

Editorial

The contribution of *BJPsych Open* to the growing relevance of legal epidemiology

Steve Kisely and Ben Beaglehole



Legal epidemiology is an emerging field that examines how laws and policies influence human rights and health outcomes, particularly in areas such as in-patient psychiatric treatment, community treatment orders and child maltreatment. This editorial highlights contributions from *BJPsych Open* that apply legal epidemiological methods to assess issues relevant to child maltreatment and coercion in psychiatric care. Findings emphasise the need for early intervention, standardised evaluation measures and reforms that prioritise human rights and well-being. Legal epidemiology can offer a scientific basis for improving legal frameworks, as well as promoting equitable and effective mental healthcare.

Keywords

Child maltreatment; coercion; consent and capacity; epidemiology; psychiatric treatment.

Copyright and usage

© The Author(s), 2025. Published by Cambridge University Press on behalf of Royal College of Psychiatrists. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial licence (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original article is properly cited. The written permission of Cambridge University Press must be obtained prior to any commercial use.

Steve Kisely (pictured) is a psychiatrist and addiction and public health physician who currently works as a professor at the University of Queensland.

Ben Beaglehole is an associate professor in the Department of Psychological Medicine at the University of Otago, Christchurch. He is also a practising psychiatrist with the Anxiety Disorders Service for the Canterbury District Health Board.

Legal epidemiology evaluates law and policy as a factor in the cause, distribution and prevention of disease and injury.^{1,2} This approach includes policy surveillance (or mapping), which involves the systematic collection, analysis, comparison and evaluation of laws across different jurisdictions and over time.^{1,2} Other legal epidemiology methods include implementation, intervention and mechanism studies.² For psychiatry, this field is particularly relevant in addressing issues such as involuntary in-patient treatment, community treatment orders (CTOs) and child maltreatment. The present editorial highlights the contribution of *BJPsych Open* articles to these areas.

Application to coercive in-patient treatment

Coercive in-patient treatment involves practices such as involuntary admission to hospital, locked environments, seclusion, forced medication and physical or chemical restraint. These measures are often used to manage patients at acute risk of harm to themselves or others, but raise significant ethical and human rights concerns. Studies have shown that coercive measures can worsen mental health outcomes, highlighting the need for alternative approaches.^{3,4} By mapping and evaluating the impact of laws and policies, researchers can then identify best practices and recommend reforms to ensure that mental healthcare respects individuals' rights and promotes their well-being. For instance, an evaluation of a change from a closed to an open in-patient environment showed that although unauthorised absences increased, there was a reduction in the time spent in seclusion and no increases in violent incidents.⁵

In one *BJPsych Open* paper, Savage et al compared coercive practices in mental healthcare across nine countries, revealing

significant variations and the need for standardised measures to evaluate and reduce coercion.⁶ The study recommended international collaboration to develop and implement standardised measures, supported by continuous monitoring and reporting.

A further *BJPsych Open* study explored factors associated with involuntary admission in New South Wales, Australia, given uncertainty as to what these were.⁷ A greater knowledge of these factors might help in reducing coercion in psychiatry. It found that involuntary in-patient treatment had increased despite efforts to decrease its use. The strongest associations with involuntary care were referrals from the legal system and diagnoses of psychosis or organic mental disorders.⁷ Moderate associations included substance use disorders, affective disorders, comorbid cannabis and amphetamine use disorders, unmarried status and being born in Asia, Africa or the Middle East. Conversely, individuals over 75 years old, those with comorbid personality disorders or those with private health insurance were less likely to receive involuntary care.⁷

There are also potential harms from in-patient treatment with qualitative research highlighting fear and distress during detention, particularly related to the use of force and restraint.⁸ Although this was mitigated by staff efforts to form caring and collaborative relationships and provide clear information, negative impacts on self-worth and emotional state remained.

A final *BJPsych Open* study highlighted the impacts of involuntary admission on carers.⁹ This included feelings of relief mixed with distress and anxiety about their loved one's well-being. Carers emphasised the importance of timely and accessible information, supportive relationships with mental health professionals and involvement as partners in care.

Application to community treatment orders

CTOs allow compulsory treatment in the community for individuals with mental illness. Legal epidemiology can evaluate the effectiveness of CTOs in managing aggression and criminal behaviour among individuals with mental illness. Research has shown mixed results, with some studies indicating that CTOs may not significantly reduce violent or criminal behaviour.¹⁰ This

suggests that the risk of violence may be influenced by factors beyond the scope of CTOs, such as substance use and environmental conditions. A comprehensive approach involves addressing the social and public health factors that contribute to violence and criminal behaviour.¹⁰ Legal epidemiology therefore allows for a broader and deeper understanding of the impact of interventions, potentially informing the development of policies that focus on the whole person and their community, rather than solely relying on legislative control of individuals. This includes integrating social services, community support and preventive measures to create a more holistic and effective mental health system.

