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# **Epidemiology and Criminology: Managing Youth Firearm Homicide Violence in Urban Areas**

**POSTER  
PRESENTATION**

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## Abstract

Despite violence being considered a public health problem in the United States, little is known about the benefit of using a combined epidemiology and criminology (EpiCrim) approach to focus on urban youth firearm homicides. This general qualitative study identified alignment between Akers and Lanier's EpiCrim and Benet's polarities of democracy approaches when used to research an interdisciplinary concern. Data were collected through semi structured interviews of 16 criminal justice practitioners and medical professionals. The positive social change implications identified approaches to reduce gun violence among youth in urban communities.

*Doctoral Research*

## Problem

The Office of Juvenile Justice and Delinquency Prevention identified in 2016 that juveniles were involved with 731 homicides in the United States (Office of Juvenile Justice and Delinquency Prevention, 2016). Additionally, juvenile homicide offenders trended upward from 2013 through 2016 (Office of Juvenile Justice and Delinquency Prevention, Statistical Source Book 2016). Despite this increase, there has been a dearth of combined EpiCrim research studies specifically focused on risk behavior factors related to youth who commit homicides and the development of intervention and prevention strategies.

## Purpose

The purpose of this qualitative study was to understand whether the EpiCrim approach, as suggested by Akers and Lanier (2009), can be used to reduce gun homicides by youth in U.S. urban areas

## Significance

Given the impact of gun violence in various urban communities, policy makers often must identify solutions to problems that seem intractable.

This study increases understanding of how an EpiCrim approach can contribute to reducing gun homicides by youth in U.S. urban areas. By identifying the drivers of such behaviors, policy makers at the local, state, and federal levels are better positioned to develop intervention and preventive strategies.

Combining epidemiological and criminology approaches provides ability to leverage two disciplines with unique perspectives and capabilities to target an issue.

## Theory or Framework

Akers and Lanier (2009) formed EpiCrim as a theoretical and conceptual framework that provided a method for practitioners in public health and criminology to bridge approaches and address matters that transcended both disciplines.

Additionally, selection of Benet's (2006, 2012, 2013) polarities of democracy theoretical framework provided a method to understand various attributes that were factors in a democratic society.

Because Benet used Johnson's (1996) polarity management as his conceptual framework, it was a conceptual framework for this study along with Akers and Lanier's (2009) combined epidemiological and criminology conceptual framework.

## Relevant Scholarship

Understanding the intersection of public health with criminal justice through the application of EpiCrim provides potential visibility to a myriad of areas, which can be leveraged toward understanding youth homicide risk factors (DeLisi, et al., 2016).

Levine et al. (2012) suggested a unique relationship exists between criminal justice and public health, whereby both disciplines seek to reduce crime and disease in communities.

Given the intersection between public health issues and criminology, the EpiCrim model supports an examination of the root cause of violence through the application of a public health model to reduce the potential of epidemics such as violence (Welsh et al., 2014).

## Research Question

**In what ways can a combined epidemiological criminology approach contribute to or detract from the reduction of gun homicides by youth in U.S. urban areas?**

## Participants

The snowball sampling process of identifying potential participants assisted with removing any potential bias in the selection of contributors for the study.

A total of 16 criminal justice practitioners and medical professionals with experience relative to juvenile justice policies pertaining to gun violence participated.

The criminal justice practitioners consisted of active and retired chiefs of police, deputy chiefs of police, commissioners, and an assistant superintendent.

The public health professionals consisted of public health directors, forensic pathologists, medical examiners, a trauma surgeon, a neurosurgeon, and medical physicians.

## Procedures

Data were collected through semi structured interviews.

A total of eight participants were directly identified by me and provided with information relative to the study. A total of four participants were identified through the snowball data collection approach. Finally, a total of four participants were identified through an e-mail, using a public-facing LinkedIn account soliciting volunteers. A total of five participants were interviewed in private locations.

The remaining participant was interviewed via telephone. All interviews were transcribed using NVivo machine language transcription service in addition to hand coding. The total amount of time recorded for interviews of all participants totaled 403 minutes (6 hours).

Data saturation was achieved over a period of 49 days when no new themes emerged from participant interviews.

## Analysis

Interview data were inductively coded, then subjected to a thematic analysis procedure.

Field notes obtained during participant interviews were compared against transcribed data to validate accuracy.

In reviewing participants' responses to the semi structured open-ended questions several themes resonated.

Codes were developed manually from my initial review of all transcripts and subsequently revised as necessary when participants returned their edited transcripts.

