



# SCIENTIFIC BULLETIN

OF THE INSTITUTE OF  
MENTAL HEALTH

11:2025

## CONTENTS:

- **REPORTS**

*First Symposium of the Adult Clinic  
& Fourth Symposium of the Child and  
Adolescent Clinic of the Institute of  
Mental Health*

- **OUR RESEARCH**

*Case Report – Sanja Andrić  
Petrović & Nadja Marić*

- **BULLETIN GUESTS**

*George Garibaldi, Switzerland  
Dennis Ougrin, United Kingdom*

- **WORLD NEWS**

*Report from the 33rd Congress of the  
European Psychiatric Association*

*TikTok and Mental Health*

- **SCIENCE AND ART**

*My Life – Ivana Grubor*

## REPORTS

### First Symposium of the Adult Clinic of the Institute of Mental Health – “Psychotic Disorders”

To mark the 62nd anniversary of the founding of the Institute of Mental Health, the First Symposium of the Adult Clinic of the Institute of Mental Health—with international participation—was held on April 15, 2025, at the Yugoslav Film Archive in Belgrade, under the theme “*Psychotic Disorders*.”

The event, which brought together over 230 registered participants, was officially opened by the presidents of the scientific and organizing committees—Prof. Nađa Marić Bojović and Prim. Vesna Stefanović. Opening remarks were also delivered by Prof. Tatjana Simić, Dean of the Faculty of Medicine at the University of Belgrade, and Dr. Saša Radovanović, Director of the Institute for Medical Research. Both speakers emphasized the importance of such gatherings for advancing clinical practice and fostering academic collaboration in the field of mental health.

Following the opening addresses, a short film was screened in which Prof. Milica Pejović Mi-

lovančević, Director of the Institute of Mental Health, welcomed the guests. The film also featured an interview with two distinguished members of the Adult Clinic—Prim. Goran Gajić and Senior Medical Technician Zlatko Vujin—offering a retrospective on the Clinic’s history and its key figures from its founding to the present day.

The symposium’s scientific program was rich and varied, comprising three main thematic segments:

- “Current Issues in Psychosis Research – From Etiology to Pharmacology”  
*Speakers:* Prof. Silvana Galderissi, Prof. Sinan Guloksuz, Prof. Philip McGuire
- “Experiences and Suggestions for More Effective Treatment of Psychosis”  
*Speakers:* Prof. Igor Filipčić, Prof. Dragana Ignjatović Ristić, Prof. Marin Jukić
- “Psychosis in a Broader Context: Apopnea, Autism, Peripartum, and Forensics”  
*Speakers:* Prof. Goran Knežević, Clin. Assist. Vanja Mandić Maravić, Clin. Assist. Maja Milosavljević, Assist. Prof. Bojana Dunjić



In addition to the main program, two satellite symposia were held, organized by pharmaceutical companies:

- “Sleep Disorders and New Treatment Options”  
– organized by Makpharm (platinum sponsor)  
*Speakers:* Prof. Maja Ivković and Assist. Prof. Bojana Pejušković
- “Dopamine Stabilizers in Practice – For Whom, How, and How Much?” – organized by Richter Gedeon (gold sponsor)  
*Speakers:* Prof. Olivera Vuković and Prim. Vesna Stefanović

The symposium program offered participants a comprehensive overview of current approaches to understanding, diagnosing, and treating psychotic disorders, with a particular focus on schizophrenia spectrum disorders. Participants gained deeper insight into the concept of psychosis vulnerability and the role of exposome-genome interactions, as well as new findings on the connection between negative symptoms and cognitive deficits in individuals at risk for psychosis or experiencing a first psychotic episode. Various treatment modalities were presented, including novel approaches such as the use of cannabidiol in managing psychotic disorders. Presentations also covered the clinical application of clozapine and the benefits of therapeutic drug monitoring in optimizing and personalizing treatment. Attention was given to the organization of services for first-episode psychosis, aimed at improving timely intervention and patient support. Additional discussions addressed the relationships between autism and psychosis, peripartum-related psychotic episodes, and forensic aspects of psychotic disorders.

The goal of this and future symposia organized by the Adult Clinic of the Institute of Mental Health is to establish a regular forum for professionals from diverse areas of mental health care. We began with the topic of psychosis, and in the coming years, we plan to organize thematic events focused on affective and anxiety disorders, trauma-related disorders, psychotherapy, and other clinically and scientifically relevant topics in psychiatry and related disciplines.

*Sanja Andrić Petrović*

#### 4th Symposium of the Child and Adolescent Clinic, topic: Trauma – How to Prevent It, How to Treat It?

On November 8, 2024, the Institute of Mental Health in Belgrade hosted the annual Symposium of the Child and Adolescent Clinic, titled „Trauma – How to Prevent It, How to Treat It?“. The central theme of the symposium focused on understanding and treating trauma in childhood and adolescence, with particular emphasis on prevention, early intervention, and therapeutic approaches tailored to meet modern challenges. A key topic was the role of the support system—families, educational institutions, and health and social services—in the recovery and empowerment of children affected by trauma.

