

OPEN ACCESS

EDITED AND REVIEWED BY Ingrid Melle, University of Oslo, Norway

*CORRESPONDENCE
Massimo Tusconi
massimotusconi@vahoo.com

RECEIVED 05 May 2025 ACCEPTED 15 May 2025 PUBLISHED 05 June 2025

CITATION

Tusconi M, Nibbio G, Gupta R and Carr E (2025) Editorial: Case reports in Schizophrenia and psychotic disorders: 2023. *Front. Psychiatry* 16:1623129. doi: 10.3389/fpsyt.2025.1623129

COPYRIGHT

© 2025 Tusconi, Nibbio, Gupta and Carr. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Editorial: Case reports in Schizophrenia and psychotic disorders: 2023

Massimo Tusconi^{1*}, Gabriele Nibbio², Rishab Gupta³ and Erika Carr⁴

¹Department of Medical Sciences and Public Health, University of Cagliari, Cagliari, Italy, ²Department of Clinical and Experimental Sciences, University of Brescia, Brescia, Italy, ³Brigham and Women's Faulkner Hospital, Harvard Medical School, Boston, MA, United States, ⁴Department of Psychiatry, Yale University School of Medicine, New Haven, CT,

United States
KEYWORDS

case reports, schizophrenia, psychosis, Catatonia, encephalitis, treatment resistant psychosis

Editorial on the Research Topic

Case reports in schizophrenia and psychotic disorders: 2023

Case reports have long played a fundamental role in the evolution of medical knowledge (1-3), offering food for thought on rare or complex clinical conditions that could hardly be adequately evaluated in large-scale studies (4). In the context of Schizophrenia and psychotic disorders, the importance of meticulously documented case reports cannot be underestimated (5, 6). These clinical descriptions, although singular (7-9) in their scope, often catalyze new lines of investigation, challenge prevailing paradigms (10-12), focus on aspects that have only been marginally explored, and deepen our understanding of the clinical, neurobiological, and psychosocial dimensions of psychosis (13-15). Schizophrenia and related psychotic disorders remain among the most enigmatic conditions in psychiatry (16, 17), often associated with cognitive impairment, poor realworld functioning and high levels of disability (7). Despite significant advances in neuroimaging, genetics, and psychopharmacology, their etiopathogenesis is only partially understood (18). Clinical heterogeneity, diagnostic complexity, and variable responses to treatment further emphasize the need for in-depth clinical observations (19-21). Case reports offer a powerful means of exploring these complexities, often revealing atypical symptom patterns and comorbid conditions, new therapeutic responses, and the profound interaction between individual biology and environment (22-25). In recent years, the psychiatric community has witnessed a revival of appreciation for qualitative and phenomenological approaches, particularly in the study of psychotic disorders (26-29). Through case reports, research can highlight the nuanced experience of psychosis as lived by the patient, illuminating dimensions of suffering, healing, insight, and meaning that standardized measures may fail to capture, regardless of inclusion criteria (17, 30, 31). Such narratives humanize psychiatric illness, enrich clinical empathy, and promote a more patient-centered approach to care (32, 33) of particular importance in working with those who experience psychosis and stigma.

Tusconi et al. 10.3389/fpsyt.2025.1623129

Furthermore, case reports have a unique pedagogical value (34). For medical students, trainee doctors, and doctors early in their careers, engaging in preparing and publishing a case report cultivates essential skills in clinical reasoning, literature synthesis, and scientific communication (35, 36). In the field of psychosis, where patients' journeys often defy the most classic textbook definitions, learning through real-world clinical narratives can be particularly formative (37, 38). This Research Topic, Case Reports in Schizophrenia and Psychotic Disorders, aims to highlight the breadth and depth of contemporary clinical psychiatry by describing reports that show diagnostic dilemmas, rare comorbidities, new therapeutic approaches or ethical challenges in the treatment of individuals with psychosis, and by delving deeper with contributions that incorporate multidisciplinary perspectives, drawing from neurology, pharmacology, psychology, and social work.

