the 88 involuntarily admitted patients, 34 underwent OCMs, while the remaining 54 constituted the control group.

Patients subjected to these measures were more often brought in by police than those in the control group. In contrast, presentation by ambulance or with family members was associated with a lower likelihood of experiencing OCMs. Higher aggression and illness severity were also identified as significant risk factors.

Conclusions and Personal Contributions

Despite its controversial history, involuntary hospitalization remains an integral component of psychiatric care. It is important to emphasize that this is often a traumatic experience and should be used only as a last resort for psychiatric cases whose severity poses a danger to the patient or others. Care strategies should prioritize its prevention through treatment continuity and post-discharge support. Accordingly, investing in community-based mental health services is imperative, as their absence is arguably the most critical weakness of Romania's mental health system.

While involuntary hospitalization is extensively covered in international literature, the present study brings a significant novelty by exploring the local particularities of this phenomenon. Prior to this, no such data existed from Eastern European countries, with most research coming from North America, Western Europe, or Australia. Given the divergent historical trajectories of mental health systems in the former Soviet bloc versus the Western world, extrapolating findings from existing studies to the Eastern European context is problematic. This study, therefore, enables a comparative analysis of the Romanian psychiatric system and provides a foundation for future research on this topic.

Selective bibliography

Adler, N., Mueller, G. O. W., & Ayat, M. (1993). Psychiatry under tyranny: A report on the political abuse of Romanian psychiatry during the ceausescu years. *Current Psychology*, *12*(1), 3–17. https://doi.org/10.1007/BF02737088

Carmona, R., Cook, B. L., Baca-García, E., Chavez, L., Alvarez, K., Iza, M., & Alegría, M. (2019). Comparison of Mental Health Treatment Adequacy and Costs in Public Hospitals in Boston and Madrid. *The Journal of Behavioral Health Services & Research*, *46*(3), 464. https://doi.org/10.1007/S11414-018-9596-9

Chow, W. S., & Priebe, S. (2013). Understanding psychiatric institutionalization: A conceptual review. *BMC Psychiatry*, *13*(1), 1–14. https://doi.org/10.1186/1471-244X-13-169/FIGURES/2

Dlouhy, M. (2014). Mental health policy in Eastern Europe: A comparative analysis of seven mental health systems. *BMC Health Services Research*, *14*(1), 1–8. https://doi.org/10.1186/1472-6963-14-42/TABLES/4

Fonseca Barbosa, J., & Gama Marques, J. (2023). The revolving door phenomenon in severe psychiatric disorders: A systematic review. *International Journal of Social Psychiatry*, *69*(5), 1075–1089. https://doi.org/10.1177/00207640221143282/ASSET/IMAGES/LARGE/10.1177_00207640221143282-FIG1.JPEG

Gobbicchi, C., Verdolini, N., Menculini, G., Cirimbilli, F., Gallucci, D., Vieta, E., & Tortorella, A. (2021). Searching for factors associated with the "Revolving Door phenomenon" in the psychiatric inpatient unit: A 5-year retrospective cohort study. *Psychiatry Research*, *303*, 114080. https://doi.org/10.1016/J.PSYCHRES.2021.114080

Gutiérrez-Colosía, M. R., Salvador-Carulla, L., Salinas-Pérez, J. A., García-Alonso, C. R., Cid, J., Salazzari, D., Montagni, I., Tedeschi, F., Cetrano, G., Chevreul, K., Kalseth, J., Hagmair, G., Strabmayr, C., Park, A. L., Sfectu, R., Ala-Nikkola, T., González-Caballero, J. L., Rabbi, L., Kalseth, B., & Amaddeo, F. (2019). Standard comparison of local mental health care systems in eight European countries. *Epidemiology and Psychiatric Sciences*, *28*(2), 210–223. https://doi.org/10.1017/S2045796017000415

Hotzy, F., Hengartner, M. P., Hoff, P., Jaeger, M., & Theodoridou, A. (2019). Clinical and socio-demographic characteristics associated with involuntary admissions in Switzerland between 2008 and 2016: An observational cohort study before and after implementation of the new legislation. *European Psychiatry*. https://doi.org/10.1016/j.eurpsy.2019.04.004

Hotzy, F., & Jaeger, M. (2016). Clinical Relevance of Informal Coercion in Psychiatric Treatment—A Systematic Review. *Frontiers in Psychiatry*, *7*(DEC), 197. https://doi.org/10.3389/FPSYT.2016.00197

Iudici, A., Girolimetto, R., Bacioccola, E., Faccio, E., & Turchi, G. (2022). Implications of Involuntary Psychiatric Admission: Health, Social, and Clinical Effects on Patients. *Journal of Nervous and Mental Disease*, *210*(4), 290–311. https://doi.org/10.1097/NMD.0000000000001448

Jaeger, S., Pfiffner, C., Weiser, P., Längle, G., Croissant, D., Schepp, W., Kilian, R., Becker, T., Eschweiler, G., & Steinert, T. (2013). Long-term effects of involuntary hospitalization on medication adherence, treatment engagement and perception of coercion. *Social Psychiatry and Psychiatric Epidemiology*, *48*(11), 1787–1796. https://doi.org/10.1007/S00127-013-0687-X/METRICS

