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Supporting a Community-Based Participatory Evaluation Approach to Violence Prevention in Kansas City

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Disparities in rates of firearm-related homicide exist for some segments of the population and by geographic area. There are interrelated factors across multiple social–ecological levels that increase the risk of violence for some individuals and groups, which may suggest the importance of comprehensive community intervention approaches for addressing violence. Participatory approaches can aid in the implementation of community interventions by engaging community and researcher partners in collaboratively

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155
addressing community-identified concerns. The purpose of the present study is to demonstrate the application of a participatory evaluation framework used to support the Aim4Peace Violence Prevention Project in Kansas City, Missouri. The study presents data from the second year of program implementation to examine the contributions of the program in addressing violence.

KEYWORDS community-based participatory research, homicide, participatory evaluation, violence prevention

In 2007, over 18,000 individuals in the United States died as a result of homicide (National Center for Injury Prevention and Control, CDC, 2010). Firearm homicides accounted for more than 68% of homicide deaths (National Center for Injury Prevention and Control, CDC, 2010). For some segments of the population, firearm homicide was a leading cause of death, including for African Americans, Hispanics, and youth (National Center for Injury Prevention and Control, CDC, 2010). Firearm homicides were also found to be more prevalent with increased urbanization (Centers for Disease Control and Prevention, 2011).

There are multiple and interrelated factors that increase risk for violence across socioecological levels, including at the individual, relationship, community, and societal levels (Dahlberg & Krug, 2002). Violence, as a public health concern, is a preventable behavior that requires addressing risk and protective factors across multiple socioecological levels through varied types of prevention (i.e., primary, secondary, and tertiary) (Prothrow-Smith, 2007). Community-based participatory approaches are becoming increasingly more common to violence prevention efforts as they promote the engagement of community partners in addressing complementary risk factors across various socioecological levels (Dahlberg & Krug, 2002).

Community-based participatory research and evaluation supports a methodology for involving community partners and researchers in collaboratively addressing issues of public health concern. Based on a participatory approach, community partners and researchers are co-learners in the process and are mutually accountable for supporting research goals, methods, and improvements in outcomes (Fawcett et al., 2003). Unlike the traditional model of summative evaluation, participatory evaluation is an embedded process that promotes continuous data collection, review and feedback with community partners to support intervention refinement and improvements in targeted outcomes.

The purpose of the present study is to examine the application of a participatory evaluation framework used to support the Aim4Peace Violence Prevention Project in Kansas City, MO. Each component of the framework will be described and then illustrated through the Aim4Peace case example. This article will demonstrate how the Aim4Peace program has been supported and enhanced using a community-based participatory evaluation process.
METHODS

Context for the Development of the Violence Prevention Project

The Commission on Violent Crime was established in October 2005 by the Kansas City, MO City Council to examine the alarming increase in homicides. In 2005, there were 127 (2.82 per 10,000) homicides in Kansas City, MO which was a 42.6% change increase from 2004 (Kansas City, MO Commission on Violent Crime, 2006). The Commission on Violent Crime identified that arguments and conflicts were the primary cause of homicides in the City.

Based on the Commission's recommendations, the City Council established the Community Mediation Task Force to identify both an intervention area and appropriate community strategy for addressing violence. The East Patrol, one of six patrol divisions in the City, was identified as the intervention area due to its disproportionately high homicide and aggravated assault rate. Based on an extensive review of evidence-based urban violence prevention approaches, CeaseFire Chicago and Caught in the Crossfire were identified as appropriate evidence-based programs to adapt for implementation in Kansas City, MO.

Aim4Peace Violence Prevention Project Overview and Partners

In January 2008, Aim4Peace began implementation in the East Patrol Division of Kansas City to address homicides and non-fatal firearm-related incidences in the area. The mission of Aim4Peace was to “increase the capacity of the community to handle its own disputes and empower citizens through community mobilization to peacefully resolve their conflicts.” As shown in Figure 1, the core components of the program included: (1) outreach and support for individuals with high risk for violence and (2) community mobilization to reduce community tolerance toward violence. In August 2008, Aim4Peace established agreements with 11 community-based organizations to serve as Neighborhood Action Team (NATs) partners to support mobilization efforts. In October 2007, Aim4Peace contracted with the Work Group for Community Health and Development at the University of Kansas (KU) to serve as the program evaluator. A member of the Task Force was also designated to serve as a co-evaluator on the project along with KU Work Group researchers, based on principles of participatory evaluation.