The issue of managing the macroscopic aspects of Schizophrenia is considered by Takada et al. in their case report on the long-term management of occlusion after surgicalorthodontic treatment for a patient with drug-induced open bite developed after the onset of Schizophrenia; in this case, the synergistic effect of the use of a removable orthodontic appliance and medication management to achieve psychological and occlusal stability is reported, emphasizing how medication control was considered essential to improve the patient's drug-induced open bite and adding that, however, a minimally invasive orthodontic treatment, such as the use of a removable appliance, could be helpful to promote mental stability and improve occlusion. In their case series, Shelef et al. analyze the use of short-term chloral hydrate as an add-on treatment, reporting how it can improve sleep and relieve agitation in patients with treatment-resistant Schizophrenia (TRS). The authors state that chloral hydrate is effective in showing some short-term benefits in improving sleep disorders and reducing violent and agitated behavior in patients with TRS, providing an optimal alternative in the short-term treatment of Schizophrenia. Delving deeper into the discussion regarding rare conditions in their clinical manifestations, Huang describes a case of rare variants in the MTRR gene, 66GG and 524TT, which cause hyperhomocysteinemia and folic acid deficiency associated with schizophrenia; the authors describe a case of early-onset psychosis with hypertension and established refractoriness to antipsychotics and antihypertensive drugs. The authors hypothesized that some patients with schizophrenia with abnormal levels of homocysteine or vitamins in the blood may respond to additional vitamin supplementation, as suggested by some studies. Long-term clinical history revealed a case with limited response to pharmacological treatment, with the onset of epileptic events, subsequently highlighting two pathogenic variants (66GG and 524TT) in the MTRR gene that caused high levels of homocysteine and low levels of folic acid in the blood. The patient's serum homocysteine and folate levels returned to normal with vitamin supplementation, although the psychosis did not improve significantly, suggesting the importance of careful clinical monitoring for associated signs. A variant concerning the surgical

aspects of the management of the biological bases of Schizophrenia is described by Wu et al. in their report concerning a case of mental disorder caused by shunt blockage after surgery for hydrocephalus. The authors describe how psychiatric symptoms are a significant aspect of the clinical presentation of organic brain lesions and can manifest themselves before the anomalies are detectable through imaging; the evaluation of this case allows for an increased awareness of the multiple aspects involved in such complex conditions, pushing for an improvement in diagnostic accuracy. Furthermore, Fu et al. analyze a case of Electroconvulsive Therapy (ECT)-induced primary open angle glaucoma in a patient with unstable thyroid function; in their report, the authors emphasize that although ECT has been used in patients with coexisting psychiatric and thyroid dysfunctions, there are no reports addressing the risk of inducing or exacerbating glaucoma in the context of unstable thyroid function. This case emphasizes the need to monitor intraocular pressure in patients with unstable thyroid function during ECT to mitigate the risk of ocular complications.

The importance of rigorous methodological standards in case reporting is emphasized by the impact of case report descriptions on enriching the literature (39). The rigorous management of complex cases based on standardized and internationally recognized guidelines such as CARE (CAse REport) (40) appears essential to ensure clarity, transparency and replicability. Although the uniqueness of each case is valuable, contextualizing it within existing literature and theoretical frameworks greatly increases its relevance and impact (41). In an era increasingly dominated by big data and meta-analyses, the individual case report remains a cornerstone of clinical knowledge and innovation (42). Through the lens of individual experience, we are reminded that behind every diagnosis, there is a complex, unique human story that deserves our closest attention (43). Moreover, case reports can serve as an incubator for innovation in diagnostics and therapeutics (44). Descriptions of rare constellations of symptoms, treatmentresistant trajectories, or unexpected responses to off-label pharmacological interventions can suggest hypotheses that ultimately lead to formal research studies (45-49). Case reports provide a crucial way to report adverse effects or complications not yet fully characterized in the literature, informing clinical vigilance and risk management (46, 50). The in-depth study of case reports allows for a significant improvement in scientific knowledge and its impact on better clinical management, achieving better outcomes.

