

Violence and Trauma

Chairs: J Plummer and A Soyibo

(O – 01)

Violence, health and development: examining the costs of violence-related injuries to Jamaica

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Background: Like many of its counterparts in the developing world, Jamaica has been tremendously burdened by interpersonal violence, the Island's fourth leading cause of premature death.

Methods: The Jamaica Injury Surveillance System was used to identify and collect data on patients presenting with violence-related injuries (VRIs) to public accident and Emergency Departments across the Island. The study collected the profile of VRIs during the period April to June 2014 at seven major hospitals. Direct medical costs were calculated from the patient medical records. Indirect costs due to loss of productivity were also estimated using the World Health Organization (WHO) Manual for estimating the economic costs of injuries due to interpersonal and self-directed violence.

Results: During 2014, the total cost of violence-related injuries was J\$8.6 billion. The direct medical cost due to interpersonal violence (J\$3.6 billion) accounted for approximately 22% of Jamaica's total health budget (excluding compensation). The indirect costs of interpersonal violence due to productivity loss amounted to J\$5 billion.

Conclusion: The findings demonstrates the tremendous opportunity for financial and social savings that can be made by effectively implementing prevention programmes.

(O – 02)

Is there an association between cannabis use and reported violent behaviour among psychiatric patients? Evidence from a hospital-based study

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Background: Cannabis use is high among psychiatric patients. This research aimed at exploring whether there was an association between cannabis use and a reported history of violent behaviour among psychiatric patients.

Methods: This was a cross-sectional study of patients accessing psychiatric services at the University Hospital of the West Indies in St Andrew, Jamaica. A history of violence as reported by patients and their family was obtained as part of an interviewer-administered general questionnaire. Pearson Chi-squared test for independence was used to assess sub-group differences on categorical variables. Multivariate logistic regression analyses were used to assess the socio-demographic characteristics and clinical factors associated with hazardous cannabis use and past six months' cannabis use. Statistical significance was taken at $p < 0.05$.

Results: Among 280 participants, 68% were males. The mean age 33.88 ± 14.38 years. Forty-eight per cent of the participants reported cannabis use. In bivariate analysis, cannabis use (Yes *versus* No) and frequency of cannabis use were associated with having a history of violent behaviour ($p < 0.001$). In multivariate analysis, past history of violence retained its significant positive association with past six months' cannabis use after controlling other clinical factors (AOR: 9.18, 95% CI: 2.07– 40.80; $p = 0.004$). This association became weaker and non-significant in the adjusted logit model.

Conclusion: There is an association between cannabis use and reported violent behaviour among psychiatric patients. The relationship could be bi-directional and further studies are required to elucidate this.

(O – 03)

Analysis of road traffic fatalities in Jamaica 2017: application of injury prevention

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Background: Injury prevention research as related to road traffic fatalities has been inadequate in Jamaica.

Methods: Data was collected from the Road Traffic Agency (RTA) on all the road traffic fatalities in 2017. Fatalities were categorised as pedestrians, motor car and motor cycle crashes. The model of the Haldon Matrix was applied and examined as a measure for injury prevention. The four E's of injury prevention are discussed, namely, education, enforcement, engineering and economic incentives.

Results: Data base from the RTA revealed that there were 321 fatalities including 272 males and 49 females primarily of young victims. Motorcyclist accounts for an alarming 30% of all deaths.

Conclusions: There is an urgent need to examine preventive strategies with regards to road fatalities. Prevention is better and cheaper than cure.

(O – 04)

Audit of compliance with the emergency severity index time to be seen policy at University Hospital of the West Indies

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Background: The Emergency Severity Index (ESI) focusses on triaging patients depending on the acuity of their presentation. An Audit was done as a quality measure to assess compliance with the ESI.

Methods: A cross-sectional study was done between March 16 and April 12, 2015. Data was collected with a tool which maintained patient anonymity. Information collected included age, gender, ESI level, day, date and shift of presentation. A margin of error and confidence level of 5% and 99%, respectively were used in the Raosoft® sample size calculator and the recommended sample size was 586. Data analysis was with SPSS version 19. A descriptive analysis was done. Test for significance using an alpha level of < 0.05 was accepted for statistical significance.

Results: One thousand seven and thirty audit tools were completed exceeding the required minimum sample size of 586. Twenty-four patients (1.4%) were not given an ESI category at the time of triage, leaving 1706 tools to be analysed. Ten patients (0.6%) were assigned to ESI 1, 226 (13.1%) to ESI 2, 725 (41.9%) to ESI 3, 701 (40.5%) to ESI 4 and 44 (2.5%) to ESI 5. The male to female ratio was 1:1.3 with 43.3% of the sample size being male (n = 749) and 56.7% female (n = 981). The mean age was 42 years. Compliance was met in 38% of the 1730 patients.

Conclusion: Compliance with the ESI time to be seen policy is met in less than half of patients presenting to the ED. Further research to be done to elucidate the cause.