

Influence of early life exposure to social disadvantages on deliberate self-harm (DSH) among children of parents with mental health disorders

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Introduction

It is well established that parental mental health disorders increase children's risk of deliberate self-harm (DSH). However, little is known about how early life exposure to social disadvantage influences DSH among children whose parents have a mental health disorder.

Aims

To examine how early life exposure to high neighbourhood socioeconomic disadvantage and having a teen mother influence the DSH risk among children whose parents have a mental health disorder.

Methods

This study was based on the linkage of population-level records routinely collected by government agencies in Western Australia. A birth cohort including 474,860 non-Aboriginal individuals born between 1981 and 2001 was followed up until 2011. A nested case-control sample was compiled from the birth cohort for data analysis. A total of 7,151 people with DSH-related contacts (cases) and 143,020 matched controls were analysed. Conditional logistic regression models were utilised in this study.

Results

Exposure to high neighbourhood socioeconomic disadvantage was associated with additionally increased odds of DSH among children exposed to maternal mental health disorders during early childhood (1-4 years) (OR=1.75, 95%CI:1.30-2.36, $p<0.001$). However, this was not observed for children exposed to maternal

mental health disorders during late childhood (5-9 years) or adolescence (10-19 years). Comparatively, exposure to high socioeconomic disadvantage was related to additionally increased odds of DSH among children exposed to paternal mental health disorders during adolescence (10-19 years) (OR=2.25, 95%CI:1.60-3.16, $p<0.001$), but not childhood. Having a teen mother was significantly associated with additionally increased odds of DSH, regardless of when the parental mental health disorders occurred. Children with a teen mother and early life exposure to socioeconomic disadvantage were at additionally increased odds of DSH, compared to children with only one form of disadvantage (OR=1.51, 95%CI:1.07-2.12%, $p=0.018$) among children exposed to parental mental health disorders during childhood, but not during adolescence.

Conclusion

Among children of parents with mental health disorders, early life exposure to social disadvantage is not uncommon, and confers additionally increased risk of DSH. Therefore, preventive strategies need to be based on joint actions involving both social and health services, and need to incorporate child mental health interventions into adult mental health services. The cross-cutting efforts would provide a greater positive impact in effectively addressing the multifaceted nature of reducing DSH among children of parents with mental health disorders.

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