Author contributions

MT: Investigation, Supervision, Software, Conceptualization, Writing – review & editing, Visualization, Formal Analysis, Writing – original draft, Data curation, Validation, Methodology, Project administration. GN: Supervision, Data curation, Visualization, Writing – original draft, Conceptualization, Writing – review & editing, Investigation, Validation, Project administration. RG: Project administration, Visualization, Writing – original draft, Data

Tusconi et al. 10.3389/fpsyt.2025.1623129

curation, Writing – review & editing, Conceptualization, Validation, Supervision, Investigation. EC: Writing – review & editing, Validation, Supervision, Investigation, Data curation, Writing – original draft, Project administration, Conceptualization, Visualization.

Acknowledgments

The authors thank all contributing authors who have made this Research Topic a reference for the field.

Conflict of interest

The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

References

- 1. Zheng Y, Gan W, Chen Z, Qi Z, Liang Q, Yu PS. Large language models for medicine: a survey. *Int J Mach Learn Cybern*. (2025) 16:1015–40. doi: 10.1007/s13042-024-02318-w
- 2. Reiser SJ. The clinical record in medicine part 1: learning from cases. *Ann Intern Med.* (1991) 114:902–7. doi: 10.7326/0003-4819-114-10-902
- 3. Riley DS, Barber MS, Kienle GS, Aronson JK, von Schoen-Angerer T, Tugwell P, et al. CARE guidelines for case reports: explanation and elaboration document. *J Clin Epidemiol.* (2017) 89:218–35. doi: 10.1016/j.jclinepi.2017.04.026
- 4. Tusconi M, Nibbio G, Gupta R, Carr E. Editorial: Case reports in schizophrenia and psychotic disorders. *Front Psychiatry*. (2023) 14:1282780. doi: 10.3389/fpsyt2023.1282780
- 5. Tusconi M, Sanchez-Gutierrez T. Editorial: reviews in psychiatry 2022: schizophrenia. Front Psychiatry. (2023) 14:1237676. doi: 10.3389/fpsyt.2023.1237676
- 6. Tusconi M, Kätzel D, Sánchez-Gutiérrez T. Editorial: Reviews in psychiatry 2023: schizophrenia. Front Psychiatry. (2024) 15:1444818. doi: 10.3389/fpsyt.2024.1444818
- 7. Maj M, Stein DJ, Parker G, Zimmerman M, Fava GA, De Hert M, et al. The clinical characterization of the adult patient with depression aimed at personalization of management. *World Psychiatry*. (2020) 19:269–93. doi: 10.1002/wps.20771
- 8. Vita A, Barlati S, Deste G, Nibbio G, Penn DL, Pinkham AE, et al. Life engagement in people living with schizophrenia: predictors and correlates of patient life engagement in a large sample of people living in the community. *Psychol Med.* (2023) 53:7943–52. doi: 10.1017/S0033291723002106
- 9. Vita A, Nibbio G, Barlati S. Conceptualization and characterization of "primary" and "secondary" cognitive impairment in schizophrenia. *Psychiatry Res.* (2024) 340:116126. doi: 10.1016/j.psychres.2024.116126
- 10. Carey JC. Significance of case reports in the advancement of medical scientific knowledge. Am J Med Genet A. (2006) 140A:2131-4. doi: 10.1002/ajmg.a.31449
- 11. Sakurada K, Ishikawa T, Oba J, Kuno M, Okano Y, Sakamaki T, et al. Medical AI and AI for medical sciences. *JMA J.* (2025) 8:26–37. doi: 10.31662/jmaj.2024-0185
- 12. Hatoum MB, Charr JC, Ghaddar A, Guyeux C, Laiymani D. NNBSVR: neural network-based semantic vector representations of ICD-10 codes. *Appl Intell.* (2025) 55:466. doi: 10.1007/s10489-025-06349-w
- 13. Correll CU, Tusconi M, Carta MG, Dursun SM. What remains to be discovered in schizophrenia therapeutics: contributions by advancing the molecular mechanisms of drugs for psychosis and schizophrenia. *Biomolecules*. (2024) 14:906. doi: 10.3390/biom14080906
- 14. Chaves C, Dursun SM, Tusconi M, Hallak JEC. Neuroinflammation and schizophrenia is there a link? *Front Psychiatry.* (2024) 15:1356975. doi: 10.3389/fpsyt.2024.1356975
- 15. Tusconi M, Dursun SM. Editorial: Further findings in the role of inflammation in the etiology and treatment of schizophrenia. *Front Psychiatry.* (2024) 15:1349568. doi: 10.3389/fpsyt.2024.1349568
- 16. Carta MG, Aguglia E, Caraci F, Dell'Osso L, Di Sciascio G, Drago F, et al. Quality of life and urban/rural living: preliminary results of a community survey in Italy.

