Examining the perceptions and practices of Romanian psychiatry residents regarding electroconvulsive therapy

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ABSTRACT

Introduction. Electroconvulsive Therapy (ECT) stands as a controversial yet efficacious psychiatric intervention, attracting clinical interest and public debate. In Romania, where cultural, historical, and systemic factors influence medical practices, research on the perceptions of psychiatric residents regarding ECT is limited.

Objective and methods. The primary objective of this study is to gain insights into the attitudes and practices of psychiatric residents regarding ECT in Romania. An online survey was conducted among Romanian trainees, collecting data on demographics, ECT exposure, safety and efficacy perceptions, training experiences, and the impact of stigma on clinical decisions.

Results. The survey, encompassing responses from 49 Romanian psychiatric residents, revealed that nearly 70% of them were exposed to ECT procedures, with varying frequencies of attendance. While safety and efficacy perceptions were predominantly positive, with 75.5% considering ECT safe and 73.5% deeming it effective, significant training gaps were evident. Only 16.3% received specific ECT training, highlighting the need for more comprehensive education. Stigma had a mild to moderate impact on clinical decisions, emphasizing the importance of targeted educational efforts. Beliefs and preconceptions about ECT among patients and colleagues underscored the necessity for thorough patient education. Despite these challenges, an overwhelming majority (89.8%) expressed a favorable inclination towards expanding ECT use, signifying a potential shift towards greater acceptance within the young psychiatric community.

Conclusion. This study provides valuable insights into the perspectives and practices of psychiatric residents regarding ECT in Romania. Enhancing ECT training and addressing stigma is essential to ensure its safe and effective use in psychiatric practice. Healthcare institutions and policymakers should prioritize these efforts to promote evidence-based psychiatric treatment decisions.

Keywords: electroconvulsive therapy, psychiatry trainees, attitude, perception, Romania

INTRODUCTION

Electroconvulsive Therapy (ECT), a well-established psychiatric treatment, has been a subject of both clinical interest and public debate. Originating in the early 20th century, ECT has undergone significant advancements in terms of safety and efficacy. It is recognized for its effectiveness in treating severe psychiatric conditions, including major depressive disorder, bipolar disorder, and schizophrenia. Despite its clinical utility, ECT's portrayal in media and historical contexts has contributed to ongoing stigmatization and varying perceptions among healthcare professionals [1,2].

In Romania, the practice and perception of ECT reflect a complex interplay of historical, cultural, and healthcare systemic factors. These elements shape the attitudes and application of ECT in psychiatric care, differentiating it from other global contexts. However, there is a notable paucity of research focusing on the perspectives of psychiatric residents in Romania regarding ECT, an area crucial for understanding and optimizing its use in psychiatric practice [1,3].
OBJECTIVE

This study aims to comprehensively examine the perspectives, experiences, training, and stigma perceptions of ECT among Romania’s psychiatric residents. By exploring these dimensions, the study endeavors to delineate the current status of ECT in Romanian psychiatric education and practice. The insights gained are intended to inform the academic understanding of ECT and aid in addressing training gaps and developing strategies to mitigate stigma and enhance patient care. This exploration is vital for advancing psychiatric practice in Romania and offers valuable insights for similar healthcare settings worldwide.

METHODS

To gain a deeper understanding of the attitudes and practices of psychiatric residents, we conducted an online survey targeting individuals in psychiatric residency programs in Romania. Forty-nine respondents participated in the survey, providing valuable information regarding their demographic characteristics, exposure to electroconvulsive therapy (ECT), perceptions of its safety and efficacy, training experiences, and the impact of stigma on their clinical decisions.

RESULTS

Demographics and exposure

All participants provided informed consent for their participation in the online questionnaire. The demographic characteristics revealed a diverse representation among the respondents. Nearly half of the participants (49%) fell within the age range of 25-28 years, with a notable proportion (24.5%) in the 28-30 years bracket. The respondents included approximately 73.5% females and 26.5% males. Psychiatric residency distribution was balanced, with 28.6% in Year III and 20.4% in Year II. Geographically, most respondents (40 out of 49) were based in Bucharest, with smaller numbers from other university centers like Iasi, Sibiu, Timisoara, Cluj, Craiova, and Targu Mures.