Implementation of a Participatory Evaluation Framework With the Aim4Peace Project

A six-component framework was used to guide the process of participatory evaluation (Fawcett et al., 2003), and included the following phases: (1)
Naming and framing the problem and goal; (2) Identifying research questions and methods; (3) Developing a logic model for achieving success; (4) Documenting the intervention and its effects; (5) Making sense of the data; and (6) Using information to celebrate and make adjustments. Based on this six-component framework, both community and research partners are expected to be fully engaged in the iterative evaluation process (Collie-Akers, Watson-Thompson, Schultz, & Fawcett, 2009).

In the first phase of the framework, the problem or goal area is identified and framed in terms of either behavior (i.e., reduced shooting) or conditions (e.g., increased safety) that need to be addressed. It is key that the framing of the issue occasions the interest and participation of multiple and diverse actors across sectors that can contribute to addressing the problem (Fawcett et al., 2003). After framing the problem, it is important to plan how to address the identified problem. In the second phase, a logic model is developed or refined to provide a visual summary of the necessary resources that support implementation of activities, which produce results for improvements in targeted outcomes (CDC, 1999). The third phase specifies the research or evaluation questions to anchor the logic model by examining the relationships between different components of the model (Fawcett et al., 2003). Ultimately, the evaluation questions posit inquiry statements about what is being implemented and for what purpose. The involvement of community stakeholders in developing the evaluation questions may further identify their interests and ensure the utility of the evaluation (CDC, 1999; Fawcett et al., 2003).
After establishing the evaluation questions and methodology, it is appropriate to start collecting credible evidence (CDC, 1999). In the fourth phase, ongoing documentation of the intervention activities and results can inform the initiative of early successes, as well as assure necessary adjustments are made throughout the implementation process to enhance the effort (Collie-Akers et al., 2009; Fawcett et al., 2003). Phase five supports the engagement of stakeholders in data review and analysis to better understand both what works and how, as well as what does not work. Ultimately, in phase six, the evaluation should be used to support informed decision making, promote adjustments that enhance program effectiveness, and celebrate and communicate the successes of the community initiative (Collie-Akers et al., 2009; Fawcett et al., 2003).

**Aim4Peace Violence Prevention Project Case**

**Example of Participatory Evaluation**

The Commission on Violent Crime and the Mediation Task Force, both consisting of diverse multisector representatives, assisted in framing the violence-related problem to be addressed by the Aim4Peace initiative. Based on the Commission on Violent Crime Report (2006), it was identified that too many residents in the community were not peacefully resolving their arguments and conflicts, with the result of high firearm-related mortality. Based on the CeaseFire Model, the program was socially marketed as “Aim4Peace: the movement to stop the shootings and the killings.”

Members of the Mediation Task Force developed an initial logic model that was then adapted by staff of the program and the evaluators. Through the logic model, the program identified multiple resources and partner stakeholders to support the development and implementation of the program, including academic, community, and system-level partners. The core components of the program included: (a) targeted outreach, education, and support for individuals with high risk for violence, and (b) community mobilization to reduce community tolerance toward violence. Through supporting primary, secondary, and tertiary prevention efforts across multiple socioecological levels, the Aim4Peace program aims to contribute to reductions in firearm-related homicides and assaults.

The co-evaluators worked with Aim4Peace leadership to develop and refine the evaluation questions, methods, and measures. Due to the nature of the intervention and the problem, there were relatively few designs identified as appropriate. The evaluation design that was acceptable to program partners was a quasi-experimental interrupted time-series with non-equivalent comparison group design, and an empirical case study design.

The following six questions guided the evaluation of the initiative: (a) Has Aim4Peace contributed to change in the target area to support violence prevention efforts? The primary measure used to examine this question was
community change—new or modified program, policy, and practice changes; (b) How has Aim4Peace enhanced the service capacity of local government to respond to conflicts among residents? To examine this question services provided by the program to residents and groups in the community were measured; (c) What key factors influenced the implementation of Aim4Peace? Interviews and surveys were conducted with Aim4Peace staff to identify and thematically analyze factors influencing program implementation; (d) Does Aim4Peace support individuals from the target area with high risk for violence? This question was examined based on a review of documented program records; (e) Have there been changes in residents’ perceptions toward violence in the target area? A biannual survey was administered to community residents through a survey of randomly selected phone numbers of residents in the target area; and (f) Were there improvements in homicide and aggravated assault rates in the target area? Archival records from the Kansas City, MO Police Department were reviewed to examine changes in these targeted outcomes. An evaluation plan was developed detailing the evaluation questions, logic model components, data collection methods, and grant performance measures.