The event featured 11 speakers, with 18 professionals contributing to the preparation of scientific and expert papers. A total of 155 participants attended, including experts from mental health, pediatrics, social protection, and education, highlighting the strong interest in and need for ongoing education and collaboration in this field. The symposium made a significant contribution to the professional development and improvement of clinical practice, with the aim of strengthening the capacity of professionals working with traumatised children and their families in the context of contemporary social challenges.

In the opening presentation, the Institute for Mental Health shared its response to the events of May 2023 in our country, through the implementation of crisis interventions and a program





called „Skills for Psychological Recovery“ (SPR), aimed at mitigating the effects of trauma in children and adolescents. The SPR program is designed to help survivors reduce suffering and distress after a disaster, enabling them to move forward in their lives. The symposium also examined the impact of trauma on the developmental stages of children and adolescents, with a particular focus on the vulnerability of specific developmental phases. A discussion was held on the phenomenon of emotional dysregulation in young people, exploring how trauma can contribute to the development of persistent emotional and behavioral patterns.

The importance of play therapy as an effective tool in working with children and young people in crisis situations was also discussed. Additionally, the concept of schema therapy was introduced, offering a way to understand and restructure dysfunctional patterns in individuals with a history of chronic trauma. Presentations included real-world therapeutic experiences with survivors of severe traumatic events, emphasizing both the challenges involved and the critical importance of building a strong therapeutic alliance.

At the turn of the century, studies showed that intense psychological distress can trigger an

inflammatory response, preparing the body for physical defense. This distress, through the activation of the amygdala and sympathetic nervous system, can induce an inflammatory response, a topic that was also addressed during the symposium.

The emotional experience of parents when delivering a diagnosis of autism spectrum disorder was presented, along with the importance of family dynamics and parenting skills in supporting a child's recovery following a traumatic event.

Finally, the potential of psychodrama in trauma treatment and the group-analytic approach to working with trauma were discussed.

Throughout three dynamic discussions, participants had the opportunity to exchange ideas and experiences. At the conclusion of the symposium, the need for further networking, education, and the development of practices that integrate psychological, pedagogical, and neurobiological insights into trauma treatment was emphasized. The symposium concluded that trauma in children and adolescents requires a comprehensive, sensitive, and individualized approach, grounded in modern scientific and clinical knowledge.

*Olivera Aleksić Hil and Jasmina Bogdanović*



## ● OUR RESEARCH

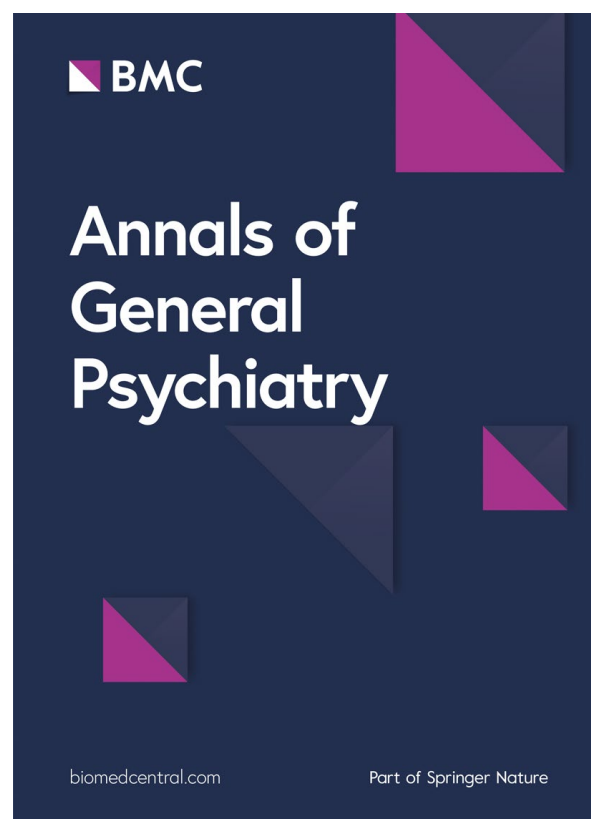
Clin. assist. Sanja Andrić Petrović  
and prof. Nađa Marić

### **Bilingual side effect: a case of foreign language syndrome following chlorpromazine-induced neuroleptic malignant syndrome**

In January 2025, the journal *Annals of General Psychiatry* published a case report entitled *Bilingual Side Effect: A Case of Foreign Language Syndrome Following Chlorpromazine-Induced Neuroleptic Malignant Syndrome*, authored by clin. assist. Sanja Andrić Petrović and prof. Nađa Marić.

In 2024, a 34-year-old man was admitted to the Clinical Department for Psychotic Disorders at the Institute of Mental Health (IMZ) with a diagnosis of schizoaffective disorder. He had a history of multiple prior hospitalizations at other institutions. The patient was admitted due to a depressive episode characterized by pronounced apathy, emotional instability, reduced functional capacity, and persistent insomnia lasting six months. His personal and family history included long-term alcohol abuse, as well as a family history of suicide and intellectual disability.

