Risk Factors for Violence and Suicide in the General Population: a Meta-epidemiological Study

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Aims

1) To systematically review literature and conduct a meta-epidemiological study (review of meta-analyses) on risk factors for violence and suicide in the general population.

2) To assess if risk factors for violence and suicide overlap and determine the impact of each risk factor at a population level.

Background

Approximately 1.6 million people die each year as a result of violence and suicide. There is a large volume of literature examining single risk factors or domains. We aimed to create an overview of this and compare risk factors across multiple domains.

Methods

We conducted a systematic search to identify meta-analyses and systematic reviews analysing risk factors for violence and suicide in the general population. Risk factors were categorised into similar domains. Information on effect sizes was extracted, synthesized and presented. Population attributable risks were calculated.

Results

41 meta-analyses were eligible for data synthesis. Risk factors with the largest effect sizes were in the neuropsychiatric domain, especially for suicide. Other important risk domains were environmental, psychological, parental and historical factors. There was some overlap for neuropsychiatric risk factors for violence and suicide, but little for other risk domains. The neuropsychiatric risk factors which had the largest impact at a population level were substance abuse for violence and depression for suicide.

Conclusions

In contrast to most criminological literature, risk factors for violence are not solely based around socio-economic determinants. Individual risk factors, including substance abuse and psychiatric illness, play a potentially important role. Overlaps with suicide suggest some common mechanisms.