Kisely et al (2025) explored variations in CTO use across four Australian jurisdictions using administrative data, where percentages varied from 8% of people in contact with mental health services in New South Wales to 17.6% in South Australia.¹¹ Use varied widely even within the same jurisdiction. For instance, there was a six-fold difference between services with high and low levels of use in New South Wales and South Australia, while in Victoria it was four-fold.¹¹ There were also significant disparities in use by gender, place of birth and metropolitan versus rural residence.¹¹ It therefore seems unlikely that variations in clinical acuity can explain all these differences.

Another *BJPsych Open* study was a systematic review and meta-regression of 35 papers from 16 epidemiological studies across Australia and New Zealand. This indicated that higher rates of CTO use were associated with worse outcomes, suggesting that better targeted CTO placement that was restricted to use in non-affective psychosis might improve mental health outcomes.¹² There was a similar finding in a third *BJPsych Open* paper, which evaluated the outcomes of CTO use for all New Zealanders placed on CTOs over a ten-year period.¹³ This compared periods on CTOs with periods off CTOs. CTOs were associated with reduced admissions in people with psychotic disorders, but the opposite occurred for those with dementia disorders, bipolar disorders, major depressive disorder and personality disorders. These findings again raised questions about the appropriate use of CTOs and whether they are sufficiently targeted. The finding that higher rates of medications, including depot antipsychotic medications, were used on CTOs for all diagnostic groups similarly questions the use of compulsory treatments if they are not associated with improved clinical outcomes.

Another study by the same research group evaluated mortality rates on and off CTOs in New Zealand.¹⁴ There were higher mortality rates on CTOs for deaths by accidents and assaults, as well as medical causes, possibly because CTOs were used at times of greater unwellness and risk. There was no significant effect on suicide. The authors concluded that increased care and medication while on a CTO did not modify the course of illness sufficiently to reduce mortality.

These *BJPsych Open* papers therefore suggest that legal and policy frameworks should focus on reducing unnecessary CTO use and ensuring effective use for those who would benefit most.

Application to child maltreatment

Legal epidemiology can also be applied to the prevention of child maltreatment. Several *BJPsych Open* articles have highlighted the long-term adverse consequences and impacts on public health of child abuse and neglect. For instance, a study by Kisely et al (2024) showed significant associations between substantiated maltreatment and increased emergency department presentations and hospital admissions for common mental disorders up to 40 years old.¹⁵ The paper formed part of a larger project on the

consequences of childhood maltreatment on outcomes in adulthood that linked data from a birth cohort to administrative health databases that was described in a further *BJPsych Open* paper.¹⁶ This measured emergency department presentations and admissions for a wide range of mental and behavioural conditions, including severe mental illnesses, substance use disorders, suicidal ideation and self-harm.

In contrast to coercive or involuntary psychiatric treatment, there has been less emphasis on analysing the implementation and impact of interventions such as mandatory reporting, child protection services and family support programmes. Concerningly, two recent systematic reviews reported that suspected maltreatment was inconsistently reported to child protection services and, when it was, responses were limited or lacked evidence of efficacy in either the short or long term.^{17,18} This included a broad range of health, psychosocial, academic and behavioural outcomes.


Limitations

These findings mark the preliminary step in applying the methods of legal epidemiology to all three areas and indicate the need for further exploration using mixed methods and trans-disciplinary approaches. For instance, an implementation study might consider if the United Nations Convention on the Rights of Persons with Disabilities has influenced mental health legislation concerning coercion or compulsion in psychiatric treatment.

Future directions

Legal epidemiology provides a powerful tool for understanding and addressing complex public health issues such as coercive psychiatric in-patient treatment, CTOs and child maltreatment. In all three areas, there was evidence of inconsistency in the use of legal measures, including variations by race, ethnicity or country of birth.^{7,12,17} When evaluated, effects on outcomes were also limited.^{12,17}

These findings therefore underscore the importance of applying scientific methods to evaluate the impact of laws and policies to ensure equity, improve health outcomes and promote human rights. In particular, the use of routinely collected administrative data allows the longitudinal assessment of the impacts of new legislation. For example, proposed changes to replace the current risk-based Mental Health Act in New Zealand with a capacity-based act could be evaluated using similar methods to those in these *BJPsych Open* papers. This approach not only enhances the effectiveness of legal interventions but also promotes equity and well-being in vulnerable populations. However, these approaches should be complemented by other means of evaluation, including randomised controlled studies (if feasible), as well as mixed methods and trans-disciplinary approaches to establish causality more definitively.

Steve Kisely , School of Medicine, The University of Queensland, Street Lucia, Australia; Metro South Addiction and Mental Health Services, Metro South Health, Woolloongabba, Australia; Griffith Criminology Institute (GCI), Griffith University, Mount Gravatt, Australia; and Departments of Psychiatry, Community Health and Epidemiology, Dalhousie University, Halifax, Canada; **Ben Beaglehole** , Department of Psychological Medicine, University of Otago, Christchurch, New Zealand

Correspondence: Steve Kisely. Email: s.kisely@uq.edu.au

First received 27 May 2025, final revision 25 Jul 2025, accepted 2 Sep 2025

Author contributions

S.K. wrote the first draft. Subsequent drafts, including the final version, were reached through collaboration and revision by both S.K. and B.B.