Experience with ECT

The participants’ experiences with electroconvulsive therapy (ECT) unveiled a comprehensive view of their interactions with this treatment modality. A substantial 69.4% of respondents reported their attendance at ECT procedures, reflecting their direct exposure to this psychiatric intervention. Among those who attended, the frequency of ECT participation varied: 12.2% indicated frequent attendance (monthly), another 12.2% attended less often (every 1-6 months), and 10.2% participated rarely (every 12 months). In contrast, 34.7% reported attending ECT procedures infrequently (with intervals exceeding 12 months). Intriguingly, 16.3% of participants disclosed that they did not have the possibility to attend an ECT procedure, underlining the variation in access to this treatment among the surveyed psychiatric residents.

Furthermore, respondents employed ECT in the treatment of various psychiatric disorders, demonstrating its utility within their practice. Schizophrenia was the most common indication, cited by 51% of participants, followed by the management of depressive episodes (40.8%). A smaller percentage mentioned using ECT for manic episodes (6.1%) and schizoaffective disorder (2%).

Regarding safety assessments, 75.5% of participants viewed ECT as safe or very safe, reflecting their confidence in its application. Only a minority, constituting 4.1%, expressed uncertainty regarding its safety. Simultaneously, when evaluating the effectiveness of ECT compared to other modalities for treating mental disorders, the majority, a combined 73.5%, deemed it effective or very effective. There was minimal doubt in this regard, as only 8.2% admitted not knowing. These findings collectively provide a nuanced understanding of the experiences and perspectives of the surveyed psychiatric residents, underscoring the utilization, perceived safety, and efficacy of ECT within the field of psychiatric treatment.

Training

Despite their favorable views on ECT, the survey revealed noteworthy insights among the training of psychiatric residents. A modest 16.3% of participants indicated that they had received specific training in using ECT, reflecting a limited exposure to formalized ECT education within their psychiatric residency programs. In contrast, 98% of respondents expressed a compelling need for more information or training in utilizing ECT, highlighting a substantial gap in their perceived knowledge and skills in this treatment modality. Looking ahead to their future roles as specialist psychiatrists, the participants’ attitudes toward ECT were diverse. A resolute 46.9% expressed a strong willingness to consider performing ECT on their patients according to clinical indications, underscoring their openness to incorporating ECT into their clinical practice. Additionally, 53.1% indicated they would consider it, showcasing a willingness to explore ECT as a therapeutic option. None of the respondents dismissed the idea, with 0% stating that they would not consider performing ECT at all.
Stigma

Our study investigated whether the stigma associated with ECT influences healthcare professionals' decision to recommend it as a treatment option. Respondents were asked to rate the extent to which stigma influenced their recommendation on a scale from 1 (unlikely) to 10 (very likely). The average rating of approximately 3.5 indicates a mild to moderate influence of stigma on the decision to recommend ECT among the survey respondents. Most respondents rated stigma's influence as low to moderate, with only a minority rating higher. This suggests that, for most participants, stigma was not a significant factor influencing their recommendation of ECT as a treatment option. However, it's important to note that the presence of some respondents who rated stigma's influence higher indicates that, for a subset of healthcare professionals, stigma may play a more substantial role in their clinical decision-making regarding ECT.

The survey responses unveiled several key factors contributing to the stigma surrounding ECT among medical professionals:

- A significant portion of respondents (42.9%) expressed concerns about potential adverse reactions associated with ECT.
- A substantial majority (77.6%) stressed the lack of training and the crucial need for specialized ECT training.
- Some respondents also questioned the perceived efficacy, perceived barbarity, and resource allocation related to ECT. This underscores the importance of research, evidence, and open dialogue to address these multifaceted concerns.

The survey revealed the following primary sources contributing to the stigma associated with ECT:

1. A significant majority (85.7%) pointed to the portrayal of ECT in films as a substantial source of stigma.
2. Around 60% identified that mass media, including television, radio, and newspapers, play a substantial role in perpetuating ECT-related stigma.
3. Fiction literature was identified as another contributor to the stigma surrounding ECT by 57.1% of the respondents.
4. The internet and online sources were recognized as influential platforms shaping perceptions of ECT (49%).
5. Though less prominent, some respondents (6.1%) mentioned scientific literature as a source of stigma.

Beliefs and preconceptions surrounding ECT: insights from patients and colleagues

The survey uncovered a spectrum of beliefs and preconceptions about ECT prevalent among both patients and colleagues. Respondents articulated concerns about the perceived risks associated with ECT, with some characterizing it as a risky procedure akin to human experimentation. Additionally, apprehensions about mortality and concerns regarding inefficacy and adverse reactions were voiced. These apprehensions underscore the need for open communication and comprehensive education to dispel ECT misconceptions.

