



**Service Priorities and Programmes**  
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**Submitting author:** Mr PING FAT LAU

**Post title:** Department Operations Manager, Pamela Youde Nethersole Eastern Hospital, HKEC

**Are elderly pedestrians fated to suffer significant trauma? Can we do better?**

*Lau PF(1), Yuen M(1), Chan LW(1) and Cheung F(2)*

*(1) A&E Dept., Pamela youde Nethersole Eastern Hospital, (2) Dept. of Surgery, Pamela Youde Nethersole Eastern Hospital*

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**Introduction**

Increasing trend in geriatric population is a worldwide phenomenon. In addition to chronic illnesses, aged people (>64 years old) are also vulnerable to suffer acute trauma in motor vehicle incidents (MVI). The authors would like to share information and findings derived from the Trauma Registry (TR) which recorded trauma data of severely injured patients admitted to a regional hospital in the Eastern part of Hong Kong Island.

**Objectives**

To identify prevalence of severe geriatric trauma related to MVI in the Eastern part of Hong Kong Island. To discuss clinical and patient education issues such as geriatric trauma resuscitation, age related physiological changes that impact on the presentation of elder trauma patients, barriers to assess and evaluate elderly patients, road safety tips for elderly pedestrians and the ways to use clinical data to influence community policies.

**Methodology**

SPSS had been employed to create a platform for database establishment as well as statistic calculation. A designated Advanced Practice Nurse of the A&E department is responsible for data abstraction, entry and maintenance. Thus quality of data is maintained. This paper reported the result of retrospective data analysis basing on database from 2009 to 2011.

**Result**

Results: The TR pooled a total of 270 MVI related trauma patients during the captioned period. It was found that fifty-nine (21.9%) of them aged 65 years or older. In the elderly group, most of them (n=48, 82%) were pedestrians and accidents occurred during daytime commonly in residential area with busy traffic. Various types of vehicles like double-deck buses, tourist coaches, heavy-duty trucks and private cars were involved in those incidents. Body regions that commonly injured, in the

sequence of occurrence rate, are head and brain, extremities, cardiothoracic, pelvis and abdominal organs. Comparing with non-geriatric (64 years old or younger) pedestrian group, elderly patients suffered significantly worse trauma in terms of higher Injury Severity Score ( $p=0.025$ ), higher New Injury Severity Score ( $p=0.034$ ), and longer length of stay ( $p=0.003$ ). Discussion: Results look sensible. Older people are weaker in sensory capability like visual acuity, hearing ability, and distance estimation than youngsters. They are slow in physical response to escape from MVI. They have relative low physiological reserve to tolerate trauma consequences. All these unfavorable functional or pathological factors make the fate of elderly pedestrians vulnerable when MVI occurred. Nevertheless, are they deemed to suffer because of old age? Can we do better? Discussion will be focused on clinical and patient education issues such as geriatric trauma resuscitation, age related physiological changes that impact on the presentation of elder trauma patients, barriers to assess and evaluate elderly patients, road safety tips for elderly pedestrians and the ways to use clinical data to influence community policies.