Funding

This paper received no specific grant from any funding agency, commercial or not-for-profit sectors.

Declaration of interest

S.K. is a member of the International Editorial Board of *BJPsych*, *BJPsych Open* and *BJPsych International*. B.B. is a member of the International Editorial Board of *BJPsych Open*. However, neither author took part in the review or decision-making process of this submission to *BJPsych Open*. The authors declare no other potential conflicts of interest with respect to the research, authorship and/or publication of this article.

References

- Burris S, Cloud LK, Penn M. The growing field of legal epidemiology. *J Public Health Manag Pract* 2020; **26**(suppl 2): S4–9.
- Poirier MJ, Viens AM, Penney TL, Van Katwyk SR, Astbury CC, Lin G, et al. Principles and methods of global legal epidemiology. *J Epidemiol Community Health* 2022; **76**: 828–32.
- Kersting XAK, Hirsch S, Steinert T. Physical harm and death in the context of coercive measures in psychiatric patients: a systematic review. *Front Psychiatry* 2019; **10**: 400.
- Chieze M, Hurst S, Kaiser S, Sentissi O. Effects of seclusion and restraint in adult psychiatry: a systematic review. *Front Psychiatry* 2019; **10**: 491.
- Beaglehole B, Beveridge J, Campbell-Trotter W, Frampton C. Unlocking an acute psychiatric ward: the impact on unauthorised absences, assaults and seclusions. *BJPsych Bull* 2017; **41**: 92–6.
- Savage MK, Lepping P, Newton-Howes G, Arnold R, Staggs VS, Kisely S, et al. Comparison of coercive practices in worldwide mental healthcare: overcoming difficulties resulting from variations in monitoring strategies. *BJPsych Open* 2024; **10**: e26.
- Corderoy A, Large MM, Ryan C, Sara G. Factors associated with involuntary mental healthcare in New South Wales, Australia. *BJPsych Open* 2024; **10**: e59.
- Akther SF, Molyneaux E, Stuart R, Johnson S, Simpson A, Oram S. Patients experiences of assessment and detention under mental health legislation: systematic review and qualitative meta-synthesis. *BJPsych Open* 2019; **5**: e37.
- Stuart R, Akther SF, Machin K, Persaud K, Simpson A, Johnson S, et al. Carers' experiences of involuntary admission under mental health legislation: systematic review and qualitative meta-synthesis. *BJPsych Open* 2020; **6**: e19.
- Kisely S, Bull C, Gill N. A systematic review and meta-analysis of the effect of community treatment orders on aggression or criminal behaviour in people with a mental illness. *Epidemiol Psychiatr Sci* 2025; **34**: e12.
- Kisely S, Bull C, Zirnsak T, Edan V, Gould M, Lawn S, et al. Variations between, and within, jurisdictions in the use of community treatment orders and other compulsory community treatment: study of 402 060 people across four Australian states. *BJPsych Open* 2025; **11-20**: e57.
- Kisely S, McMahon M, Siskind D. Benefits following community treatment orders have an inverse relationship with rates of use: a meta-analysis and meta-regression. *BJPsych Open, Apr* 2023; **9**: e68.
- Beaglehole B, Newton-Howes G, Porter R, Frampton C. Impact of diagnosis on outcomes for compulsory treatment orders in New Zealand. *BJPsych Open* 2022; **8**: e145.
- Beaglehole B, Newton-Howes G, Porter R, Frampton C. The association between compulsory community treatment order status and mortality in New Zealand. *BJPsych Open* 2023; **9**: e15.
- Kisely S, Bull C, Trott M, Arnautovska U, Siskind D, Warren N, et al. Emergency department presentations and admission for common mental disorders following agency-notified child maltreatment at 40-year follow-up: results from the Childhood Adversity and Lifetime Morbidity study. *BJPsych Open* 2024; **10**: e220.
- Kisely S, Leske S, Arnautovska U, Siskind D, Warren N, Northwood K, et al. A 40-year study of child maltreatment over the early life course predicting psychiatric morbidity, using linked birth cohort and administrative health data: protocol for the Childhood Adversity and Lifetime Morbidity (CALM) study. *BJPsych Open* 2023; **9**: e50.
- Viswanathan M, Rains C, Hart LC, Doran E, Sathe N, Hudson K, et al. *Primary Care Interventions to Prevent Child Maltreatment: An Evidence Review for the U.S. Preventive Services Task Force*. Agency for Healthcare Research and Quality, 2024.
- Garrison ST, Gillen M, King LM, Cutshall K, Howitt A. Child maltreatment, adverse childhood experiences, and the public health approach: a systematic literature review. *Int J Child Maltreat Res Pol Pract* 2022; **5**: 541–71.