Impact of Police and Legislative Initiatives on Urban Gunshot Wound Admissions

Allen Lee Roberts, MD, Lori A. Weichenthal, MD, University Medical Center, Fresno, UCSF-Fresno Medical Education Program

Introduction
- Firearm injuries are a major cause of death and disability in the US
- In Fresno County there has been a decrease in firearm injuries
- We wished to determine any causative factors in this decrease

Methods
- Retrospective, case control study including all GSW admissions from 7/1/90 to 7/30/99
- Grouped GSW admissions into four subgroups
- Looked at the effect of one local police initiative and two state laws on the rate of these GSW admissions

Statistical Methods
- Means where calculated for the subgroups and for the time intervals following interventions
- Between group comparisons were made using analysis of variance with a post hoc comparison test
- A p-value <0.5 was considered statistically significant

Results
- 1,499 patients admitted with GSWs, the majority secondary to assaults
- Significant decrease in GSW admissions during study period
- Only statistically significant intervention was the state law “Use a Gun and You’re Done” (p<0.005)

Limitations
- Study design
- Short period between implementation of the two studied laws
- Using GSW admissions as measure of all violent crime

Objective
- To assess the effect of local police and state legislative initiatives intended to reduce violent crime on the number of gunshot wound admissions to an urban Level One

Conclusions
- There was a correlation between the decrease in GSW admissions to a major trauma center and the implementation of state laws designed to decrease violent crime
- These results suggest that focused legislation may help to reduce violent crime

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**Study design**

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<th>Year</th>
<th>GSW Wounds Due to Assault</th>
<th>GSW Homicides</th>
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<td>90</td>
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<td>1999</td>
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</table>

**Legislative Changes**

- VCSU: Violent Crimes Suppression Unit