Upon admission, the patient was receiving levomepromazine (100 mg) and valproate (1500 mg). A transition from valproate to lithium was initiated. Due to persistent insomnia, various sedative agents including midazolam, zolpidem, quetiapine, and diazepam were administered over several consecutive nights without achieving the desired effect - the patient was unable to sleep for more than two continuous hours. On the fourth day of hospitalization, a 50 mg intramuscular dose of chlorpromazine was administered. The following morning, the patient exhibited agitation, disorganized behavior, and was verbally unresponsive, though remained alert. He appeared pale and diaphoretic, with normal blood glucose levels. Physical examination revealed hyperthermia, hyperten-



sion, and pronounced rigidity and hypertonia in the neck and upper limbs bilaterally.

During the physical examination, the previously non-verbal patient suddenly began speaking fluently in English, inquiring primarily about the reasons for his hospitalization. This unexpected episode lasted approximately five minutes, after which he reverted to a non-communicative state. According to his family, the patient had not actively used English; his exposure was limited to learning the language during childhood and through watching cartoons.

Based on the clinical presentation, a suspicion of neuroleptic malignant syndrome (NMS) was raised. This was confirmed by laboratory findings, including elevated creatine kinase (CK) levels and leukocytosis. Consequently, all previous medications were discontinued, and treatment with intravenous rehydration, biperiden, and lorazepam was initiated. The patient showed initial improvement within a few hours. In the following days, laboratory parameters normalized, and quetiapine (200 mg) was introduced, leading to the restoration of normal sleep patterns and achieving remission by the time of discharge.



Foreign language syndrome is an exceptionally rare neuropsychiatric phenomenon, previously documented exclusively following general anesthesia. The presented case represents the first recorded instance of its occurrence in association with NMS, thereby expanding the spectrum of atypical clinical manifestations of NMS and underscoring the importance of clinical vigilance in such cases.

The pathophysiology of NMS remains incompletely understood and its high mortality rate demands prompt recognition and treatment. Typical symptoms include autonomic instability, neuromuscular abnormalities, and cognitive changes, but this case demonstrates that the clinical presentation can also be atypical — such as the sudden use of a foreign language in a patient who is not bilingual. To date, nine documented cases of foreign language syndrome have all involved

Caucasian male patients, occurring after general anesthesia, with activation of a language learned later in life. Functional MRI studies indicate that in individuals who are not bilingual, native and subsequently acquired languages are processed in different brain regions. A possible mechanism for foreign language syndrome may involve compensatory activation of brain centers responsible for the second language, triggered by suppression of areas governing the native language — whether as a consequence of delirium or other underlying pathophysiological processes.

This case underscores that NMS can present with unexpected cognitive and linguistic disturbances. Recognizing such atypical manifestations promptly is crucial for accurate diagnosis and the initiation of appropriate treatment, which directly impacts patient outcomes and safety.

## GUEST OF THE BULLETIN

George Garibaldi, MD

George Garibaldi, M.D., is a child psychiatrist and neuroscientist with more than three decades of experience in CNS global drug development and medical affairs. He is a co-founder of multiple biotechs dedicated to developing new therapies with people with brain disorders. Throughout his career at Sandoz/Novartis, Janssen, and Roche, Dr Garibaldi has spearheaded the worldwide development and regulatory approval of multiple novel molecular entities across psychiatric, neurodegenerative, neuro-immunological, and neurodevelopmental indications. He is the author of more than 100 articles in peer-reviewed journals.

### What is the magnitude of the stuttering problem, and how has it been treated to date?

Stuttering is a speech disorder characterised by disruptions in the normal flow and rhythm of speech, such as repetitions of sounds, syllables, or words; prolongations of sounds; and involuntary pauses or blocks. People who stutter know what they want to say but struggle to produce fluent speech, often accompanied



by physical struggle behaviours like rapid eye blinks or lip tremors.

Stuttering affects about 5% of children starting before the age of 5, and 1% of the adult population worldwide. It is more common in males, who are about four times more likely to stutter than females.

Stuttering can severely affect communication, leading to frustration, anxiety, and social withdrawal. People who stutter often experience bullying, social exclusion, and negative self-perception from childhood onward, which can cause lasting emotional scars. Stuttering is often associated with mental health issues such as depression and anxiety. It negatively affects quality of



King George 6, Samuel Jackson and James Earl Jones. Examples of famous people who stutter.

life, including vitality, emotional functioning, and social functioning. It also impacts educational and occupational outcomes; people who stutter tend to have lower college graduation rates, underemployment, lower income, and lower job satisfaction compared to non-stutterers.

