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## Aggression and Violent Behavior

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Comparative efficacy and safety of carbamazepine in adults without severe mental illness, with aggressive and violent interpersonal behavior: A systematic review and meta-analysis



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## ABSTRACT

Background: Violent and aggressive interpersonal behavior is a serious public health concern. Evidence for management approaches of violence in non-psychiatric populations is limited. Although it is widely used as an off-label treatment to manage aggression and impulsivity, there is a lack of systematically collected evidence on the efficacy and safety of carbamazepine for this indication.

Aim: Determine the efficacy and safety of carbamazepine in non-institutionalized adults without severe mental illness, with aggressive and violent interpersonal behavior.

Methods: We systematically searched PubMed, Medline, CINAHL, EMBASE, PsycInfo, CENTRAL, OpenGrey and ClinicalTrials.gov. We included randomized controlled trials assessing the efficacy of carbamazepine in adults without severe mental illness in reducing violent interpersonal behavior, compared to no carbamazepine or other pharmacological treatment modalities. We extracted data from published reports and planned to conduct meta-analyses.

Results: We reviewed 3447 citations, retrieved 17 full-texts and identified 2 eligible studies. Carbamazepine significantly reduced interpersonal aggression among women with borderline personality disorder but not so among men with impulsive aggression. Given the paucity of results, we could not perform a quantitative analysis.

Conclusions: Quality evidence supporting the use of carbamazepine in the management of aggressive interpersonal behavior in adults without severe mental illness is lacking. Further studies are warranted.