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Exclusion from school and risk of serious violence: a target trial emulation study

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Objectives

To investigate the link between permanent school exclusion and perpetration of (i) serious violence (ii) homicide or near-miss homicide in young people.

ations are causal, targeting the upstream common causes of exclusion and violence should be prioritised.

Methods

We used linked national education and justice data to emulate a randomised controlled trial. Individuals aged 11 to 16 years enrolled in a state secondary school in England who were permanently excluded were matched 1:1 to an unexcluded control (meeting the same eligibility criteria). Follow up started on the date of exclusion for the matched pair and ended at the outcome of interest or after 12 months, whichever occurred first. Cox proportional hazards regression was used to compare outcomes in the two groups. We used a fixed bias analysis as a sensitivity analysis to unmeasured confounding.

Results

Among the approximately 650,000 individuals meeting eligibility criteria there were just over 21,000 exclusions with complete data on covariates. 98% of these were matched to an eligible control. Of those excluded, 4.8% had a conviction or caution for serious violence within a year, compared to 2.4% among those not excluded (adjusted hazard ratio (HR)=2.05, 95% confidence interval (CI) 1.83 to 2.29). Homicide or near-miss homicide was much rarer (<0.1% of those excluded), with adjusted HR=2.36, 95% CI 1.04 to 5.36. The fixed bias analysis indicated that an unmeasured confounder would have to be strongly related to both the exposure and outcome in order to fully explain these associations.

Conclusion

Permanent exclusion is associated with approximately a doubling of the risk of being convicted or cautioned for serious violence and for homicide or near-miss homicide in the following 12-months. Since we cannot determine whether these associ-

