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EDUCATING THE COMMUNITY ABOUT VIOLENCE THROUGH A GUN TURN-IN PROGRAM

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ABSTRACT: The Ceasefire Oregon gun turn in program was initiated to educate the community regarding violence through a gun turn-in program with voluntary surrender of firearms, educational efforts about violence, and institution of public safety policies. The community board of directors was composed of multiple community leadership organizations. A multi-intervention education, outreach and media program consisting of distribution of brochures, presentations, school education programs, and workshops was implemented throughout the year in addition to the gun turn-in program held in May for two days. A survey was administered to participants in the program at the turn-in sites. The cumulative total for guns turned in years 1994 to 1999 was 4,345. Half of the respondents reported possession of a gun at home. The most common reasons for participating in the gun turn in were obtaining *gift certificates* and *not wanting the gun any more*. A successful community grassroots program, Ceasefire Oregon has shown sustainability over six years with increased participation secondary to education, advertising and incentives. Community and statewide efforts can assist with building the infrastructure for programs, however more tools for quantitative performance

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program evaluation would facilitate measuring the impact on the community.

KEY WORDS: firearms-legislation/jurisprudence; violence-prevention/control; crimes; community.

INTRODUCTION

National estimates of firearm morbidity have declined over the last decade.[1] In local communities such as Oregon, firearm morbidity and mortality is a significant problem with statistics reporting a mortality rate of 14 per 100,000 individuals.[2] Currently the general public is not well informed regarding statistics on gun violence, however they have supported policy changes reducing gun access in other communities.[3]

Gun Turn-In programs have been developed and implemented in many communities, but have demonstrated very little impact on other community indicators such as firearm injuries, deaths, and crimes.[4,5] Ceasefire Oregon was modeled after programs developed in Boston and St. Louis and was designed to be a multi-modal approach to address some of the barriers noted in pre-existing communities.[6] The gun turn-in program was linked to an educational program targeting all sectors of the community on the many aspects of gun danger. Gun exchanges or gun buy back programs are different from gun turn in programs as guns were traded for cash in contrast to the voluntary surrender of the guns.[6] Two policies were instituted to minimize competition in that guns were exchanged at an equal $50 value no matter what the condition and all weapons would be melted down at the exchange in contrast to policies of restoring and reconditioning weapons for resale as seen in previous programs.[7]

Current trends are the development of evidence-based interventions, such as comprehensive gun turn-in programs through gun control legislation, and collaboration with community resources[8] for removing firearms from the home. Interventions successful in reducing firearm violence consist of behavioral and legal interventions using regulatory policies to trace weapons through police in the purchase of guns.[9] Multi-faceted interventions such as standardized reporting systems, increased criminal sentencing, and increased physician risk assessment knowledge for reducing violent media messages in adults and youths may demonstrate more behavior change.[10] Risk reduction strategies and programs to reduce firearm injuries have been developed with gun turn-in programs involving community policing and regulation, safe storage and removal of firearms

from the home.[11] Education on gun storage and removal strategies may reduce gun violence for targeted groups[12] at high risk for suicide[13] or unintentional injuries.[14,15]

Ceasefire Oregon addresses the need for community support for implementation of a gun violence program. We present a description of a Portland-based community gun turn-in program and describe how the program's educational strategy involving the community and physicians can be used to build the infrastructure and begin to promote awareness about violence within the community.

GUN TURN-IN PROGRAM

Infrastructure

The local Portland community initiated Ceasefire Oregon in 1994 and a Board of Directors composed of multiple community leadership administered the program. This leadership oversaw the legal framework for permitting regular and auxiliary police for receiving, evaluating, and destroying weapons under voluntary surrender by patrons who brought in illegal or stolen weapons. In addition, the Board oversaw the community education effort and a network of gun turn in sites located in churches, schools, fire houses, hospitals and shopping centers. A two weekend media campaign discussing gun safety preceded the initial 1994 four-site pilot program. Implementation of the gun turn-in occurred annually in May on two consecutive Saturdays, one week apart from 1994 to 2000 with police participation. Multiple interventions have been added incrementally (Figure 1) to increase voluntary participation, such as community advertising, education and outreach, monetary incentives and public policies. Financial support and coupon donations for the program have evolved from local individual sponsors to include a large Portland-based HMO (with a professional interest in promoting gun safety) and representatives from the major hospitals and health systems.

