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Outcome Research on Hospital-Based Violence Prevention Programs: What's Been Done & Recommendations for Future Research

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Identification of Outcome Studies

Searched: PubMed, PsycINFO, SafetyLit, VioLit, NCJRS, Medline, ERIC, Google Scholar, Review Articles, Academic Emergency Medicine, Network Colleagues

Inclusion Criteria

- Subjects treated in hospital (ED, Trauma Center) for assault-related injury (not sexual / familial assault)
- Initial contact with client in hospital or soon after
- Case management for ≥ 1month after discharge
- Treatment group outcomes compared to statistically valid comparison group

Six Outcome Studies Identified

Aboutanos, M. B., Jordan, A., Cohen, R., Foster, R. L., Goodman, K., Halfond, R. W., . . . Ivatury, R. R. (2011). Brief violence interventions with community case management services are effective for high-risk trauma patients. *The Journal of Trauma and Acute Care Surgery, 71*(1), 228-237 210.

Cheng, T. L., Wright, J.L., Markakis, D., Copeland-Linder, N, & Menvielle, E. (2008). "Randomized trial of a case management program for assault-injured youth: impact on service utilization and risk for reinjury." Pediatric Emergency Care, 24(3): 130-136.

Cheng, T. L., D. Haynie, et al. (2008). "Effectiveness of a mentor-implemented, violence prevention intervention for assault-injured youths presenting to the emergency department: Results of a randomized trial." Pediatrics, 122(5): 938-946.

Cooper, C., Eslinger, D.M., & Stolley, P.D. (2006). Hospital-based violence intervention programs work." Journal of Trauma-Injury Infection & Critical Care, 61(3): 534-537.

Shibru, D.,E. Zahnd, E., Becker, M., Bekaert, N., Calhoun, D., & Victorino, G. P. (2007). Benefits of a hospital-based peer intervention program for violently injured youth. Journal of the American College of Surgeons, 205(5): 684-689.

Zun, L. S., Downey, L, & Rosen, J. (2006). The effectiveness of an ED-based violence prevention program. American Journal of Emergency Medicine, 24(1): 8-13.

Program Services

Hospital/ER Services Included:

- Needs Assessment
- Motivational Interviewing
- Establishment of a Service Plan

Post-Release Services Included: (4 to 12 months)

- Mentoring
- Parental Home Visits
- Information & Referral Services
- Case Management (Social Worker and/or Peer Based)
- Linkages with Community-Based Programs
- Primary and Preventive Healthcare
- Home Visits
- Conflict Resolution Skills Training
- Advocacy Services (legal, educational, financial, entitlement, and or housing)
- Group counseling/support sessions

Medical Settings

All 6 programs were operated in urban centers: Chicago, Oakland, Baltimore, Richmond, and Washington, DC.

3 Programs Recruited Patients at Level I Trauma Centers

1 Program Recruited Patients at a Primary Adult Resource Center

2 Programs Recruited Patients the ED of Large Children's Hospital

Participant Demographics

- 5 of the 6 programs targeted adolescents, with upper age ranging from 15 to 24.
- 1 program focused on adults 18 and over who were on Parole/Probation.
- The vast majority of clients in each program were male, ranging from 73 to 95 percent.
- The vast majority of clients were African American, ranging from 60 to 95 percent.
- The sample sizes were relatively small, ranging from 39 to 96 clients in each treatment group.

Program Characteristics

	Study 1	Study 2	Study 3	Study 4	Study 5	Study 6
Program Elements	Motivational Interviewing CM	Mentoring Parental Home Visits	Intensive CM I & R	CM I & R Support Group	CM	CM Work with primary CBO
Duration	6 Months	Up to 6 Months	4 Months	Not Reported	12 Months	6 Months
Frequency	Weekly to Monthly	≥ Monthly	Weekly to Monthly	Biweekly Weekly (Group)	≥ Monthly	Weekly to Monthly
Prof/Para-Prof	Profes-sional	Both	Profes-sional	Profes-sional	Para	Both

Study Characteristics

5 of the 6 studies were Randomized Controlled Trials

1 study utilized a Retrospective Comparative Double Cohort Design

5 of the 6 studies utilized an “intent to treat” design

5 of 6 studies compared HBVIP to standard /routine protocol and list of available services; 1 study compared to hospital-based brief intervention with no post-release treatment.

Study Characteristics (cont'd)

Follow-Up Periods (time for hospital release to outcome assessment) ranged from 6 to 18 months, however, 3 studies did not use uniform follow-up period.

Attrition rates for 5 of the 6 studies were high, ranging from 32 to 57 percent; 1 study, utilizing official records to assess impact, retained nearly all its subject s (95 percent).

3 of the 6 studies reported on dosage of treatment received.

All studies suffered from limited statistical power due to relatively small sample sizes.

Outcome Measures

Self-Report

Attitudes regarding violence

Aggressive/Delinquent behavior

Victimization /Injury

Arrests

Weapon Carrying

Family Functioning

Social competence

Drug Use

Employment

Data Extraction from Official Records

Hospital/ER Readmission (nature of medical problem)

Arrests/Convictions/Incarceration (nature of crime)

Death

Compliance with Medical Follow-Up Visits

Peer Anti-Social Behavior

Findings

	Study 1 6 Months	Study 2 Mean= 8 Months	Study 3 6-8 Months	Study 4 ≤ 2 Years	Study 5 8 Months	Study 6 12 Months
Reduced Reinjury (Self Report)	No	No	No	NA	NA	Some Yes Some No
Reduced Reinjury (Official Records)	No	NA	NA	Yes	No	No
Reduced Perpetration (Self Report)	NA	Some Yes Some No	No	NA	NA	No
Reduced Perpetration (Official Records)	No	NA	NA	Yes (except for total Number of Arrests)	Some Yes Some No	No
Other Measures	Accessed Services	Conflict Avoidance	Program Satisfaction	Employment	NA	NA

Recommendations for Future Studies

1. Secure minimal sample sizes of 100 in treatment and comparison groups.
2. Utilize standardized outcome measures that are obtainable from extant records, including, at minimum, hospital and ER subsequent admissions and nature of injury; and number and nature of arrests subsequent to release. This will drastically reduce problems associated with high rates of attrition for purposes of data analysis.
3. Secure participation, if possible, of geographically contiguous hospitals for purposes of collecting follow-up hospital data.
4. Collect common core data elements for characteristics of the population served.
5. Include only assault victims, excluding family and sexual violence victims.

Recommendations (Cont'd)

6. Secure measures of fidelity, including, at minimum, dosage of each type of service offered.
7. Describe the nature of the program and the rationale for adopting the program.
8. Secure accurate measures of costs and conduct cost-benefit analyses.
9. Conduct cross-site studies.
10. Utilize RCTs. And "intent to treat" designs.
11. Compute effect sizes (with confidence intervals) in addition to statistical significance.