Methods Study population: All drivers involved in a fatal motor vehicle crash in MD January 1, 2001 to December 31, 2013: 126 monthly data points from police reports pre-intervention and 30 post- intervention. Using an interrupted time series analysis we examined the effect of the tax on all alcohol-involved drivers in fatal crashes and fatally injured alcohol-involved drivers. Rates were calculated per 100,000 population, 100,000 licensed drivers, and 100 million vehicle miles travelled.
Results 6,967 crashes involving 10,777 drivers resulted in 4,642 driver fatalities. Unadjusted analysis found a significant 15% reduction in rate of alcohol-impaired drivers with BAC >0.08 g/dL per vehicle miles travelled after the tax increase. Significant reduction was also observed for alcohol-positive drivers and for fatally injured BAC positive drivers. After adjusting for linear trend, seasonality, and unemployment, the immediate effect of the 2011 alcohol sales tax increase in was not significant. However, we did observe a significantly larger decline in the rates of alcohol-impaired drivers and alcohol-related fatalities with BAC > 0.08 g/dL as indicated by the significant gradual decline in the slope after the introduction of the 2011 alcohol sales tax increase.
Conclusions: While there was no immediate reduction in the rate of alcohol-impaired drivers following a 3% increase in alcohol sales tax, there was a significantly larger decline in the rates of alcohol-involved fatalities at BAC > 0.08 g/dL following the intervention, suggesting a gradual delayed effect. Other studies find an effect with excise taxes but this is the first study to evaluate the impact of sales taxes.

Trauma Care and Rehabilitation

Parallel 2.5

304 "THAT'S WHAT YOU DO FOR PEOPLE YOU LOVE": A QUALITATIVE STUDY OF SOCIAL SUPPORT AND RECOVERY FROM MUSCULOSKELETAL INJURY

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Background Social support has been identified as a key factor in facilitating better health outcomes following injury. However, research has primarily focused on the role of social support from the perspective of the person experiencing an injury. Limited research has examined the experiences of the family members/friends to a person with injury. This study aims to explore the perceptions and experiences of social support and recovery following a transport-related musculoskeletal injury (MSI) in a population of injured persons and their family members/friends.
Methods This study was conducted using a phenomenology qualitative research design. In-depth semi-structured interviews were conducted with ten persons with MSI, recruited via the Transport Accident Commission (TAC) in Victoria, Australia. Seven family members/friends were also interviewed. Interviews were audio-recorded and transcribed verbatim. The data was analysed using thematic analysis.
Results Several themes were identified including: (i) key sources of support, (ii) types of support received, (iii) relationship development and (iv) challenges of providing and receiving support. The presence of social support was perceived as fundamental to recovery. Different members of the social network provided different types of support. Iterative changes in relationships and barriers in providing and receiving support following the injury were noted.
Conclusions This study provides valuable insights into the perceptions and experiences of social support and recovery from MSI. The study revealed complexities in the interactions between persons with MSI and their family members/friends, in particularly related to caregiving demands. The findings of this study have implication for involving and supporting family members/friends in the planning and implementation of treatment plan.

305 TRAUMA CARE SYSTEM MATURITY IN INDIA: EVALUATION USING WHO MATURITY INDEX AND GEOSPATIAL ANALYSES

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Background In the context of recent emphasis on developing trauma care systems globally, a Pan-India trauma care system is getting ready. Given the well known regional disparities in health systems in India, evaluation of its parts (states) becomes important if the sum of the parts (the Nation) needs to develop a system in an equitable way. Trauma System Maturity Index (TSMI) and other guidelines by WHO, along with Geographical Information System (GIS) provides an opportunity for such evaluation and evidence based policy making.
Methods A cross sectional analytical study was done to grade trauma care system maturity of 10 representative states in India. Four major components of trauma system were assessed, including pre-hospital care, education and training, facility based trauma care and quality assurance; using a structured schedule prepared in line with WHO TSMI and 7 major guidelines for trauma care by WHO. In addition to this, GIS based analyses were done to assess the geographical distribution of trauma care facilities. The GIS data was analysed using ArcGIS version 9.1 and data for TSMI analysed using SPSS version 17.0.
Results While most of the state trauma care systems were graded level 2 for prehospital care and quality assurance, almost all systems graded 1 for facility based trauma care. Host of variables within the components were analysed and critical areas were identified where in small initiatives would evolve the trauma system to next level of maturity grading. GIS based analyses showed that even with in the states the access to trauma care services is alarmingly inequitable. Better grade in TSMI translated as better outcome in terms of trauma related mortality.
Conclusions The trauma care systems in different states are in diverse phases of evolution and their TSMI grade reflects their system performance. Study also projects successful examples which can be adapted by other states and countries with similar policy environment.

306 PRE-HOSPITAL CARE IN OMAN: RESULTS FROM HOSPITAL BASED TRAUMA REGISTRY

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