Community Needs Assessment

We did not collect specific personal information on participants in the gun turn-in program because of the policy of anonymity and immunity. Community demographics within Portland are comparable to that of the United States in general with most residents ages 21 to 44 years, Caucasian, and earning an income of $25,000 or more.[16] Common adult risk

FIGURE 1

Timeline of the *Ceasefire* Oregon Program (1994–2000).

The Ceasefire Oregon program has been held annually on two consecutive Saturdays in May from 1994 to 2000. It is preceded by a media campaign with additional education and outreach targeted throughout the year.

Year 1—1994

- **Program Pilot** in three Portland sites: *Eastport Plaza, Mount Olivet Church, SW 18th & Jefferson* (United Methodist Church) with media campaign.

Year 2—1995

- **Program Pilot** continued but only at 2 metro area sites: *East Port Plaza* and *Mount Olivet Church*. Less money was available for gift certificates, however community volunteers from Tualatin helped.
- **Outreach**:
  1. First "how to workshop took place" (basics of a successful program)
  2. Presentation to Oregon Medical Association Alliance, citizens group in Eugene, Oregon.

Year 3—1996

- **Program**: additional sites added for a total of six sites; Multnomah County (Eastport Plaza, Mount Olivet Church, United Methodist Church SW 18th & Jefferson, Tualatin (Clackamas County) and Eugene, Oregon.
- **Education & Policy:** Statewide and medical societies, adoption of the AAP educational brochure
- **Education, Awareness & Research by trauma systems:** (1) trauma surgeon education in schools, civic organizations (2) coordinated activities around the national silent march campaign, "die in" staged by medical students on the public square and shoe collection to document the empty shoes left behind by citizens of the state killed by guns (3) additional survey questions added to the State trauma task force on activities of the gun exchange.
- **Community leadership:** New affiliations with Portland police

FIGURE 1 (*Continued*)

Year 4—1997

- **Program**: Additional site of Gresham was added
- **Media Advertising**: Ceasefire Oregon working with Handgun Control and National Ceasefire to pilot series video public service announcements on Portland television.

Year 5—1998

- **Media Education**: Co-sponsor Statewide conference on Gun Violence, "Confronting Gun Violence in America"

Year 6—1999

- **Program**: Additional sites of Beaverton, Hillsboro, Milwaukee, and Clark County
- **Leadership**: First executive director hired, Diana Madarieta.
- **Policies**: Gun Free Workplace Research perceptions: develop gun free work place policies for businesses.
- **Education**
  a. Schools: Cops, Docs & DAs will debut in Portland Public Schools, (David Douglas and Parker Schools)
  b. Curriculum: Design teaching programs to transfer skills to create new programs
- **Funding**: 2,500–5,000 received from hospital and health systems, Foundations, Public Health Agencies, Restaurants and Retail Stores, and Education and Faculty.

Year 7—2000

- **Program**: an additional county planned for Gun Turn In.
- **Education**: Public awareness campaign will be launched in the Spring
- **Media**: Development of a Website for the program www.ceasefire-oregon.org.

factors identified for firearm violence are possession of a firearm with hunting and protection as the predominant motivation for possession, in addition a high percentage (16%) of Oregon Behavioral Risk Factor Survey Respondents (BRFSS) respondents reporting attendance at a firearm safety workshop.[17] Prevalent youth risk factors are carrying a weapon (18%), carrying a weapon on school property (10%), carrying a gun (6%), perception of having been threatened (8%), and missing school secondary to safety (4%).[18]