Based on the evaluation questions and related measures, Aim4Peace and the evaluation team supported an ongoing process of data collection. Aim4Peace and Neighborhood Action Team (NAT) staff documented implementation activities using the Online Documentation and Support System (ODSS) developed by the KU Work Group. Aim4Peace staff and NAT partners documented community mobilization data including community/system changes (i.e., new or modified programs, policies, practices) and service activities provided to residents and groups in the community. Aim4Peace intervention workers also recorded outreach activities in the ODSS and systematically documented de-identified information regarding participant intake status (e.g., violence risk level, individual risk reduction goals) and case notes from worker contacts with participants. Program implementation data collected were systematically reviewed and analyzed by members of the Evaluation Team. The Evaluation Team provided monthly feedback and technical assistance to Aim4Peace data collectors to maintain data reliability and validity. Two members of the evaluation team independently categorized documented instances of activities for reliability and maintained at least 80% interobserver agreement.

Several types of data were also collected to examine the effects of the intervention. In the ODSS, community-level indicator data (e.g., homicide rates) were collected monthly to monitor changes in targeted outcomes (i.e., homicides, aggravated assaults). The evaluation team also administered interviews and surveys with key stakeholders of the Aim4Peace initiative to examine factors affecting program implementation. Qualitative information was gathered through semi-structured interviews with key stakeholders and the data were thematically analyzed. A randomized telephone survey was
also administered to assess resident satisfaction and perceptions of violence in the East Patrol. The survey included 606 adult respondents in 2007 and 281 respondents in 2009. Across the two survey periods, the age, gender, annual income, and highest level of education of the two survey populations were not found to be significantly different.

Both implementation and outcome data were regularly reviewed and analyzed by the evaluators, program staff, and community stakeholders. Aim4Peace supported an internal group-based process for weekly review and validation of data documented by individual outreach workers. Data collected in the ODSS by intervention workers were reviewed in individual weekly team meetings with Aim4Peace staff. Monthly, the evaluators provided Aim4Peace staff with summary reports using automated graphs and data listing generated from the ODSS to examine ongoing implementation effectiveness. Initially, the data reports were discussed in monthly joint team data sense-making sessions involving Aim4Peace staff and the evaluation team. In the meetings, Aim4Peace staff, NAT representatives, and the evaluators collectively reviewed data to identify adjustments to be made within the next month. Mobilization data reviewed included the frequency and types of community changes and services provided documented by the program and NATs. Street outreach data reviewed included number of participants enrolled, hours and frequency of contacts with participants, and participant attainment of goals. Workers also debriefed on violent situations in the target area and developed violence de-escalation plans.

In addition to the regular joint data sense-making sessions, the data were routinely presented to key community stakeholders. Annually, the evaluation team provided a comprehensive evaluation report and presentation, which was shared with the Aim4Peace staff and key stakeholders. Aim4Peace staff and evaluators collaboratively presented data findings to several key audiences including the City Council and local health commission. The Aim4Peace director also co-presented with the evaluators at a professional academic conference. Each year, the evaluation report presented key recommendations to enhance program implementation.

**RESULTS GUIDING INFORMED DECISION MAKING BY THE PROGRAM**

Results are presented to summarize the data findings related to the evaluation questions from 2008 to 2009, during the initial two years of program implementation. The data presented were representative of the types of data regularly collected and analyzed by program partners.

In supporting community mobilization efforts, Aim4Peace facilitated 76 community changes (i.e., documented instances of program, policy, and practice changes) between 2008 and 2009. The primary sectors engaged through
the mobilization efforts were community residents (19.7%), community organizations (18.4%), government (11.6%), faith-based organizations (11.7%), and business/workplace (11.7%). The most common type of mobilization activity the community changes supported were the establishment of new community collaborations and partnerships (34.2%) and the facilitation of new community activities (18.2%). Examples of community activities included the Hater-Free Movement week during which truce agreements were made between rival individuals and groups and community peace talks were held in schools and other settings. Another example was the 30-Days of Peace initiative that promoted one month of community service provided by community organizations and residents, including high-risk program participants, with the dual aim of increasing community ownership and pride.

