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Injuries and violence: a global public health challenge

Injuries and violence are a significant cause of mortality and physical disability. Injuries killed five million people worldwide each year [1]. The level of this dilemma, however, differs significantly by age, sex, region and economic development [2]. Globally, road traffic injury mortalities, self-inflicted injury mortality and interpersonal violence, war, drowning, and exposure to fire are the leading cause of deaths among people aged 15-44 years [3]. This special issue aims to assess the magnitude of this problem, identify risk factors and explore prevention strategies to alleviate the burden of injuries and violence.

There is a dire need to increase the knowledge of the extent of problem, and associated risk factors that needs to be targeted for prevention. Erosa et al., examined reports of verbal and physical abuse from family caregivers of adults with severe physical, neurological and developmental disabilities, and found that caregivers who reported some form of abuse reported significantly greater distress and burden than caregivers who did not report any abuse. Grice et al., found that reported histories of work-related physical assault and work-related threat were associated with elevated risks of current work-related physical assault. Ahmad, systematically reviewed and summarized current scientific knowledge on the use of interactive computer-assisted screening to detect intimate partner violence (IPV). Schwebel et al., showed that higher levels of reading achievement and mathematics achievement were associated with slightly reduced risk of pediatric injury among kindergartners from low-income background, however, intelligence did not relate to injury history. Lund et al., conducted the study in out-patient clinic in Trondheim, Norway. The authors devised a less time-consuming qualitative method for in-depth investigations to identify preventable occupational risk factors.

Ninety percent of injury mortalities occur in low and middle income countries, and in the upcoming years this situation will continue to represent an important global health problem [4]. Most injuries are preventable however, the dilemma is that the evidence based effective prevention strategies are underutilize in low and middle income countries. Branas, in his article gave an overview of injury burden in the developing nations, and highlighted the factors resulting in underutilization of effective injury prevention strategies. He provided epidemiologic model of disease prevention and proposed various prevention methods for injuries in low and middle income countries. Kashif et al., by literature review revealed the burden of violence during pregnancy in Asian countries, and showed adverse effects of violence on women's physical and mental health, and on their children. Effective trauma system and hospital management are important in natural and man-made disasters. Low and middle income countries lack efficient trauma system and thus lead to greater mortality and disability as a result of these disasters. Khan et al., gave an overview of the importance of trauma systems and hospital management in the event of disaster in low and middle income countries. Natural disasters like earthquake in Pakistan, 2005 and current 2010 Haiti earthquake are taken as practical examples to provide importance of effective trauma system in low income setting.

Pakistan is the seventh most populous country in the world with a population of 164 million. Pakistan, like other low income countries has huge burden of injuries [3]. Injuries were among the 2nd leading cause of disability and 11th leading cause of premature deaths in Pakistan [5]. Nasrullah et al., described the circumstances, risk groups, types and severity of injuries in patients coming to the tertiary care hospital of Karachi, Pakistan. The authors found road traffic injuries (RTIs) the most common type of injuries. In RTIs, females and motor vehicle occupants were more likely to have severe head injuries. Violence is another public health problem in



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Pakistan. Jalal, gave an overview of magnitude and risk factors for IPV in Pakistan and provides policy suggestions to reduce IPV in Pakistan.

While numerous injury policy interventions developed in high income countries are potentially transferable to low income countries [6]. However, it is important to consider country-specific factors such as feasibility, costs, sustainability, and barriers, all of which must be factored into the assessment of effectiveness in specific low income settings. Allegrante et al., conceptualize the elements of the ecological model and concluded with some examples of applications of ecological approaches to the prevention of unintentional injury and promotion of community safety.

We hope that this special issue will convince public health professionals that injury and violence should be on their agendas. This issue may stimulate more research in injury and violence prevention, especially in low and middle income countries, as well as increased advocacy and partnerships to reduce injuries. We also hope that this issue will encourage countries and governments to implement injury and violence control policies that will actually decrease the injury and violence burden.

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