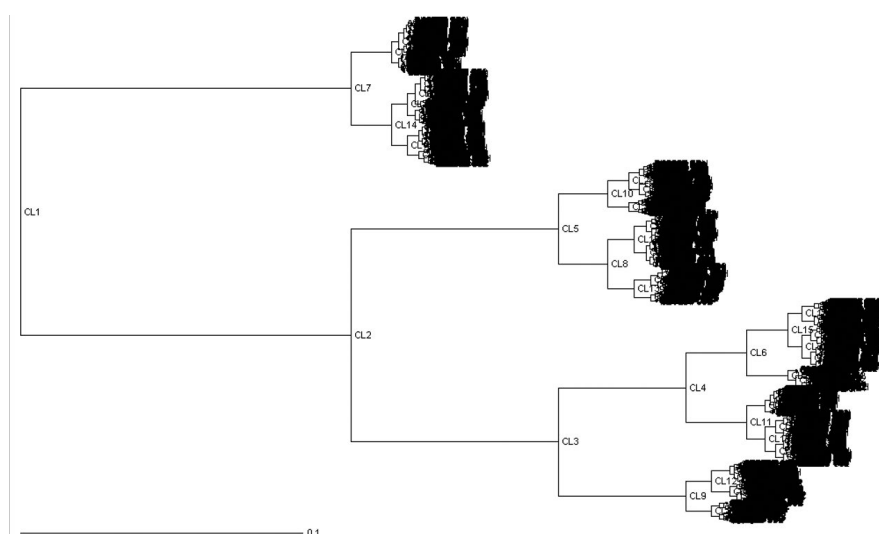
#### Can artificial intelligence assist in stratifying the subtypes of stuttering?

Like all neurological and psychiatric disorders, stuttering has a heterogeneous presentation and would benefit from clustering through generative AI to identify different clinical phenotypes. Clinical and genetic phenotypes are typically done through including all known variables associated with the disorder and conducting agglomerative hierarchical clustering. Variables include different speech defects, age of onset, speech sound accuracies, language skills and secondary behaviors such as rapid eye blinks, trembling of the lips or jaws, abnormal facial movements, head nodding or tightening of fists. Stuttering has been associated with several

genes including GNPTAB, GNPTG, and NAGPA and AP4E1 all related from the trans-Golgi all involved with intracellular trafficking.

#### Are monoamines involved in the etiopathogenesis of stuttering, and if so, which ones?

It is widely accepted that stuttering is associated with presynaptic hyperdopaminergic activity. This is evidenced by several facts: a) In neuroimaging studies, structural and functional neural correlates of stuttering, b) L-Dopa-induced stuttering was observed in patients with Parkinson's disease and, c) Dopamine blocking agents enhance speech fluency. In addition to dopamine, other biological correlates of stuttering include Intracellular trafficking: mutations in GNPTAB, GNPTG, and NAGPA disrupt the lysosomal targeting pathway, affecting enzyme localization in cells. Finally, genetic factors linked to stuttering influence brain development, particularly in regions associated with speech and language processing.



Agglomerative hierarchical clustering uprooted tree diagram to identify clinical phenotypes.

**Are new medications being developed to treat this problem?**

Over the last 5 years, studies focused on developing novel therapies have been conducted. Emalex ecopipam is a D1/D5 receptor antagonist. The results of a 3-month placebo-controlled study were inconclusive. In a second 3-month study using a PDE-10A enzyme inhibitor, participants were randomly assigned to receive gemlapodect or placebo. Patients with higher stuttering severity on the Maguire Leal Garibaldi subjective stuttering scale improved significantly on gemlapodect compared with placebo using a one-sided statistical test.

Our understanding of stuttering as a neurodevelopment disorder, its biology and genetics has significantly evolved over the last 2 decades—children and adolescents who stutter benefit from speech therapy. When indicated, psycho-

logical support is also offered for the management of concomitant anxiety and depression. For persons whose stuttering persist in adulthood, more clinical research will enable the identification and development of medicines to enhance speech fluency and other symptoms associated with this impediment. Clinical research methodology for the development of novel therapeutics for stuttering has significantly matured and, together with AI used to define the different populations, will enable a significant advancement in the near future.

## GUEST OF THE BULLETIN

Prof. Dennis Ougrin, MD



Prof. Dr. Dennis Ougrin is a Professor of Child and Adolescent Psychiatry and Global Mental Health at Queen Mary University of London. He leads a global mental health research programme focused on developing community-based mental health services in Ukraine and other developing countries. His main professional interests include the prevention of borderline personality disorder, pathophysiology and interventions for self-harm in young people. He is the author of the Therapeutic Assessment model, an innovative approach to assessing young people who self-harm. He also developed and tested an intensive community care model for adolescents with severe psychiatric disorders, known as the Supported Discharge Service.

**Your work is focused on improving the treatment of children and adolescents with severe psychiatric disorders through models of intensive outpatient care. The Intensive Community Care Service (ICCS) model, which**

**you developed and studied, significantly reduced the need for hospitalisation among young people. What are the key elements of this model, and what does its implementation look like in practice?**

Intensive community care service is an umbrella term for a number of teams which essentially work as an alternative to inpatient treatment. They have three main functions. The first one is supported discharge, so early discharge from hospital with a lot of support in the community. The second function is prevention of admissions, an alternative to admission, and that function is important when you have children in crisis who could do well in the community but require immediate response. The third function is reaching out to some of the more difficult to reach young people in the community. They



may not be in high risk, but often they lead very boring and limited life, and so engaging with these young people and their families is the third function.