Oregon and United States firearm-related deaths have steadily declined since 1994 with age-adjusted death rates being slightly higher for Oregon and homicide rates being lower than the United States. State firearm suicide rates have reached a plateau in contrast to the steady decline observed in the United States.[19] Aggravated assault is the most prevalent Portland firearm-related crime at a rate of 2.4 for adults and 18.8 for youths in 1994.[19] Assault is the most common context for firearm injuries with a prevalence of 49% in 1994 while suicide is the most common context for firearm deaths[19] and youths accounting for 19% of all gun fatalities.[18]

Intervention

We developed a multi-intervention program (Table 1) composed of education and outreach to leaders in the field such as physicians, schools and community members, (2) gun turn in program policy implementation, and (3) distributing incentives to the participants of the gun turn in program. The content for the educational outreach to physicians and community residents within the gun turn in program counties included two standard messages, background on violence facts, tips for offering advice, and action steps adopted from local professional societies such as the Oregon Medical Association and the American Academy of Pediatrics. These messages are (1) a *gun in the home is a danger to you and your family*, and (2) *if you keep a gun, unload it and lock it up*.[7] A trauma surgeon (LLE) performed further outreach to schools and civic organizations throughout Oregon. Ceasefire Oregon developed five educational programs: one how to workshop in 1995, two interactive question and answer programs (1996, 1999), one Statewide program to raise awareness of gun violence (1998), a teaching program (1999) and a public awareness campaign (Spring of 2000).

Gun Turn-In Program

Law enforcement officers collected guns twice over a two-week period. In 1994, the program began with four sites in Multnomah County:

TABLE 1

Summary of Interventions Implemented for Ceasefire Oregon

Education and Outreach	*Program Policies*	*Incentives*
• Distribute of brochures American Academy of Pediatrics Center to Prevent Handgun Violence Ceasefire Oregon • Presentations Firearm Injuries: An American Epidemic • School education program • Workshops How to Promote Safe Communities	• Temporal Constancy and restricted program time frame • Police Officer based • Attitude Gun turn-in Non-judgmental • Voluntary surrender • Gun procedures Disposing and handling	• Voluntary Surrender of guns • Gift Certificate Coupons from local donors

Eastport Plaza, Mount Olivet Church, United Methodist Church, SW 18th & Jefferson, and Meridian Park Hospital in Tualatin. Eastport Plaza and Mount Olivet Church are the only two sites in 1995. We added to the program Washington County (Hillsboro) and Eugene sites in 1996 and Gresham in 1997.

Participant Questionnaire

We administered a survey to participants at the gun turn-in sites in 1998 and 1999. The domains of the questionnaire addressed motivation for participation in the gun turn in, personal possession of a gun at home, and current and future incentives to participate. Twenty-five percent of the participants in the program responded to the survey in May, 1998 (total of 269 surveys returned, 1069 participants) and thirty-seven percent in May of 1999 (254 surveys returned, 690 participants).

GUN TURN-IN MEASURES

Gun Turn-in Results are illustrated in Table 2. The cumulative total (1994–1999) is 4,345. The largest amount of guns returned is 1069 in 1998, while the lowest amount is 300 in 1995. The Eugene site from1996 to 1999 accounted for an additional 15% of the total amount of guns collected. The greatest number of guns collected is on the first Saturday of the program.

Participant characteristics and motivations are illustrated in Table 3. Approximately half of the respondents still had a gun at home in both 1998 and 1999. Most commonly, participants learned about the gun turn in program through television and newspaper advertisement. Television advertisement informed more participants in 1999 than in 1998 (difference of 21%). The respondents reported different motivations for participation in 1998 and 1999, however, receipt of a gift certificate was the predominant reason for gun turn-in, in both 1998 and 1999. Many of the participants expressed an interest in stopping violence within the community (19.6% in 1998) or in not wanting the responsibility of having a gun

TABLE 2

Annual and Cumulative Gun Turn-In Results

Program Location	*Year of Program*						*Cumulative Total*
	1994	*1995*	*1996*	*1997*	*1998*	*1999*	
Metro area†	690	300	591	809	912	647	3,949
Additional sites:							
Eugene	*	*	98	98	157	43	396
Total firearms collected	690	300	689	907	1069	690	4,345

*Not a designated site during the respective year.

