

## Editorial

### Drink-driving: can we help?

### 酒後駕駛：我們能否防止？

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It is difficult for any Hong Kong citizen to forget the gut-wrenching traffic crash that seized six innocent human lives on 23rd January, 2009. Who could not be moved by the image of a man dropping to his knees in front of our Chief Executive to beg for the return of a relative who was killed in the crash? The public outcry is clear: a demand for more vigilant actions against drink-driving, including a heavier penalty.

The effect of alcohol as a risk factor for injuries is well studied. Extensive medical research has been conducted to measure the association between alcohol consumption and a driver's injury severity, although conflicting results have emerged. It is still uncertain whether alcohol has an effect on the degree and outcome of injury after the severity of the impact is being controlled. Some studies have suggested that the casualty injury severity increased with the degree of alcohol intoxication,<sup>1-3</sup> but others have indicated that alcohol did not adversely affect the degree of injury and the clinical outcome.<sup>4,5</sup> The inconsistency of these findings could be attributed to differences in the selection of the study population.<sup>6</sup> While most of these studies were focusing on the driver; rarely has a study explicitly evaluated the effects on other road user groups, including the passengers, pedestrians or cyclists (i.e. the innocent third party).

So what is the drink-driving situation in Hong Kong? Limited but important information could be collected from different sources. The Centre for Health Protection conducted surveys in the years 2004 and 2005 on drink-driving behaviour among Hong Kong residents. About 6% of the interviewed drivers admitted that they had drink-driving for at least once during the past month of the interview and more than 2% even had three or more episodes.<sup>7</sup> According to the news, there were 1341 cases of prosecution against drink-driving in the year 1996, and rose to 1490 cases in the year 2008.<sup>8</sup> According to the coroner report, raised blood alcohol concentration (BAC) was detected in 24-30% of all tested fatal drivers (vehicle drivers and motorcyclists) in the year 2006 to 2007.<sup>9,10</sup> What worrying us further is that the binge drinking (5 glasses or cans of alcohol drinks on one occasion) rate in Hong Kong is persistently high. About 10% of interviewees admitted that they had binge drinking for two or more times per month.<sup>7</sup> According to a local single-centre study, 5.6-6% of driver casualties presented to emergency departments had consumed alcohol shortly before the traffic crashes leading to their injuries.<sup>11</sup>

As emergency physicians, how can we contribute our effort to combat against this important socio-medical problem? Firstly, can we screen all injured drivers for alcohol problem? The American College of Emergency Physicians (ACEP) supports alcohol screening in emergency departments.<sup>12</sup> Mello et al reported that most emergency physicians would agree to screen and refer intoxicated drivers for alcohol counselling.<sup>13</sup> The practical obstacle to screening is not limited to the heavy workload in all emergency departments but also

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the lack of a sensitive screening tool to identify the injured drivers who are at-risk as well as who will be most likely to respond to interventions. All common screening criteria, including BAC, clinical judgment, self-reported drinking six hours prior to injury, CAGE, and the National Institute of Alcohol Abuse and Alcoholism (NIAAA) quantity and frequency (Q&F) questions, have different limitations and drawbacks. Field et al suggested using serial screening criteria and 90% of eligible patients were successfully screened.<sup>14</sup> However, the commitment in resource could be enormous.

Secondly, can we give intervention to the identified at-risk drivers in the emergency department to deter their habit of drink-driving? The post-injury period in emergency departments can be a unique "teachable moment" for the delivery of interventions to address risky health behaviour. Brief interventions in the trauma setting have been found to be effective for injured patients who were at risk drinking whether or not they were drinking at the time of their injuries.<sup>15</sup> ACEP has developed a resource kit to support brief motivational intervention in emergency departments.<sup>16</sup> Motivational interviewing is defined as "a directive, client-centred counselling style for eliciting behaviour change by helping clients explore and resolve ambivalence".<sup>17</sup> A randomised controlled trial conducted at a level 1 trauma centre showed that patients receiving motivational intervention had a significant decrease in alcohol consumption and traffic citations at 12 months as compared with those not receiving intervention.<sup>18</sup> Some may argue that emergency departments may not be the ideal setting for intervention because of the noisy, chaotic and stressful environment. Some colleagues may complain that they do not have the skill, time or resources to conduct interventions and they perceive conducting intervention as not being part of their clinical responsibilities.

It is not possible to conclude whether screening and intervention should be conducted in our local setting now. Let us keep our mind open until the appearance of new local evidence. There is an urge for local centres to try acquiring additional resources or funding to start pilot studies. In the mean time, emergency physicians

can help, at least, by being more co-operative with the police when they are required to help sampling specimens from suspected drink-driving casualties. "Too busy" or "patient is too unstable" should not be an excuse for not collecting the necessary information to reflect the true epidemiology of this important public health problem. A physician's refusal on sampling a specimen may not only undermine the success rate of prosecution and enforcement of the Law but also may deprive a chance to rectify a dangerous behaviour and save threats to many innocent people.

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