As far as the important components of these teams, they must have a small caseload - I really advocate no more than five families per full-time equivalent, they must operate beyond standard hours, they must have an outreach component, so they must see children and their families at home and in the other ecological places like schools and places of work and afterschool activities. And there is no such thing as somebody else's patient, so the whole team needs to know every single patient that the team looks after. It is important, for example, if somebody is sick and on leave, that other members of the team can fill in easily. And then, these teams need to work intensively, they could see children multiple times per day, but certainly if it becomes less frequent than, let's say, once a week, that will not be consistent with the intensity and usually other, more standard teams could look after that child.

#### **What were the challenges you encountered during the implementation of ICCS?**

I would say they depend on the country. In some parts of the UK and other countries, for example in Canada, one of the biggest challenges is the geography and how to reach these children who could be located in faraway places from the base of the team. In some countries the difficulty may be the incredible number of referrals of young people where sometimes these teams could be the only viable team that can actually see a young person, especially in crisis. And that is dangerous because when you start taking on too many cases, then you lose the ability to work intensively with young people. Then, of course, a big problem is shortage of qualified people and professionals. As the number of referrals increases very dramatically, with better awareness, I suppose, less stigma, then it becomes a challenge to recruit the right mix of professionals. I'd say that nursing colleagues are probably the key people for these teams. And some teams only consist of nurses. But, you know, depending on the configuration of other services and on the young people that you work with, it might be useful to have many other professionals as part of these teams. And then, of course, that becomes a challenge of recruitment. Then one other interesting challenge is how to work

with other existing teams. For example, an important question that needs to be sorted out quite early is who makes decisions regarding discharge from hospital, for example, or admission to hospital. Is it hospital colleagues or intensive community care colleagues? And then, of course, there is a question about responsibility. So, who eventually bears responsibility for, and is the final decision maker as far as these young people are concerned? Is it the community team, the intensive community care service, or some sort of a combination of the two?

#### **How can the model be adapted to the healthcare systems of other countries, including those with limited resources?**

I'd say that, you know, the challenge of creating ICCS in countries with low resource services is a challenge. There is no doubt about this. But I have to say that many countries will have inpatient services, and European countries will, that are very expensive and often quite inefficient. And we have shown in a number of studies that ICCS could be cheaper than inpatient care, and so really creating these teams could be a real opportunity to also save money, you know, when you think about the cost of inpatient services. For other countries that don't have inpatient services of any kind, I would say that probably starting with these teams is not a good idea. So, I would start with creating standard multidisciplinary community teams. In fact, something like this is happening currently in places like Portugal, for example. And it is clear to me that I wouldn't start with ICCS. I would start with standard teams, and then maybe think about ICCS for those young people who are most unwell.

#### **One of your many contributions to the field of youth self-harm is the Therapeutic Assessment model. What are the key features of this model?**

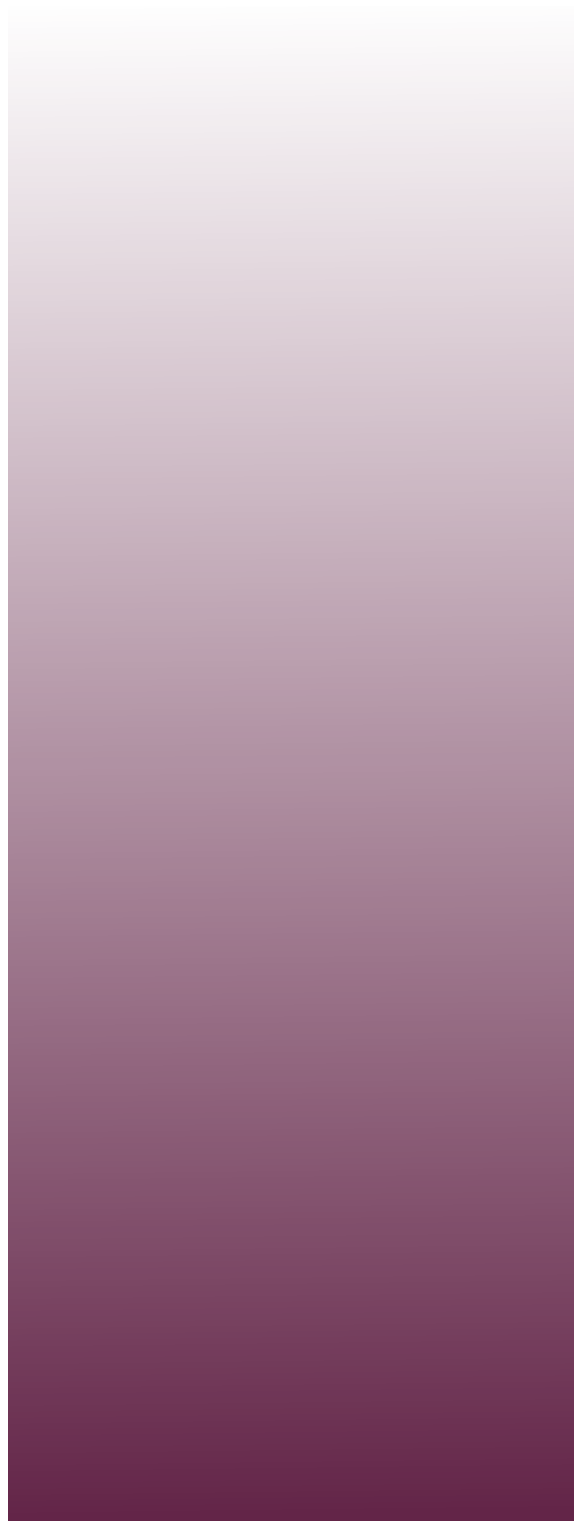
So, as you say, a lot of my career was spent on self-harm and suicide in young people. And we have shown that, you know, certainly with intensive community care services, one could expect fewer episodes of self-harm in comparison to standard inpatient care. But therapeutic assessment is a brief intervention that my team developed years ago. And the idea here is that you complement the standard assessment that happens when young people come with self-harm, significant self-harm to emergency rooms in hospitals. And it's a brief intervention that is