Between 2008 and 2009, Aim4Peace delivered over 800 direct service activities in the community, including mediated conflicts. Intervention workers mediated 70 conflicts between individuals that may have potentially resulted in violence. Examples of other types of services provided by the Aim4Peace program included late night barbeques held in response to shootings in the area to engage high-risk individuals who could retaliate. The Aim4Peace Life Skills Program, a 1-hour credit extracurricular course for at-risk high-school students was another example. Following up with recent shooting victims who were hospitalized to promote peace with the victim and their family to prevent retaliation was also a common service activity.

From 2008 to 2009, there were 103 participants enrolled in the Aim4Peace street outreach component of the program, with 41 participants enrolled in 2008 and 62 participants enrolled in 2009. On average, nearly 71% of program participants were categorized as high-risk for violence perpetration or victimization based on pre-identified risk criteria.

Based on a survey issued to nine Aim4Peace staff and program partners in 2009, the importance, satisfaction and impact of implementing the program were assessed on a 1 (very unimportant) to 5 (very important) point Likert-type scale. Activities supported by Aim4Peace were assessed including levels of street outreach activities, recruitment of high risk individuals, competent leadership, collaboration with community and faith-based partners, training and technical assistance, and the use of documentation and feedback. The survey item receiving the highest ratings for importance in supporting the development of the initiative was documenting and receiving feedback on the efforts of the initiative through the Online Documentation System ($M = 4.63; SD = 1.06$). The overall impact of documentation and feedback on the development of the initiative had a mean rating of 4.50 ($SD = .756$) and satisfaction with the use of documented information was 3.89 ($SD = 1.27$). Based on the program staff and partner survey, other areas of high importance supporting the development of the initiative included: increasing the ability of the community to deal with violence ($M = 4.56; SD = .726$);
increasing participation of residents in antiviolence efforts ($M = 4.44$; $SD = .527$); and engaging street intervention workers in reaching individuals with high risk for violence ($M = 4.33$; $SD = .500$). Overall, the survey area with the highest satisfaction was for the competence of the program’s leadership ($M = 4.56$; $SD = 1.01$).

Based on a community survey administered in 2007 and 2009, survey respondents indicated increased satisfaction with neighborhood efforts to address gang activity, shootings, and verbal threats. Between 2007 and 2009, mean ratings for survey respondent satisfaction in addressing the following improved: satisfaction in addressing gang activity increased from 31.5% to 41.5% ($X^2 (2) = 8.50, p = .01$), satisfaction with community efforts to address shootings increased from an average of 31.4% to 38.7% ($X^2 (2) = 9.37, p < .01$), and average satisfaction with efforts to address verbal threats increased from 28.5% to 40.4% ($X^2 (2) = 12.30, p < .01$). Survey respondents indicated they were more involved in antiviolence and safety-related activities in 2009 than in 2007, from an average of 17.4% to 24.6% ($X^2 (1) = 6.34, p = .01$) of respondents.

There were some improvements in outcomes from 2006 (baseline) to 2009 (Intervention Year 2). In East Patrol, there was a 17.9% decrease in firearm homicides per 10,000 residents from a rate of 4.67 (40 homicides) to 3.87 (32 homicides). While Kansas City overall had a more modest 3.2% decrease in firearm homicides (Kansas City, MO Police Department, 2010). From 2006 to 2009, Missouri overall experienced nearly a 6% change increase in the rate of firearm homicide deaths (National Center for Injury Prevention and Control, CDC, 2009). The decrease in homicide rates experienced in East Patrol, and more moderately for Kansas City overall, did not follow the state trend, which observed an increase in homicide deaths during the same period.

**CONCLUSIONS AND RECOMMENDATIONS BASED ON THE PARTICIPATORY EVALUATION PROCESS**

During the second year of the program, there was a noted decrease in rates of firearm homicides in the target area. To ensure the program could demonstrate a stronger association between the intervention and observed improvements in outcomes, the program stakeholders and evaluators worked collaboratively to identify more rigorous methods. For instance, initially, the overall homicide rate, regardless of the cause, was the primary outcome data examined by the program. Based on recommendations from program partners, the primary outcome measure was modified to more specifically focus on firearm related homicides and aggravated assaults, which are more direct measures of shooting and killing. Similarly, the evaluators recommended in both the 2008 and 2009 annual reports, that the program consider prioritizing a smaller area (e.g., police sector) within East Patrol to concentrate its
efforts and demonstrate stronger and replicable effects within the Patrol. In 2011, the program refined the target area within East Patrol, and now concentrates efforts within one police sector.

