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Educational Outcomes for Children in Intergenerational Households with Substance Misuse: A National Data Linkage Study in Wales, UK

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Background

Parental substance misuse is a known risk factor for adverse child outcomes, yet large-scale UK evidence linking household misuse across health and justice systems to education remains limited. This study leverages whole-population linked administrative data in Wales to address this gap, operationalising policy commitments for earlier intervention.

scale, this study highlights the necessity of integrated preventative strategies across health, justice, and education to break cycles of disadvantage.

Methods

This retrospective electronic cohort study utilised the Secure Anonymised Information Linkage (SAIL) Databank. The cohort included children aged 11–15. A novel linkage combined Magistrates Court data with health records to define household substance misuse (SMHH). Children were categorised by the adult's misuse source: health only (SMHH-H), justice only (SMHH-J), or both (SMHH-HJ). Multilevel models analysed associations with school attendance and exclusions, adjusting for deprivation and Special Educational Needs (SEN).

Results

Exposure to household substance misuse was significantly associated with reduced attendance and increased exclusion odds. A clear risk gradient emerged: children in the SMHH-HJ group (misuse identified in both health and justice systems) experienced the poorest educational outcomes: highest likelihood of exclusion, lower attendance rates. These associations remained significant after adjusting for SEN and mental health, with effects compounded by socioeconomic deprivation.

Conclusion

Household substance misuse, particularly when interacting with the justice system, is a critical marker for educational disengagement. By linking cross-sectoral data at a population

