

Risk factors related to bodily restraint duration in the Northern Health emergency department

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RESEARCH WEEK
19-22 OCTOBER 2026
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BACKGROUND

Bodily restraint is a critical but ethically sensitive practice in emergency psychiatry¹. Despite its frequency, factors predicting restraint duration remain underexplored in the literature^{2,3}.

OBJECTIVES

Explore clinical and sociodemographic factors associated with restraint duration among psychiatric patients presenting to the ED of Northern Hospital, Victoria across three 3-month periods.

METHODS

N= 180 Restrained Individuals In NH ED

Retrospective cases · de-identified electronic records

Periods: Aug–Oct 2018 · Aug–Oct 2020 · Aug–Oct 2023

Analysis: Pearson r · t-test · ANOVA

References

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3. Richardson, B., Webber, L. S., & Lambrick, F. (2020). Factors associated with long-term use of restrictive interventions. *Journal of Intellectual & Developmental Disability*, 45(2), 159–166.
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SYSTEMIC & TIMELINE PREDICTORS

Longer waiting time before restraint (in minutes)

$r = 0.351$ · $p < 0.001$ (strongest systemic predictor)

Early intervention directly shortens restraint duration

Delayed EMH clinician attendance (in minutes)

$r = 0.243$ · $p = 0.002$

Delay in specialist review correlates with prolonged restraint duration

Longer initial restraint episode (in minutes)

$p = 0.006$

Predicts further restraint episodes within the same admission

Restraint time of Indigenous vs non-Indigenous patients

$p = 0.067$ 405 mins (n=15) vs 213 mins (n=153)

Nearly 2× longer restraint duration for Indigenous patients

CLINICAL PREDICTORS

Stable housing ($p = 0.003$)

People came from stable housing paradoxically had longer restraint durations compared to people came from unstable housing

Mood & "other" Diagnoses vs psychotic disorders ($p = 0.051$)

Patients who had the diagnosis of Mood disorders and other categories show longer restraint duration

NON-SIGNIFICANT FACTORS

$P > 0.05$

- **Substance use, Sex, Age, Forensic history, Past history of restraints, Medication compliance, Neurodevelopmental disorders, Personality disorders**

KEY CONCLUSIONS & CLINICAL IMPLICATIONS:

Timely assessment is the highest-yield intervention, Earlier review and reduced wait times directly shorten restraint duration

Culturally responsive care is essential - Indigenous patients face a disproportionate restraint burden nearly double that of non-Indigenous patients

Early de-escalation breaks the cycle: a longer first restraint predicts further restraint episodes within the same admission

Systemic factors dominate: Restraint duration is driven more by system response and cultural factors than by individual patient demographics