based on providing understanding of the cycle of self-harm, how one thing leads to another, and how these cycles could be understandable for the young person and their families, especially for those young people who engage in self-harm regularly. And then the second part of this brief intervention is showing ways of working with the young person and the family on how to break these vicious cycles of self-harm using a number of techniques, of which I have to say the most popular is a solution-focused technique where you invite the young person and their families to co-create a future for them and then notice elements of that future when it happens. Therapeutic assessment seems to improve engagement with aftercare very substantially, and we have evidence of this from several studies now. And it may be beneficial to a subgroup of young people in terms of reducing self-harm, but we have not yet demonstrated consistently across all studies that it actually substantially reduces self-harm. So, so far, we see it as an engagement tool.

**5. In your opinion, what are the biggest misconceptions when it comes to child and adolescent psychiatry and the needs of young people with psychiatric disorders?**

Child psychiatry... I don't think people realize that what young people die of is not cancer or cardiovascular problems or infection diseases, certainly in the developed world. What young people die of is accidents, primarily, and suicide, these two causes. And so, of course, child psychiatry is dealing with one of the key areas of morbidity and mortality in young people, which is suicide. So, I always say to students and junior doctors that if they want to make a difference to young people, then I would encourage them to go into child psychiatry because that is where they can make the biggest difference. I'd also say that child psychiatry could be an exceptionally rewarding profession. We have effective interventions for a number of conditions. And I certainly keep in touch with a lot of my former patients who I helped with my teams to go through difficult times. But it's an incredible pleasure to see how they recover and start building their careers and their lives, following what could be some of the most difficult times in their life. So, I would say it's a wonderful career. It's something that is a lot less

stigmatized in many countries. And I would say that as far as how rewarding it is and how much suffering we can reduce and save, it's one of the best.



## NEWS FROM THE WORLD

### Report from the 33rd Congress of the European Psychiatric Association (EPA), April 5–8, 2025, Madrid, Spain

Under the slogan “Towards Real-World Solutions in Mental Health,” the 33rd Congress of the European Psychiatric Association (EPA) brought together more than 5,000 participants from around the world in Madrid—including clinicians, researchers, and policymakers. The congress focused on practical solutions for contemporary challenges in mental health, emphasizing the application of the latest scientific findings in everyday clinical practice.

The extensive program featured over 800 sessions, including thematic symposia, workshops, and educational sessions tailored for young psychiatrists. Across a diverse range of topics, key issues in contemporary psychiatry were explored—from the impact of global crises and digitalization to gender differences and the role of community in preserving mental health.

One of the congress’s central events was the symposium “Towards a New Roadmap for Mental Health in Europe,” dedicated to a new European mental health strategy, developed in re-

sponse to the alarming rise in the prevalence of mental disorders, particularly in the post-pandemic context. Leading experts—Prof. Silvana Galderisi (Italy), Prof. Andrea Fiorillo (Italy), Prof. Javier David Lopez Morinigo (Spain), and Prof. Celso Arango (Spain)—emphasized the urgent need to more deeply integrate mental health into all areas of public policy, including education, employment, and social protection. Special attention was given to psychiatry’s digital transformation—telemedicine and e-therapies—which can significantly enhance service accessibility, especially in remote areas and for vulnerable populations. The experts emphasized that systemic investment, high-quality workforce training, and the empowerment of local communities are vital for the successful implementation of any policy.

The plenary lecture “Psychiatry in Times of Crisis – Quo Vadis?” moderated by Prof. Geert Dom from Belgium (former EPA president), tackled the critical role of psychiatry in a world increasingly shaped by wars, pandemics, and economic and climate crises—all of which profoundly affect population mental health. Prof. Thomas Schulze (Germany/USA) underscored the impor-



**Towards Real-World Solutions in Mental Health**



[www.epa-congress.org](http://www.epa-congress.org)



#EPA2025



tance of a transdisciplinary approach, building system resilience, and ensuring treatment flexibility, underlining that psychiatry must remain humane and accountable. Its future, he noted, depends on its ability to adapt and take a proactive role in a rapidly changing society. Prof. Iryna Pinchuk (Ukraine) gave a powerful, firsthand account from a country affected by war, highlighting the daily challenges of practicing psychiatry amid ongoing crisis. Her presentation was a strong call for international solidarity and urgent investment in psychiatric services in conflict zones. The session affirmed that psychiatry must be an active force in social processes—ready to respond to both individual suffering and the collective distress of modern society.