†Metro area sites: 1994: *Multnomah County* Eastport plaza, Mount Olivet Church, United Methodist Church (SW 18th & Jefferson)

1995: *Multnomah County* Eastport plaza, Mount Olivet Church

1996: *Multnomah County* Eastport plaza, Mount Olivet Church, United Methodist Church (SW 18th Jefferson), *Washington County* (Tualatin), and Eugene

1997: *Multnomah County* Eastport plaza, Mount Olivet Church, United Methodist Church (SW 18th Jefferson, and Gresham); *Washington County* (Tualatin), and Eugene

1998: *Multnomah County* Eastport plaza, Mount Olivet Church, United Methodist Church (SW18th & Jefferson, and Gresham); *Washington County* (Tualatin), and Eugene

1999: *Multnomah County* Eastport plaza, Mount Olivet Church, United Methodist Church (SW 18th & Jefferson, and Gresham); *Clark County:* Beaverton, Hillsboro, Millwaukee and Eugene

TABLE 3

Gun Turn-In Program Participant Characteristics and Motivations

	Year of Survey		
Characteristics	*1998 % (N=269)*	*1999 % (N=254)*	*%Change (1999–1998)*
Learn about gun turn-in			
• Television	43.9	65.0	21.1
• Newspaper	40.9	32.0	8.9
Reason for turn-in (%yes)			
• Gift certificate	54.0	28.7	25.3
• Recent shootings	14.7	11.4	3.3
• Other violence	11.7	0.1	11.6
• Responsibility to stop gun violence	19.6	12.6	7.0
• Didn't want guns anymore	*	25.1	*
Possession of Gun at home (%yes)	58.0	51.0	7.0
Incentives			
For self (%)			
• nothing	68.6	45.0	23.6
• money	11.6	14.4	2.8
For other people (%)			
• Don't know	19.0	*	*
• More gun turn-in's	18.1	*	*
• Public outcry	12.4	*	*
• More advertising	*	33.0	*
• Education	*	15.2	*
• Cash	*	11.4	*
New types			
• Food	*	35.3	*
• Retail	*	24.5	*
• Restaurants	*	12.7	*
• Cash	*	0.1	*

*=not applicable.

within the home in 1999 (25.1%). Feedback regarding incentives for participants revealed that approximately half of the respondents in both 1998 and 1999 did not need a financial incentive to turn in their gun, and thirty-three percent expressed an interest in more advertising for the program in 1999. Ideas for new types of incentives were predominantly food (35%) or retail certificates (25%).

ACTION AND FOLLOW-UP

Oregon's community grassroots Ceasefire Oregon program has achieved over a six-year sustainability with community volunteer participation, local sponsor financial support, and continued participation of the advisory board and the introduction of steps for program improvement. Oregon's gun turn in program has been successful in its ability to build the community infrastructure through development of leadership, community spirit, media and education, and identifying of some of the barriers through a gun participant survey. Program efforts continue to involve physicians in community education and to promote statewide expansion of the program, as well as development of a comprehensive evaluation process.

Public health agencies are increasingly reliant on communication programs using the principles of marketing[20] and consumer evaluation studies[21] to improve health outcomes through programs and initiatives. A public awareness campaign specific to Gun Turn-in Programs has been supported by other communities such as Seattle.[4] Oregon has built a campaign to improve community health and safety via development of comprehensive educational programs to raise community awareness of the risks of guns in homes to families coupled with the gun turn in programs. Involvement of professional healthcare organizations such as the American Academy of Pediatrics (AAP) and Oregon Medical Association (OMA) has benefited the Ceasefire program as a means to extend its outreach and involve physicians as leaders in the process of communicating messages to the public. Evidence for successful community education with physicians has been generated through media campaigns such as seen with a community education program, "Respecting Your Choices."[22] Previous educational media interventions have been implemented successfully in changing attitudes.[23,24] Future efforts for the Ceasefire gun turn-in program may focus educating the public about the current firearm laws involving child access prevention, handgun possession, licensing and registration.[25]

