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Is the Prevention Paradox Useful in Suicide Prevention Theory and Strategies?

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Background

Little progress has been made in the areas of suicide prediction, explanation, and prevention mainly because of the difficulty inherent in examining a low base-rate behavior such as suicidal behavior.

Objectives

Geoffrey Rose's prevention paradox occurs when the majority of cases with an adverse outcome come from a population of low or moderate risk, and only a few from a 'high risk' group. The present study intends to test whether the prevention paradox applies to the initiation of suicide attempts.

Methods

Children born 1980-1985 were followed from age 15 to 29 (N=300,000). Data was analyzed using a discrete-time Cox model to allow for changing covariates over time. From administrative registers a number of variables correlated with suicidal behavior based on suicide prevention theories were collected, and thereby identify a high-risk group. These variables were individual risk factors such as living in a disadvantaged area, parental circumstances and behavior, and individual resource deficits recorded on yearly basis. An event history from birth to adulthood is used to estimate hazards at ages 15 to 29 years. The inclusion of event history information in the statistical model refines the research question: Can we identify a high risk group (<5%) in the population from whom the suicide attempts exclusively recruited?

Findings

Family background and parental factors such as mental illness, suicidal behavior, violence, unemployment and family separation all contributed independent information to prediction of adolescent's suicide attempts. The young person's hospitalization for psychiatric disorder (ADHD, anxiety, depression, severe stress reaction and adjustment disorders) contributed to the explanation model.

Discussion and Conclusion

There are many factors contributing to suicide risk therefore it is challenging to identify a high risk group (<5%) in the population. These findings illustrate that population-based rather than targeted strategies may be more beneficial for suicide prevention.

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