Moreover, the perception of ECT as a barbaric procedure with painful and potentially harmful consequences was a common theme. Respondents also raised concerns about memory-related issues, such as complete amnesia and possible long-term memory disorders. These concerns highlight the necessity of addressing the psychosocial aspects of ECT, focusing on patient education, and providing psychological support throughout the treatment process.

Respondents recognized legal implications surrounding ECT, with doctors protecting themselves from potential dissatisfaction among family members. The portrayal of ECT in popular culture, particularly in films depicting the “shock chair,” contributed to patients’ fears. Furthermore, the lack of experience among colleagues, attributed to the limited availability of ECT facilities, fueled skepticism about its effectiveness and perpetuated the notion of ECT as an archaic, seldom-performed therapy.

Additional perceptions included doubts about the long-term effects of ECT, concerns about resource allocation compared to efficiency, and a pervasive sense of fear associated with the procedure. Some even viewed ECT as a punitive measure.

In summary, these diverse beliefs and preconceptions about ECT among patients and colleagues emphasize the importance of comprehensive patient education, evidence-based communication, and addressing the various psychosocial aspects contributing to the stigma surrounding ECT within the medical community.

The future of ECT in psychiatric practice: insights and recommendations

In contemplating the future of ECT within psychiatric practice, our survey yielded that an overwhelming majority of respondents (89.8%) advocated for expanding ECT use in contemporary medical practice. This resounding endorsement underscores a growing recognition of ECT’s therapeutic potential and role in addressing various psychiatric disorders.

A range of valuable insights emerged in response to the open-ended question regarding observations...
and suggestions for ECT implementation in psychiatric practice. Many respondents stressed the importance of structured training initiatives, advocating for periodic training courses in clinical settings staffed by trained psychiatrists and anesthesiologists. Furthermore, the incorporation of case presentations and workshops to enhance medical staff proficiency garnered support.

Developing comprehensive protocols for ECT administration emerged as a critical recommendation, aiming to standardize and optimize the procedure. Respondents also highlighted the significance of performing ECT in an intensive care unit (ICU) setting to mitigate potential adverse reactions and ensure patient safety.

Simplifying pre-ECT procedures and providing intensity adjustments were recommended to enhance the procedural experience. Respondents emphasized the need for formal ECT training for psychiatric residents, alongside the broader objective of training all psychiatrists in ECT techniques to promote wider accessibility.

Moreover, the survey respondents expressed a collective belief in the increased utilization of ECT, deeming it beneficial for a broader range of patients. A notable proposal was integrating ECT training into university curricula, potentially enhancing its accessibility and utilization among future mental health professionals.

**DISCUSSIONS**

The findings of this study provide valuable insights into the perceptions and practices of psychiatric residents regarding ECT in Romania. While ECT has demonstrated its effectiveness in treating a range of psychiatric disorders, the attitudes and experiences of psychiatric residents in Romania have been underexplored.

The application and prevalence of ECT vary widely across Central-Eastern Europe, influenced by national healthcare policies, resource availability, healthcare professional training, and public and professional attitudes [4].

The use of ECT today shows considerable diversity across different regions, with variations in how frequently it's used, how it's administered, and the specific treatment parameters. Unmodified ECT, which does not use anesthesia, continues to be practiced in parts of Asia, Africa, Latin America, and even Europe.

Despite guidelines meant to standardize ECT practices, there remains a lack of uniformity in its application on a global scale. This significant disparity in ECT practices worldwide highlights the necessity for an international exchange of knowledge and expertise on ECT. Sharing insights and learning from the diverse experiences of various regions could be beneficial in advancing the practice of ECT globally [5].

The participants' exposure to ECT varied, with nearly 70% having attended ECT procedures, demonstrating their direct engagement with this treatment modality. However, the frequency of attendance varied widely, indicating disparities in access to ECT experiences. Notably, 16.3% of participants reported not having the opportunity to attend an ECT procedure, underscoring the importance of improving accessibility to this therapeutic option.

Furthermore, access to observe ECT sessions, a critical component of the learning process, is not universally available across all training institutions. Our study reveals that most participants have not received training in ECT. Among the few who have, the training was primarily focused within the residency program in Bucharest, Romania's largest psychiatric residency training center.