As part of the congress's focus on gender, the plenary lecture "*Women's Mental Health: A Global Perspective*" was particularly well-received. Moderated by Prof. Martina Rojnić Kuzman (Croatia/UK), the session featured Prof. Florence Thibaut (France), who offered a comprehensive overview of the complex biological, psychosocial, and cultural factors influencing women's mental health. It was noted that women are disproportionately affected by conditions such as depression, anxiety, and PTSD, and face additional challenges related to perinatal health and menopause. The lecture also drew attention to global disparities in access to mental health services for women and underscored the importance of involving women in the policymaking processes that impact their mental well-being. The session concluded with a call for a paradigm shift—from passively acknowledging these issues to proactively building systems that understand and reflect the realities of women's lives in all their complexity.

EPA 2025 reaffirmed that modern psychiatry must remain open, adaptable, and grounded in scientific evidence—while also being deeply attuned to the real needs of patients and communities. The exchange among international clearly pointed to a path forward: toward a more inclusive, accessible, and humane mental health system.

The upcoming 34th EPA Congress will take place in Prague from March 28 to 31, 2026. It is expected to continue the dialogue on the priorities of modern psychiatry, alongside further development of innovative approaches that will strengthen clinical practice and improve outcomes for patients across Europe and beyond.

### Impact of Problematic TikTok Use on Mental Health: A Systematic Review and Meta-Analysis

TikTok is currently the most popular social media platform, particularly among young people, with 2.1 billion users as of 2024. A research team from Greece, led by Petros Galanis, conducted the first systematic review and meta-analysis examining problematic TikTok use and its correlation with mental health.

The study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. To assess the quality of included studies, the team used the Joanna Briggs Institute (JBI) critical appraisal tool. They applied five broad inclusion criteria. The initial search yielded 7,484 papers. After removing duplicates, 4,087 remained. A detailed analysis of abstracts reduced this number to 34 articles. Based on the full inclusion and exclusion criteria, the final review included 16 studies comprising a total of 15,821 participants.

All included studies were cross-sectional, with the earliest published in 2019 and the most recent in 2024. The studies came from diverse geographical locations: 7 from Asia, 4 from Europe, 3 from the Americas, and one each from Australia and Africa. Most studies were conducted with students (8 studies), followed by adults (3 studies), and schoolchildren (4 studies).

A significant issue noted was the heterogeneity in how TikTok use was measured. Fewer than half of the studies used validated instruments. The validated tools included the Bergen Social Media Addiction Scale and the Smartphone Addiction Scale–Short Version (SAS-SV), which were modified by replacing the terms “smartphone” or “social network” with “TikTok.” Most other studies used simplistic items such as “Do you use TikTok?”—a method that lacks precision. This represents a major limitation across the reviewed studies, which in turn affects the quality of the meta-analysis itself. Consequently, the overall methodological quality was rated as moderate in 10 studies, and as high and low in three studies each. The two most frequently noted issues were the imprecise measurement of TikTok use and the failure to adequately address confounding variables.

The meta-analysis revealed a statistically significant positive correlation between problematic TikTok use and symptoms of depression and anxiety. The pooled standardized regression coefficient was 0.321 (95% CI: 0.261 to 0.381,  $p < 0.001$ ) for depression and 0.406 (95% CI: 0.279 to 0.533,  $p < 0.001$ ) for anxiety. Heterogeneity was high in both cases ( $I^2 = 78.0\%$  for depression and  $I^2 = 94.8\%$  for anxiety;  $p < 0.001$  for both, based on the Hedges' Q statistic)

Importantly, studies on depression showed stronger associations in those rated with moderate to high risk of bias compared to those with low risk. For anxiety, such stratified analysis was not possible due to the absence of low-bias studies.

For other mental health outcomes, there were insufficient studies to conduct a meta-analysis. For example, only three studies examined loneliness—one showed a positive association, while two found negative associations. Other psychological variables such as body image issues, poor sleep quality, anger, self-esteem, distress intolerance, narcissism, and stress showed preliminary indications of positive associations. No significant correlations were found for disordered eating behaviors or life satisfaction.

This review synthesized current knowledge on the association between TikTok use and mental health outcomes. The findings must be interpreted with caution. First, self-reported measures of social media use are inherently unreliable. More accurate assessments require objective tracking via mobile applications. Second, the axiom “correlation is not causation” remains critical: Does excessive TikTok use lead to mental health issues, or are individu-

als with mental health issues more likely to use TikTok excessively? Cross-sectional studies cannot answer this question. Only longitudinal research—while not definitive—could clarify causality. Currently, no such studies exist.