Residents’ perception of violence can influence both their tolerance toward violence and interest in participating in violence prevention efforts. Resident awareness and perceptions of violence in the community, as well as community knowledge and satisfaction of prevention efforts may provide social validation for violence prevention efforts. Community survey respondents indicated a modest improvement in perceived efforts to address shootings (10%), gang activity (7%), and verbal threats (12%), as well as involvement in antiviolence activities (12%). Since the survey was administered during the second year of implementation, the program was glad to observe modest improvements in targeted behaviors were noted by residents, and aimed to continuously increase satisfaction with resident perception of violence and involvement in violence prevention activities. However, the survey did not provide probes to directly assess what factors or programs were perceived to contribute to improvements, which may have permitted clearer discernment of residents’ perception of Aim4Peace’s contributions.

AimPeace supported program implementation efforts by facilitating changes in community programs, policies and practices, particularly in the target area. The engagement of community organizations in supporting violence prevention activities may have reflected their partnerships with the NATs. The support of government may have promoted system changes since the program was initiated through the City Manager’s office. Although faith-based organizations were involved in the change efforts, this sector was identified in sense-making sessions to be targeted for increased participation, as it was a key sector involved in the CeaseFire model. There were also recommendations made to the program to more fully engage other sectors such as human and social service agencies and hospitals.

The majority of program participants in the outreach components were identified as high-risk for violence. Although the evaluation supported the administration of both a community resident and program stakeholder survey to assess the importance and satisfaction of violence prevention efforts, the evaluation initially did not include a similar participant survey. Both the program staff and evaluators initially identified the lack of participant feedback as a limitation.

Interestingly, similar to other findings (e.g., Collie-Akers et al., 2009), the process of receiving documentation and using feedback was a highly rated survey item by program staff and partners in supporting the development of Aim4Peace. The impact of documentation and feedback on the development of the initiative was also highly rated, although satisfaction with the process of actually documenting and using feedback was lower. The program staff was more neutral to the actual process of documenting and using feedback. Many of the survey respondents were street intervention
workers, many of whom did not have prior work experience in a structured professional setting. Therefore, documentation behavior had to be shaped over time for many of the respondents. A critical element that likely influenced the perceived importance and impact of data documentation and use was that Aim4Peace leadership fundamentally understood and valued the use of documentation and evaluation, which promoted a program culture of participatory evaluation (Collie-Akers et al., 2009).

The present study provides insight for understanding the use of a participatory evaluation framework. First, the study further demonstrates that a participatory approach to evaluation can be effectively used to support community-based violence prevention efforts. The focus of this study on the second year of program implementation allowed for demonstration of how the framework supported informed decision making, which then resulted in enhancements to the program. Second, the presentation of the framework allowed for a comprehensive example of the use of mixed methodology to support data examination across multiple evaluation questions. The current study also illustrates that a commitment of time and resources, and to the process of collaboration, is necessary to support a participatory evaluation approach. During the initial stages of program implementation, recommendations made by the evaluators to strengthen the program did not immediately result in programmatic adjustments due to the economic, political, and social factors that also influenced decision making for program stakeholders. In the fourth year of the participatory evaluation process, feedback provided during earlier years of the program are now timely to support adjustments in the program.

There were a couple of methodological limitations to this study. One study limitation was that the intervention data were based on self-report, although there were some mechanisms to enhance the reliability of the data, such as group-based review and validation of documented entries. Another limitation was that the participatory evaluation process was not fully measured. The key stakeholder survey examined some dimensions of the participatory process such as documentation and feedback, but all components of the process were not assessed. Another limitation was that the community survey questions did not directly relate residents’ perceptions and satisfaction with violence prevention effort to the Aim4Peace program. A potential limitation of the study was there was not a comparison city, outside of Kansas City, used to examine levels and trends for firearm homicide in a similar community.

Based on this study, the community-based participatory evaluation process supported the Aim4Peace program in contributing to change and improvements by the second year of program implementation. The framework was useful in guiding the Aim4Peace program staff, partners and evaluators in facilitating a process of informed decision making to enhance the program, with the aim of improved outcomes. In addressing public health problems, such as violence, it is important to promote a participatory approach
to research and evaluation. A participatory evaluation approach enhances the capacity of the program, partnering organizations, and the community to support sustained engagement and improvements in targeted outcomes.

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