Such discrepancies not only impede the uniform understanding and application of ECT but also can perpetuate misconceptions and hesitations about the procedure.

Major medical organizations, such as the American Psychiatric Association (APA) [6] and the UK's National Institute for Health and Care Excellence (NICE) [7,8], as well as their counterparts in Canada, Great Britain, and other places, recognize electroconvulsive therapy (ECT) as an effective treatment for severe mental health disorders [9]. These organizations offer detailed guidelines supporting ECT use for severe or treatment-resistant schizophrenia and major depressive episodes, highlighting its effectiveness in cases where other treatment modalities prove inadequate or unsuitable [10].

Conditions that previously ruled out the use of ECT are now considered on a relative basis, permitting the safe treatment of patients with high-risk somatic issues [11].

ECT is an effective, though underused, therapy for schizophrenia, especially for treatment-resistant forms, severe agitation, catatonia, and when medications like clozapine fail. Research, including systematic reviews and meta-analyses, confirms its efficacy and safety, and it is beneficial across various scenarios, including initial episodes in adolescents and for catatonic schizophrenia [12].

Also, studies highlight ECT as an effective therapy for major depressive disorder, with notable benefits in severe or refractory cases. The UK ECT Review Group's meta-analysis in 2003 revealed that ECT outperforms medication in quickly and significantly alleviating intense episodes of depression. This finding is crucial, as it provides a clear evidence base for ECT's role in cases where timely and decisive treatment response is necessary. Similarly, Kellner et al. (2010) demonstrated ECT's efficacy in varying elec-
trode placements, suggesting its adaptability and effectiveness across different treatment protocols [13, 14].

Notably, the perceived safety and efficacy of ECT were generally positive, with the majority of participants viewing it as a safe and effective treatment option for psychiatric conditions. These findings suggest a favorable disposition toward ECT among psychiatric residents in Romania.

Another similar study conducted within the Dudley and Walsall Mental Health Partnership NHS Trust in the UK found that most psychiatrists hold a favorable opinion towards ECT. This positive perspective extends beyond their professional practice, as many would consider ECT as a treatment option for themselves or their family members [15].

Despite these positive perceptions, the survey unveiled critical areas for improvement, particularly in training. Only a small percentage of respondents reported receiving specific training in ECT, and there is a substantial interest—expressed by 98% of participants—for enhanced access to ECT information or the integration of specialized ECT training into the residency education program. It underscores the pressing need for standardized ECT curriculum integration within Romanian psychiatric residency programs and ensuring equitable access to practical ECT sessions for all trainees.

Knowledge of ECT among residents isn't necessarily indicative of their training experience. Residents' education in ECT is inconsistent and often below recommendations by psychiatric associations, necessitating improvements in training and practice standards to enhance the effectiveness and perception of ECT as a treatment modality.

A well-designed educational program can provide residents comprehensive information about ECT, including its indications, procedures, effectiveness, and safety. This could enable them to understand the therapy's benefits and limitations better [16–18].

Residents can build expertise in pre-ECT evaluations, ECT administration, and post-procedure care through systematic theoretical learning, clinical observation, and direct practice within a structured training framework [19].

Suzuba et al. have shown that medical students and first-year psychiatry residents improved their knowledge and attitudes towards ECT following their inpatient rotations, suggesting that direct exposure and structured education can mitigate biases and enhance acceptance of treatments often surrounded by social stigma [20].

Concerning ECT, the Royal Australian and New Zealand College of Psychiatrists advocates for a comprehensive approach to training, encompassing both practical and theoretical facets of ECT [21].

Differences in training standards exist internationally. For example, the American Psychiatric Association requires specific accreditation for administering ECT, contrasting with the more informal training in England and Wales, where junior doctors often administer ECT [22]. Using high-fidelity patient simulators (HPS) in conjunction with classic teaching and hands-on demonstrations marks a significant advancement in ECT training for psychiatric education. HPS training enriches clinical skill development in ECT, though it is comparable to traditional methods in enhancing trainees' knowledge and confidence with ECT. Notably, proficiency in ECT procedures is distinct from overall understanding or self-assuredness in its use; practical skills improve with HPS, but foundational knowledge and confidence can be similarly developed through conventional training [23].

Other studies also show that the current training and supervision for ECT are inadequate, as reflected in the low confidence reported by trainees in administering ECT. There must be better collaboration between training coordinators and clinical tutors to improve this [24,25].