Professional organizations such as the American Medical Association (AMA) and the AAP have called for physician intervention through

risk assessment and education management to eliminate the devastation of gun- related violence.[1,7] Physician leadership may have a positive effect on their patients in addressing community health problems such as gun violence through implementation of consistent messages and policies.[1,7,14,26] The American Academy of Pediatrics developed a Violence Educational Program, however the effectiveness of this Program is currently unknown.[11] The Ceasefire Oregon program targeted educational activities to the Oregon Medical Association and the outcome is reflected in the statewide adoption of standardized educational materials (Figure 1).

Our community needs assessment identifies males ages 10 to 17 years as a target group at risk for suicide and unintentional injuries and provides a focus for developing improved screening programs.[2] An individual physician may be particularly effective in assessing violence risk[14] and can contribute to raising awareness about gun violence through education of themselves and their patients by displaying educational posters and brochures. Ceasefire Oregon recommends physicians emphasize with their patients, the risk of a gun in their home to their families and the importance of safe storage of a gun using listening skills, non-judgmental attitudes, and general injury prevention counseling.[7]

Lessons Learned

Barriers the program has overcome include the loss of potential gun donors in 1995. The program secured in subsequent years through additional outreach, new coupon donors with innovations in educational efforts, enthusiasm from the board and the community of police, physicians, district attorneys, insurance companies, and churches. The media campaign, which proceeds the gun turn-in from year to year, may explain the variation in the gun turn-in results from year to year as geographically the program expanded each year. There are plans for a more intensified pubic awareness campaign with advertising, targeting of new risk groups such as adolescents, and improving the incentives.

Our community program included only a small evaluation component with process measures specific to the program: cumulative gun turn in results and a gun turn-in participant survey. The actual gun counts of each participating site allowed us accurate counts of the amount of guns returned, however the number of gun turn in sites and educational targets varied and increased each year. A better estimate of the impact of the gun turn in program on decreasing the prevalence of guns within the community would be obtained with baseline and follow up estimates of the community prevalence of guns with a case-control study.[4] We used public data

sources for an approximation of baseline community demographics, risk factors, violent crimes and injury indicators, however this data did not demonstrate a change within the community over the duration of our program and thus we presented only cross-sectional estimates.

We used a convenience sample which provided information for increasing community support through outreach activities in our participant survey. We did not obtain demographic information on the participants because of the policy of anonymity. Demographic information on gun turn-in participants may help understand the bias associated with our program and the development of additional strategies for raising awareness and outreach to the community.

CONCLUSIONS

The Ceasefire program emphasizes the principle of community-oriented primary care in the development of principles and practice from local resources and traditions with the goal to empower people with tools for development of their own indigenous organizations and turn-in programs. Community agencies like the Oregon State Police may be able to track crimes and injuries linked to the guns turned in and, hence, provide more concrete data on the impact of the May program. The development of web-based data resources may be useful for raising community awareness through outreach, distribution of self-help materials, and evaluation of educational programs while concurrently linking with existing participant surveys. The growth of Ceasefire Oregon continues with development of an educational teaching series to transfer skills to other people for promoting awareness and measuring the impact the program has on the participants and the community for further developing strategies to stop violence.

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with the George A. Russell Community Service Award. The success of Ceasefire Oregon is attributed to the enthusiasm and support of the many volunteers and broad based support from citizens, private businesses, health care providers, public officials and educational institutions who have contributed their time or donated gifts to the Ceasefire program. It is with this help that Ceasefire Oregon has distinguished itself as a sustainable program for communities within the state. We would also like to thank the research assistance provided by Richard Mishler, MD, an Internal Medicine Resident at Legacy Hospital Department of General Internal Medicine.

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