

Density of neighbourhood bars is linked to intimate partner violence-related visits to the emergency department

- Intimate partner violence (that is, violence between spouses or cohabiting partners) has been linked to heavy drinking, and alcohol outlet density to violence.
- A new study looks at links between alcohol outlet densities and emergency department visits related to intimate partner violence.
- Findings showed that the density of bars is positively related to emergency department visits related to intimate partner violence, while there is no relationship between restaurant density and these emergency visits.

Intimate partner violence has been linked to heavy drinking, substance use by one or both partners, and living in a neighborhood characterized by poverty and social disadvantage. Alcohol outlet density has been linked to assaultive violence in a community. A recent study examined the relationship between alcohol outlet densities and visits to the emergency department resulting from intimate partner violence. Data from California between July 2005 and December 2008 indicated that density of bars is associated with emergency department visits resulting from this type of violence.

“Most of the research on this type of violence has focused on individual-level risk factors,” explained Carol B. Cunradi, senior research scientist at Prevention Research Center and corresponding author for the study. “We wanted to extend this line of research by testing whether alcohol outlet densities are associated with greater intimate partner violence as indicated by emergency department visits, while also taking into account other neighborhood-level characteristics previously shown to be linked with risk for intimate partner violence.”

“Although it is true that both bars/pubs and restaurants sell alcohol and food, we hypothesized that the context surrounding use of these two types of outlets would be quite different,” said Cunradi. “For example, we expect that restaurants that also sell alcohol are frequented by couples and/or families primarily to have a meal that may or may not be accompanied by alcohol. On the other hand, we expect that bars/pubs are primarily frequented by men with or without their female partners, with the primary goal of drinking alcohol that may or may not be served with some food. There is also a large literature linking bar attendance, but not restaurants that serve alcohol, with aggression.”

Cunradi and her colleagues computed half-yearly counts of emergency department visits related to intimate partner violence for individual zip codes taken from patient-level public datasets. Alcohol outlet density measures – calculated separately for bars, off-premise outlets such as liquor stores and grocery stores that sell alcohol, and restaurants – were derived from California Alcohol Beverage Control records.

“The key findings of the study are that the density of bars was positively associated with emergency room visits related to intimate partner violence; the density of off-premise outlets, such as liquor stores and other stores that sell alcohol, was negatively associated with this type of emergency department visit,” said Cunradi. “For the latter finding, the association was weaker and smaller than the bar association. There was no association between density of restaurants and emergency department visits related to intimate partner violence. These findings suggest that environmental factors, such as alcohol outlet density, affect violence between intimate partners, as indicated by emergency room visits. Further research is needed to understand the mechanisms that underlie these associations.”

Intimate partner violence is sometimes measured by police reports. Emergency department visits represent a much more serious level this type of violence than police reports. “Police-reported intimate partner violence cases may involve threatening behavior, property damage, loud arguments, and physical aggression that may or may not result in injury,” said Cunradi. “In contrast, when the violence leads to an emergency department visit, it has resulted in injuries requiring medical attention.”

“The take-home message is that environmental factors, such as alcohol outlet density, affect a variety of behaviors, including violence between intimate partners that result in emergency department visits,” said Cunradi. “However, the absence of individual-level data do not allow us to determine the precise mechanisms that link an increase of one bar per square mile with a three percent increased likelihood of IPV-related ED visits in a given zip code. There is nonetheless research evidence linking bar attendance with aggressive behavior, both in and out of the bar. Additional research is needed to investigate how bar density results in increased risk for intimate partner violence

leading to emergency department visits.”

Results will be published in the May 2012 issue of *Alcoholism: Clinical & Experimental Research* and are currently available at *Early View*. Co-authors of the ACER paper, “Alcohol Outlet Density and Intimate Partner Violence-Related Emergency Department Visits,” were: Christina Mair of the Prevention Research Center at the Pacific Institute for Research and Evaluation, as well as the School of Public Health at the University of California, Berkeley; and William Ponicki and Lillian Remer of the Prevention Research Center at the Pacific Institute for Research and Evaluation. The study was funded by the National Institute on Alcohol Abuse and Alcoholism.