Considerable stigma still surrounds ECT, and this probably remains the most significant barrier to public acceptance of this treatment [26].

The survey also addressed the impact of stigma on ECT recommendations, revealing that, on average, stigma had a mild to moderate influence on clinical decision-making for a subset of respondents. While most participants reported low to moderate levels of stigma influence, the presence of individuals who rated it higher underscores the importance of addressing stigma within the medical community. The identified sources of stigma, including media portrayals and a lack of awareness, emphasize the need for targeted educational efforts to combat these misconceptions.

A similar study involving Romanian psychiatrists at a scientific gathering has shown a substantial lack of knowledge and generally negative views on electroconvulsive therapy (ECT). The high rate of responses indicating misunderstandings or negative attitudes in most parts of the questionnaire underscores the immediate need for enhanced education and training programs in Romania [27].

Widespread negative attitudes toward electroconvulsive therapy (ECT) are present in the general public and among healthcare professionals. However, there is evidence to suggest that clinical experience and knowledge of ECT positively improve attitudes toward this treatment. These findings indicate that attitudes toward ECT increase when individuals receive training and experience [28,29].

Firsthand experience and academic education are pivotal in dispelling myths and fostering an accurate understanding of ECT. Misconceptions are pre-
dominantly perpetuated by secondhand sources, notably media representations, and are less prevalent among individuals with direct exposure to ECT or those possessing higher educational credentials. ECT on film has become a progressively more hostile and cruel treatment, leaving the impression of a brutal, harmful, and abusive maneuver with no therapeutic benefit [30].

Similar to our respondents, Polish students’ knowledge about ECT appears to be significantly influenced by external media sources, such as films and online content, which often portray the therapy negatively. This parallels the tendency among our survey participants to harbor misconceptions that ECT is painful, archaic and brutal, stemming from the portrayal of ECT in media rather than from scientific or medical literature [31].

Despite the overall positive perception of ECT’s benefits among patients, some findings underscore a critical need to enhance the communication and consent process around ECT, mitigate the sense of coercion, and address the adverse effects and distress associated with the treatment [32,33].

In medical practice, improving how thoroughly patients are informed about their treatments, coupled with fair and accurate media depictions, can help decrease the common misconceptions and stigma surrounding mental health issues and treatments like ECT [34,35].

Well-trained residents can communicate more effectively with their patients about treatment options, including ECT, and can assist patients in making informed decisions.

Raising healthcare service standards and providing media reports on ECT that are informed and impartial can positively shift perceptions among the general populace, patients, and their caregivers. Despite these efforts, some skepticism and negative opinions may continue to exist [36].

LIMITATIONS

The sample size of 49 respondents is relatively small. While this might reflect the challenges in conducting such surveys among medical professionals, it’s essential to acknowledge potential limitations in generalizing findings to the entire population of psychiatric residents in Romania.

Also, most respondents were based in Bucharest, which may not fully represent the diversity of perspectives across different regions in Romania. This geographical bias should be considered when interpreting the results.

CONCLUSIONS

This study sheds light on the perceptions and practices of psychiatric residents in Romania regarding ECT, a vital yet often stigmatized treatment option for psychiatric disorders. The findings highlight the need for comprehensive training initiatives that provide residents with the necessary skills and knowledge to effectively utilize ECT in their clinical practice. Furthermore, efforts to combat the stigma surrounding ECT should be a priority, focusing on dispelling misconceptions perpetuated by media portrayals and a lack of awareness.

The overwhelmingly positive view of ECT’s safety and efficacy among respondents and the majority’s willingness to consider it as a treatment option signifies a potential shift toward greater acceptance of ECT within the psychiatric community. These insights should inform future strategies to integrate ECT more effectively into psychiatric practice in Romania, ultimately improving patient access to this evidence-based treatment modality. Additionally, the study emphasizes the importance of ongoing research and educational efforts to further enhance the understanding and utilization of ECT in treating psychiatric disorders.

Acknowledgements:

This article is the result of a collaborative effort by the members of the Research Working Group, a subsidiary of the Romanian Association of Psychiatry Trainees.

As active participants within this group, we conducted the survey, reflecting our joint dedication to advancing mental health research.

Conflict of interest: none declared

Financial support: none declared

10. https://www.psychiatry.org/Patients-Families/ECT.


20. https://www.psychiatry.org/Patients-Families/ECT.


