

# Risk and impact of mental disorder in institutional violence perpetration among male prisoners: findings from a Nigerian cohort

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## Background

- Mental disorders are prevalent in prison settings globally and are associated with adverse outcomes including interpersonal violence with significant psychosocial and economic costs.<sup>1-5</sup>
- No Nigerian study has prospectively examined the risk and impact of mental disorders in institutional violence perpetration among offenders.

### The Nigerian correctional context

Most populous black nation (>230 million), set to become Africa's third largest economy in 2026.

>80,000 incarcerated across 256 holding facilities

Imprisonment rate: 35 per 100,000 (2025 data)

Overcrowded prisons: 137% occupancy rate

Poor or non-existent mental health services in prisons

## Aim/Hypotheses

We hypothesised that:

- those with mental disorders would show greater risks of violence perpetration after a 3-month follow-up period
- mental disorders would demonstrate significant population attributable risk for violent behaviour.

## Methods

- Prospective cohort design with 325 male prisoners across five prisons in Ogun state Nigeria assessed for severe mental illnesses, personality disorders and neurodevelopmental disorders using the Mini International Neuropsychiatric Interview (MINI), RitVo Autism Asperger Diagnostic Scale – Revised (RAADS-R), International Trauma Questionnaire (ITQ) and Raven's Progressive Matrices at prison entry.
- Socio-demographic, clinical and forensic information on the participants was also collected at baseline.
- At 3-month follow-up, the participants were assessed for violence perpetration in prison using the Self-reported Violence Questionnaire.
- Complex survey design with Poisson regression for estimating relative risks for violence.

## Discussion

- First Nigerian study to examine violence perpetration as an outcome of mental disorder among prisoners.
- Elevated risk of violence perpetration up to 2- to 8-fold is broadly consistent with the international literature.<sup>6-9</sup>
- Ecological explanation: mental disorder as an imported characteristic may interact with situational factors to produce violence in prison.<sup>10</sup>

## Conclusions

- Substance use, personality and neurodevelopmental disorders are independently associated with violence perpetration in prison.
- This impacts the health and safety of prisoners.
- Critical steps are required to upscale mental health screening at prison entry and optimise mental healthcare processes during incarceration in Nigeria. Considerations for diversion paradigms are crucial.

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## Results

- Baseline characteristics – mean age – 33.1 (SD 10.4); most common offences – burglary/stealing (50%), violent offence (23.6%); about half on remand (51.9%)
- Attrition rate = 22.2%
- Figures 1 and 2 show significantly higher cumulative incidence of moderate and any violence perpetration in any lifetime psychiatric disorder (APD), schizophrenia, current SUD, antisocial & borderline personality disorder, ASD and any NDD.
- Table 2 shows higher adjusted RRs of moderate violence perpetration found for lifetime APD, AUD, SUD, borderline PD, any cluster B PD, ASD and Any NDD.

Fig. 1: Weighted 3-month incidence of Any violence perpetration according to psychiatric diagnosis

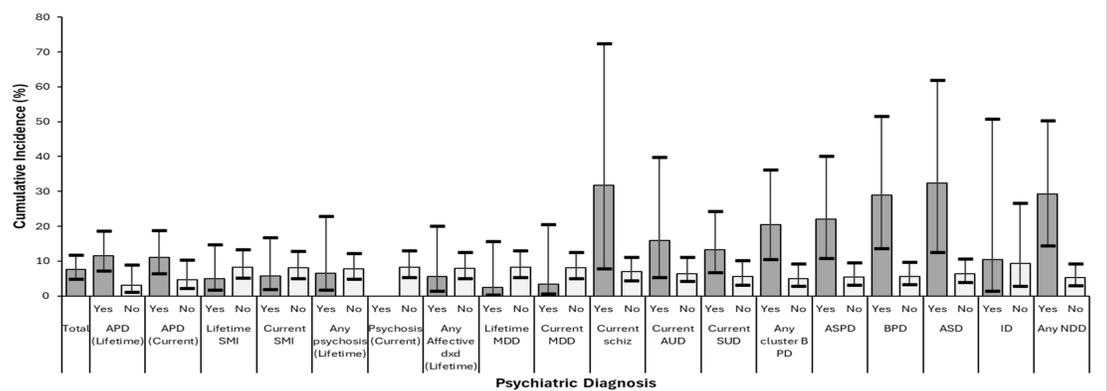


Fig 2: Weighted 3-month incidence of moderate violence perpetration according to psychiatric diagnosis