Kallert, T. W., Glöckner, M., & Schützwohl, M. (2008). Involuntary vs. voluntary hospital admission: A systematic literature review on outcome diversity. *European Archives of Psychiatry and Clinical Neuroscience*, *258*(4), 195–209. https://doi.org/10.1007/S00406-007-0777-4/METRICS

Karasch, O., Schmitz-Buhl, M., Mennicken, R., Zielasek, J., & Gouzoulis-Mayfrank, E. (2020). Identification of risk factors for involuntary psychiatric hospitalization: using environmental socioeconomic data and methods of machine learning to improve prediction. *BMC Psychiatry*, *20*(1), 401. https://doi.org/10.1186/S12888-020-02803-W

Keown, P., Weich, S., Bhui, K. S., & Scott, J. (2011). Association between provision of mental illness beds and rate of involuntary admissions in the NHS in England 1988-2008: ecological study. *The BMJ*, *343*(7816), d3736. https://doi.org/10.1136/BMJ.D3736

Kirkbride, J. B., Anglin, D. M., Colman, I., Dykxhoorn, J., Jones, P. B., Patalay, P., Pitman, A., Soneson, E., Steare, T., Wright, T., & Griffiths, S. L. (2024). The social determinants of mental health and disorder: evidence, prevention and recommendations. *World Psychiatry*, *23*(1), 58–90. https://doi.org/10.1002/WPS.21160

McLaughlin, P., Giacco, D., & Priebe, S. (2016). Use of Coercive Measures during Involuntary Psychiatric Admission and Treatment Outcomes: Data from a Prospective Study across 10 European Countries. *PloS One*, *11*(12). https://doi.org/10.1371/JOURNAL.PONE.0168720

Sfetcu, R., Musat, S., Haaramo, P., Ciutan, M., Scintee, G., Vladescu, C., Wahlbeck, K., & Katschnig, H. (2017). Overview of post-discharge predictors for psychiatric re-hospitalisations: A systematic review of the literature. *BMC Psychiatry*, *17*(1), 1–15. https://doi.org/10.1186/S12888-017-1386-Z/TABLES/5

Sheridan Rains, L., Zenina, T., Dias, M. C., Jones, R., Jeffreys, S., Branthonne-Foster, S., Lloyd-Evans, B., & Johnson, S. (2019). Variations in patterns of involuntary hospitalisation and in legal frameworks: an international comparative study. *The Lancet Psychiatry*, *6*(5), 403–417. https://doi.org/10.1016/S2215-0366(19)30090-2/ATTACHMENT/D554C461-CDA8-497C-98F8-3DCB51242D06/MMC1.PDF

Walker, S., Mackay, E., Barnett, P., Sheridan Rains, L., Leverton, M., Dalton-Locke, C., Trevillion, K., Lloyd-Evans, B., & Johnson, S. (2019). Clinical and social factors

associated with increased risk for involuntary psychiatric hospitalisation: a systematic review, meta-analysis, and narrative synthesis. *The Lancet Psychiatry*, *6*(12), 1039–1053. https://doi.org/10.1016/S2215-0366(19)30406-7

Weich, S., McBride, O., Twigg, L., Duncan, C., Keown, P., Crepaz-Keay, D., Cyhlarova, E., Parsons, H., Scott, J., & Bhui, K. (2017). Variation in compulsory psychiatric inpatient admission in England: a cross-classified, multilevel analysis. *The Lancet Psychiatry*, *4*(8), 619–626. https://doi.org/10.1016/S2215-0366(17)30207-9

List of published scientific articles

Articles published in PubMed indexed journals:

1. **R.M. Paun**, A.N. Pavel, V. P. Matei, C. Tudose, "RISK FACTORS FOR INVOLUNTARY ADMISSION IN A ROMANIAN PATIENT SAMPLE", *International Journal of Law and Psychiatry,* vol. 91, 2023, 10193*,* https://doi.org/10.1016/j.ijlp.2023.101938

2. **R.M. Paun,** A.N Pavel, V.P Matei, C. Tudose, "PERCEIVED COERCION IN PSYCHIATRIC INPATIENTS: A VALIDATION STUDY OF THE ROMANIAN-LANGUAGE VERSION OF THE ADMISSION EXPERIENCE SURVEY", *Psychiatry, Psychology and Law*, 1–10, 2024. https://doi.org/10.1080/13218719.2024.2372767

3. **R.M. Paun,** V.P Matei, C. Tudose, "THE REVOLVING DOOR PHENOMENON IN THE ROMANIAN MENTAL HEALTH SYSTEM", *Alpha Psychiatry* 2025, 26(1), 38789, https://doi.org/10.31083/AP38789

Abstractes published in Web of Science indexed journals

1. R.M. Paun, A.N. Pavel, V. P. Matei, C. Tudose, "RISK FACTORS FOR INVOLUNTARY ADMISSION IN A ROMANIAN PATIENT SAMPLE", Neuroscience Applied Volume 3, Supplement 2, 2024, 104434, https://doi.org/10.1016/j.nsa.2024.104434