## Findings

The following themes were developed:

- a) Gun violence is dynamic and involves complex issues;
- b) Revisions are needed to gun violence funding research authorization, HIPAA and FERPA laws;
- c) Barriers are manufactured and not necessarily because of specific laws and/or policies;
- d) EpiCrim affords a better ability to share information across disciplines and study the root cause of gun violence;
- e) The public health approach provides early detection capabilities through an epidemiological diagnosis of issues; and
- f) While not necessarily accessible in schools, guns are available near school environments.

## Interpretation

As an approach, EpiCrim was identified as beneficial to addressing both actual and manufactured barriers through its multidisciplinary approach.

Participants identified the lack of funding for EpiCrim studies as a major impediment, despite the benefits possible from such research.

Participants suggested that when properly implemented, EpiCrim can provide an approach that contributes toward identifying the root cause of youth gun violence.

Further, EpiCrim was identified as providing a better approach toward information-sharing and the ability to determine and develop effective intervention strategies.

## Limitations

Selection of participants using the snowball data collection approach was challenging. A second concern relative to use of the snowball approach is the researcher's limited knowledge of identified participants' backgrounds. This created the potential for participants to be referred that might have limited actual knowledge or expertise of the targeted research topic. Further it created the potential for participants to advocate personal or professional agendas inimical to the research.

Finally, the necessity to conduct telephonic interviews of most participants, and elongated member check reviews of completed transcripts extended the time of the research.



# Recommendations

## Recommendations for Practice

- A need exists to broaden the conversation and understand issues relative to youth having access to guns in rural areas and not to simply focus on urban environments.
- Secondly, given the annual suicide death rate of youth associated with firearms, more focus should be placed on youth suicides in both urban and rural areas.
- Third, future research is needed into the benefit for schools of public health to conduct EpiCrim centric research on a sustained basis.
- Finally, some participants suggested a need exists for mental health and comprehensive multitiered research that has prevention and response elements as part of the study.

# Social Change Implications

Policy makers at the local, state, and federal levels can consider the benefit of funding EpiCrim approaches through a variety of community-based participatory research initiatives.

Ability to research complex issues and ability to implement EpiCrim strategies to address youth gun violence in urban areas.

Ability to increase awareness to an approach that heretofore was not leveraged in a sustained manner by policy makers at various levels of government.

# References

- Akers, T. A., & Lanier, M. M. (2009). "Epidemiological criminology": Coming full circle. *American Journal of Public Health, 99*(3), 397–402. <https://doi.org/10.2105/ajph.2008.139808>
- Benet, W. J. (2006). *The polarity management model of workplace democracy* (Doctoral dissertation. Available from ProQuest Dissertations & Theses Global Full Text database, UMI Publishing. (Order No. NR15724)
- Benet, W. J. (2012). *The polarities of democracy: A theoretical framework for building a healthy, sustainable, and just world*. Unpublished manuscript, Social Economy Centre, Adult Education and Community Development Program of the Ontario Institute for Studies in Education of the University of Toronto, Canada.
- Benet, W. J. (2013). Managing the polarities of democracy: A theoretical framework for positive social change. *Journal of Social Change 5*(1), 26–39. <https://doi.org/10.5590/josc.2013.05.1.03>
- DeLisi, M. (2016). The big data potential of epidemiological studies for criminology and forensics. *Journal of Forensic and Legal Medicine, 57*, 24–27. <https://doi.org/10.1016/j.jflm.2016.09.004>
- DeLisi, M., Piquero, A. R., & Cardwell, S. M. (2016). The unpredictability of murder: juvenile homicide in the pathways to desistance study. *Youth Violence and Juvenile Justice, 14*(1), 26–42. <https://doi.org/10.1177/1541204014551805>
- Johnson, B. (1996). *Polarity management*. HRD Press

Levine, R. S., Goldzweig, I., Kilbourne, B., & Juarez, P. (2012). Firearm, youth homicide, and public health. *Journal of Health Care for the Poor and Underserved, 23*(1), 7-19.

<https://doi.org/10.1353/hpu.2012.0015>

Office of Juvenile Justice and Delinquency Prevention (2016). *Statistical Briefing Book*.

<https://www.ojjdp.gov/ojstatbb/offenders/qa03105.asp?qaDate=2016>

Welsh, B. C., Braga, A. A., & Sullivan, C. J. (2014). Serious youth violence and innovative prevention: On the emerging link between public health and criminology. *Justice Quarterly, 31*(3), 500-523.