The author(s) declared that they were an editorial board member of Frontiers, at the time of submission. This had no impact on the peer review process and the final decision.

Generative AI statement

The author(s) declare that no Generative AI was used in the creation of this manuscript.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

- Clinical Practice and Epidemiology in Mental Health (2012) 8:169-17. doi: 10.2174/1745017901208010169
- 17. Kovess-Masfety V, Pilowsky DJ, Goelitz D, Kuijpers R, Otten R, Moro MF, et al. Suicidal ideation and mental health disorders in young school children across Europe. *J Affect Disord.* (2015) 177:28–35. doi: 10.1016/j.jad.2015.02.008
- 18. Chaves C, dos Santos RG, Dursun SM, Tusconi M, Carta MG, Brietzke E, et al. Why N,N-dimethyltryptamine matters: unique features and therapeutic potential beyond classical psychedelics. *Front Psychiatry.* (2024) 15:1485337. doi: 10.3389/fpsyt.2024.1485337
- 19. Saboori Amleshi R, Ilaghi M, Rezaei M, Zangiabadian M, Rezazadeh H, Wegener G, et al. Predictive utility of artificial intelligence on schizophrenia treatment outcomes: A systematic review and meta-analysis. *Neurosci Biobehav Rev.* (2025) 169:105968. doi: 10.1016/j.neubiorev.2024.105968
- 20. Alfimova M, Gabaeva M, Lezheiko T, Plakunova V, Chaika Y, Golimbet V. Demographic, premorbid, and clinical characteristics of schizophrenia spectrum patients with high and low polygenic liability to the disorder. *Diseases*. (2025) 13:66. doi: 10.3390/diseases13030066
- 21. Jiang S, Jia Q, Peng Z, Zhou Q, An Z, Chen J, et al. Can artificial intelligence be the future solution to the enormous challenges and suffering caused by Schizophrenia? *Schizophrenia*. (2025) 11:1–16. doi: 10.1038/s41537-025-00583-4
- 22. Zhao NO, Topolski N, Tusconi M, Salarda EM, Busby CW, Lima CNNC, et al. Blood-brain barrier dysfunction in bipolar disorder: Molecular mechanisms and clinical implications. *Brain Behav Immun Health*. (2022) 21:100441. doi: 10.1016/i.bbih.2022.100441
- 23. Natale A, Mineo L, Fusar-Poli L, Aguglia A, Rodolico A, Tusconi M, et al. Mixed depression: A mini-review to guide clinical practice and future research developments. *Brain Sci.* (2022) 12:92. doi: 10.3390/brainsci12010092
- 24. Mineo L, Rodolico A, Concerto C, Natale A, Pennisi M, Tusconi M, et al. *Mixed Depression: A Survey on Psychopathological, Diagnostic, and Therapeutic Approaches among a Sample of Italian Psychiatrists*. Bentham Science Publishers, Sharjah, United Arab Emirates (2021). doi: 10.2174/1745017902117010331.
- 25. Tusconi M, Fries GR. Chapter 11 Neuroprogression in bipolar disorder. In: MaChado-Vieira R, Soares JC, editors. *Biomarkers in Bipolar Disorders*. Cambridge, MA: Academic Press (2022). p. 167–89. doi: 10.1016/B978-0-12-821398-8.00009-6
- 26. Mlay JP, Naidu T, Ramlall S, Patankar K, Israel K, Esquivel L, et al. Strategies for relapse prevention among people with schizophrenia in KwaZulu-Natal Province, South Africa: Healthcare providers' perspectives. *PloS One.* (2025) 20:e0316313. doi: 10.1371/journal.pone.0316313
- 27. Lee H, Lee JH, Lee S, Lim JS, Kim HJ, Park J, et al. Comorbid health outcomes in patients with schizophrenia: an umbrella review of systematic reviews and meta-analyses. *Mol Psychiatry*. (2025) 30:1127–37. doi: 10.1038/s41380-024-02792-2
- 28. Hogea L, Tabugan DC, Costea I, Albai O, Nussbaum L, Cojocaru A, et al. The therapeutic potential of psychedelics in treating substance use disorders: A review of clinical trials. *Medicina (Mex)*. (2025) 61:278. doi: 10.3390/medicina61020278

