

Risk Factors for Violence in Psychosis: Systematic Review and Meta-Regression Analysis of 110 Studies

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Abstract

Background

Previous reviews on risk and protective factors for violence in psychosis have produced contrasting findings. There is therefore a need to clarify the direction and strength of association of risk and protective factors for violent outcomes in individuals with psychosis.

Method

We conducted a systematic review and meta-analysis using 6 electronic databases (CINAHL, EBSCO, EMBASE, Global Health, PsycINFO, PUBMED) and Google Scholar. Studies were identified that reported factors associated with violence in adults diagnosed, using DSM or ICD criteria, with schizophrenia and other psychoses. We considered non-English language studies and dissertations. Risk and protective factors were meta-analysed if reported in three or more primary studies. Meta-regression examined sources of heterogeneity. A novel meta-epidemiological approach was used to group similar risk factors into one of 10 domains. Sub-group analyses were then used to investigate whether risk domains differed for studies reporting severe violence (rather than aggression or hostility) and studies based in inpatient (rather than outpatient) settings.

Findings

There were 110 eligible studies reporting on 45,533 individuals, 8,439 (18.5%) of whom were violent. A total of 39,995 (87.8%) were diagnosed with schizophrenia, 209 (0.4%) were diagnosed with bipolar disorder, and 5,329 (11.8%) were diagnosed with other psychoses. Dynamic (or modifiable) risk factors included hostile behaviour, recent drug misuse, non-adherence with psychological therapies (p values < 0.001), higher poor impulse control scores, recent substance misuse, recent alcohol misuse (p values < 0.01), and non-adherence with medication (p value < 0.05). We also examined a number of static factors, the strongest of which were criminal history factors. When restricting outcomes to severe violence, these associations did not change materially. In studies investigating inpatient violence, associations differed in strength but not direction.

Conclusion

Certain dynamic risk factors are strongly associated with increased violence risk in individuals with psychosis and their role in risk assessment and management warrants further examination.

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