The authors themselves acknowledge these limitations but nonetheless adopt a somewhat stronger tone in the discussion than the data justifies.

Unfortunately, this field remains underdeveloped due to a lack of high-quality research. The industry has little incentive to support such studies, while researchers often lack the financial and organizational resources needed to carry them out. This situation reinforces a status quo where potential negative effects—particularly on children—remain unaddressed by policy. Conversely, the absence of rigorous data allows conspiracy theories and public mistrust to flourish.

Given the massive popularity of social media platforms and the significant financial interests involved, governments must prioritize funding independent, high-quality research in this area. Only then will we obtain evidence robust enough to guide political and legal decision-making.

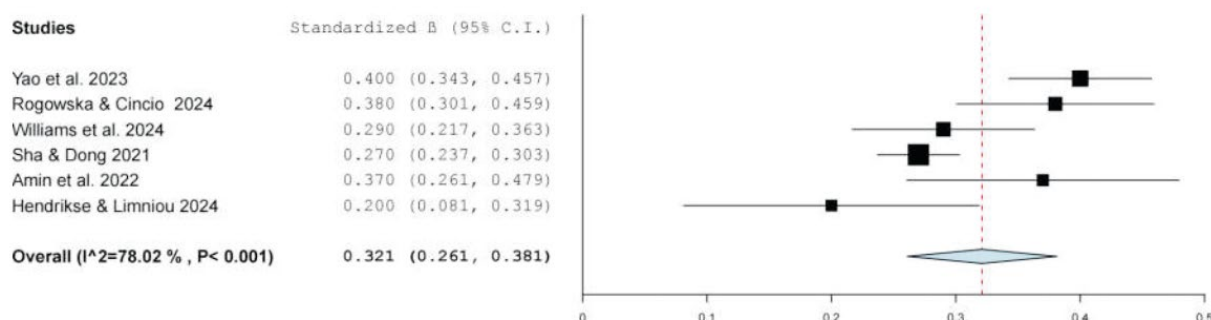


Figure 2. Forest plot of the association between TikTok use and depression.

## ● SCIENCE AND ART

### My Life

Out of cold nothingness—in truth—  
nothing can be colder.

From the void, a whim of chance  
pushed me into a warm, soft womb.  
From that same womb, a sterile hand  
of some chance stranger lifted me  
out.

The world began with a bang; I start-  
ed with a bang, and with a bang I  
entered it.

Upon the family altar, they set me,  
perfectly coiffed, in a yellow coat, a  
small suitcase in my hand.

At night, when the shift was over, I  
slipped away, through thickets and  
deserted paths, stumbling, sinning,  
loving, staring at my own navel.

By morning, scratched and bruised,  
I would return and reassume  
my place on the pedestal.

Then, when they changed the window  
display, they took me out, lazily dust-  
ed me, and I ran. I wriggled free of  
gentle hands and—bang!— cracked  
on landing

before I started to run. That fissure  
healed into a mesh of old scratches  
now gleaming like filigree.

I reached a new, larger showcase  
and tried to sit on the stand again.  
Filigree jewels are out of fashion;  
they shoved me in a corner where I

fell through a hole. And as before,  
by day I languished in a dusty dis-  
play, by night slipped through rab-  
bit holes, cotton-candy labyrinths,  
catacombs of sweets.

But my yellow coat, from the fam-  
ily altar, began to unravel. Thread  
by thread, I left my tangled skein,  
my woollen stuffing, wherever I  
roamed. The coat unravelled, the  
stuffing vanished, and my filigree  
hung suspended among the bram-  
bles, over budding flowers, over  
broken glass, down, down, down,  
through tunnels, stuck fast in  
sugar.

On those dangling threads, like  
ornaments, hang other people's  
pearls. Where is my navel now?

Ivana Grubor





*Miroljub Damjanovic*



## ● REFERENCES

Andric Petrovic S, Maric NP. Bilingual side effect: a case of foreign language syndrome following chlorpromazine-induced neuroleptic malignant syndrome. *Ann Gen Psychiatry* 2025; 24(1):1. doi: 10.1186/s12991-024-00538-6.

Galanis, P.; Katsiroumpa, A.; Katsiroumpa, Z.; Mangoulia, P.; Gallos, P.; Moisoglou, I.; Koukia, E. Impact of Problematic TikTok Use on Mental Health: A Systematic Review and Meta-Analysis. *Preprints* 2024.

Institute of Mental Health, Milana Kašanina 3,  
11000 Belgrade; Telephone: +381 11 3307500;  
Web: [www.imh.org.rs](http://www.imh.org.rs)

**Editor:**

Nada P. Marić

**Assistant editors:**

Milutin Kostić, Sanja Andrić-Petrović  
Ivan Ristić and Petar Vuković  
Bojana Pejušković (science and art)

**Technical support:**

Dosije studio, Belgrade

Follow Institute of Mental Health publications:

<https://imh.org.rs/page.php?id=52>

**LET US KNOW ABOUT YOUR SCIENTIFIC  
WORK SO THAT WE CAN REPORT ABOUT IT!**