Tusconi et al. 10.3389/fpsyt.2025.1623129

- 29. McCutcheon RA, Pillinger T, Varvari I, Halstead S, Ayinde OO, Crossley NA, et al. INTEGRATE: international guidelines for the algorithmic treatment of schizophrenia. *Lancet Psychiatry*. (2025) 0:384–394. doi: 10.1016/S2215-0366(25) 00331.8
- 30. Hazell CM, Hasapopoulos S, McGowan J, Hamza R, Ahmed Z, Gaughan B, et al. The role of verbal auditory hallucinations in influencing and retrospectively predicting physical harm prevalence in early psychosis. *Clinical Practice and Epidemiology in Mental Health*. (2024) 20:e17450179286452. doi: 10.2174/0117450179286452240520070533
- 31. Al-Awad F. Perceived burden and quality of life in caregivers of patients with schizophrenia in Saudi Arabia's eastern province: A cross-sectional study. *Clinical Practice and Epidemiology in Mental Health* (2024) 20:e17450179286452. doi: 10.2174/0117450179314013240417105321
- 32. Primavera D, Cossu G, Marchegiani S, Preti A, Nardi AE. Does the dysregulation of social rhythms syndrome (DYMERS) be considered an essential component of panic disorders? *Clin Pract Epidemiol Ment Health CP EMH.* (2024) 20:e17450179293272. doi: 10.2174/0117450179293272240328053722
- 33. Giovanni Carta M, Kalcev G, Scano A, Aviles Gonzalez CI, Ouali U, Pinna S, et al. The impact of MDQ positivity on quality of life impairment: Does it support the hypothesis of "Dysregulation of Mood, Energy, and Social Rhythms Syndrome" (DYMERS)? *J Public Health Res.* (2023) 12:22799036231208356. doi: 10.1177/22799036231208356
- 34. Chen Y, Zhang L, Zhang S, Zhang J, Yu H, Li Q, et al. Prevalence and sociodemographic configurations of anxiety and depression among caregivers of individuals with mental illness: A meta-analysis and qualitative comparative analysis. *J Affect Disord.* (2025) 375:486–95. doi: 10.1016/j.jad.2025.01.129
- 35. Park HY, Kim YC, Park SC, Cho YJ, Sur YJ. Comparison of the demographic and wound characteristics of non-suicidal and suicidal self-wrist cutting injuries. *Med (Baltimore)*. (2020) 99:e19298. doi: 10.1097/MD.000000000019298
- 36. Piras I, Portoghese I, Tusconi M, Minafra F, Lecca M, Piras G, et al. Professional and personal experiences of workplace violence among Italian mental health nurses: A qualitative study. *AIMS Public Health*. (2024) 11:1137–56. doi: 10.3934/publichealth.2024059
- 37. Tandon R, Gaebel W, Barch DM, Bustillo J, Gur RE, Heckers S, et al. Definition and description of schizophrenia in the DSM-5. *Schizophr Res.* (2013) 150:3–10. doi: 10.1016/j.schres.2013.05.028
- 38. Andreasen NC, Carpenter WT Jr. Diagnosis and classification of schizophrenia. *Schizophr Bull.* (1993) 19:199–214. doi: 10.1093/schbul/19.2.199
- 39. Bandara W, Furtmueller E, Gorbacheva E, Miskon S, Beekhuyzen J. Achieving rigor in literature reviews: insights from qualitative data analysis and