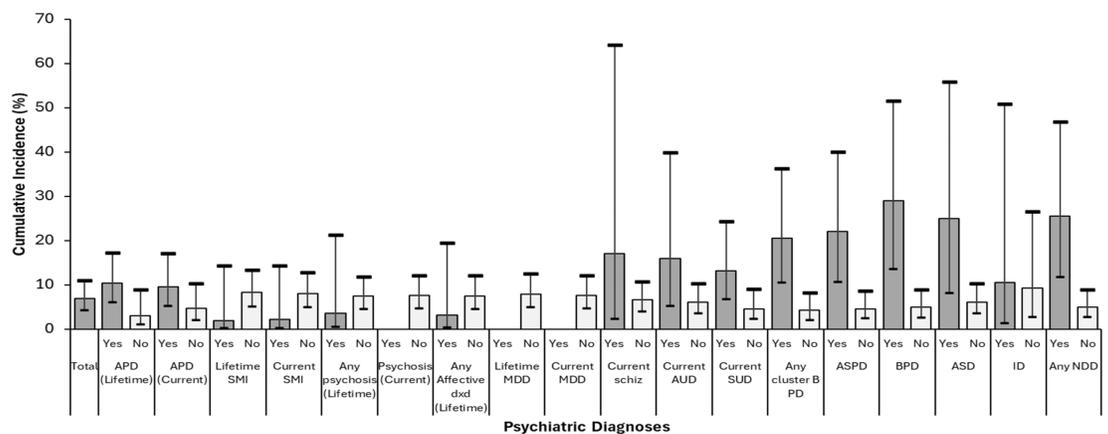


Table 1: Mental disorder as a risk factor for violence perpetration after adjusting for covariates

Mental disorder	Any physical violence		Moderate physical violence	
	aRR (95% CI)	aRR (95%CI)	aRR (95%CI)	aRR (95%CI)
Any psychiatric disorder	<b>3.4 (1.2-10.1)</b>	<b>3.2 (1.1-9.4)</b>	<b>3.1 (1.2-8.1)</b>	<b>2.6 (1.01-6.8)</b>
Alcohol use disorder	2.4 (1.0-6.0)		<b>3.1 (1.2-8.1)</b>	
Substance use disorder	2.2 (0.9-5.3)		<b>2.6 (1.01-6.8)</b>	
Antisocial PD	2.4 (0.9-6.8)		2.8 (1.0-8.3)	
Borderline PD	<b>5.5 (2.6-11.3)</b>		<b>6.5 (2.9-14.7)</b>	
Any cluster B PD	2.5 (1.0-6.4)		<b>3.0 (1.1-8.2)</b>	
Autism Spectrum Dxd	<b>8.1 (2.4-27.4)</b>		<b>6.9 (1.8-26.7)</b>	
Any NDD	<b>6.7 (2.7-16.8)</b>		<b>6.9 (2.6-18.9)</b>	

### Population Attributable Fraction (PAF)

#### Any violence

- Any lifetime Psychiatric disorder – 57% (-2 – 82%)
- Borderline PD – 26% (6 – 42%)
- ASD – 18% (1 – 32%)
- Any Neurodevelopmental Dxd – 32% (8 – 50%)

#### Moderate Violence

- Any lifetime Psychiatric disorder – 54% (-8% – 81%)
- Borderline PD – 30% (8 – 47%)
- Any Neurodevelopmental Dxd – 31% (6 – 49%)

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