

Evidence-Based Practice (EBP) - E185

Poster

Abstract Title:

Automobile versus Pedestrian Injuries: Matching Outreach Efforts to Changing Community Needs

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Background & Purpose:

This metropolitan area has a historically high incidence of pedestrian injuries and fatalities, with large periodic spikes in volume. In this state, pedestrian deaths are 9% higher than the national average, leading to a federal designation as one of 13 pedestrian focus states. Since 80% of these deaths occur in the county where the Level I Trauma Center is located, several local community groups were prompted to join a large scale interdisciplinary task force to identify key causes and develop interventions. Outreach efforts are most effective if they address the specific populations and mechanisms of injury shown in the trauma data. This presentation shows one experience with such a task force.

Study/Project Design:

All auto vs ped injured patients & fatalities were totaled from trauma registry and police data and compared annually.

Setting:

University based Med Ctr; 550 bed Level I Trauma Center & local community groups: EMS, fire, police, non-profits etc.

Sample:

All trauma center patients involved in an auto vs. pedestrian crash were included. Fatality data was obtained from police department traffic bureau.

Procedures:

Injury/fatality data were gathered from 3 trauma centers and traffic bureau and critically assessed. An interagency task force including multiple community stakeholders mobilized to investigate a root cause for the increase in pedestrian injuries/fatalities. Representatives from trauma center, schools, non-profit safety organizations, police, city officials and engineers met monthly to correlate their individual data sets to identify risk factors. Together they brainstormed ways to target interventions that would be most effective, and engaged in a blitz of educational and legislative efforts focused on prevention. These included outreach events aimed at teen drivers and students, ads on TV and radio, bus stop ads, legislative changes clarifying crosswalk laws, and structural changes in signals and lighting at problem intersections. Finally, the pedestrian data is reassessed in 2012 and compared with previous years.

Findings/Results:

Following the interventions of the task force, the data paradoxically showed a significant increase in pedestrian injuries and fatalities to date. While all 2012 data is not yet collected, pedestrian fatalities have already exceeded deaths in the previous years. Problem areas proposed by the task force were bus stops, distracted driving, and improper use of crosswalks, as well as contributing variables namely a higher volume of pedestrians related to the economy, distracting technology, and impaired driver or pedestrian. After analyzing data from the 3 trauma center registries and traffic bureau, there were no significant patterns that could be attributed to these behaviors or any one common group. The conclusion of the task force was that the erratic nature of pedestrian injury/fatality volume appears to be without discernable cause. The spike in pedestrian fatalities which prompted the task force, was followed by similar numbers in 2011 and has increased in 2012. Close communication with stakeholders was an effective way to both quickly disseminate trends in the trauma data to the community and also to ensure widest dissemination of educational efforts.

Discussion/Conclusions/Implications:

The most significant lesson learned through this experience was that injury mechanisms are sometimes unpredictable and it reinforced need for trauma outreach programs to actively monitor registry data and find new and innovative ways to respond with targeted outreach education. In this case, we were able to redirect the majority of outreach efforts and resources to this problem, to bring education to the groups most affected. The trauma landscape is

constantly changing and outreach must be flexible to quickly adapt. In the future, we will continue to address the auto vs. pedestrian mystery, and work to identify future trends as they occur and tailor outreach programs to prevent future injuries.