tool-support. Commun Assoc Inf Syst. (2015) 37:154-204. doi: 10.17705/1CAIS.03708

- 40. Gagnier JJ, Kienle G, Altman DG, Moher D, Sox H, Riley D. The CARE guidelines: consensus-based clinical case reporting guideline development. *Glob Adv Health Med.* (2013) 2:38–43. doi: 10.7453/gahmj.2013.008
- 41. Dickson H, Hedges EP, Ma SY, Cullen AE, MacCabe JH, Kempton MJ, et al. Academic achievement and schizophrenia: a systematic meta-analysis. *Psychol Med.* (2020) 50:1949–65. doi: 10.1017/S0033291720002354
- 42. Sabe M, Pillinger T, Kaiser S, Chen C, Taipale H, Tanskanen A, et al. Half a century of research on antipsychotics and schizophrenia: A scientometric study of hotspots, nodes, bursts, and trends. *Neurosci Biobehav Rev.* (2022) 136:104608. doi: 10.1016/j.neubiorev.2022.104608
- 43. Bighelli I, Rodolico A, García-Mieres H, Pitschel-Walz G, Hansen W-P, Schneider-Thoma J, et al. Psychosocial and psychological interventions for relapse prevention in schizophrenia: a systematic review and network meta-analysis. *Lancet Psychiatry*. (2021) 8:969–80. doi: 10.1016/S2215-0366(21)00243-1
- 44. Rutledge RB, Chekroud AM, Huys QJ. Machine learning and big data in psychiatry: toward clinical applications. *Curr Opin Neurobiol.* (2019) 55:152–9. doi: 10.1016/j.conb.2019.02.006
- 45. Saha S, Chant D, Mcgrath J. Meta-analyses of the incidence and prevalence of schizophrenia: conceptual and methodological issues. *Int J Methods Psychiatr Res.* (2008) 17:55–61. doi: 10.1002/mpr.240
- 46. Schomerus G, Schwahn C, Holzinger A, Corrigan PW, Grabe HJ, Carta MG, et al. Evolution of public attitudes about mental illness: a systematic review and meta-analysis. *Acta Psychiatr Scand.* (2012) 125:440–52. doi: 10.1111/j.1600-0447.2012.01826.x
- 47. Angermeyer MC, Holzinger A, Carta MG, Schomerus G. Biogenetic explanations and public acceptance of mental illness: Systematic review of population studies. *Br J Psychiatry*. (2011) 199:367–72. doi: 10.1192/bjp.bp.110.085563
- 48. Angermeyer MC, Carta MG, Matschinger H, Millier A, Refaï T, Schomerus G, et al. Cultural differences in stigma surrounding schizophrenia: Comparison between Central Europe and North Africa. *Br J Psychiatry.* (2016) 208:389–97. doi: 10.1192/bjp.bp.114.154260
- 49. Angermeyer MC, Matschinger H, Carta MG, Schomerus G. Changes in the perception of mental illness stigma in Germany over the last two decades. *Eur Psychiatry*. (2014) 29:390–5. doi: 10.1016/j.eurpsy.2013.10.004
- 50. Kovess-Masféty V, Wiersma D, Xavier M, Caldas de Almeida JM, Carta MG, Dubuis J, et al. Needs for care among patients with schizophrenia in six European countries: a one-year follow-up study. *Clin Pract Epidemiol Ment Health*. (2006) 2:22. doi: 10.1186/1745-0179-2-22