



Effective Interventions for the Safety of Pedestrians from Urban Traffic Accidents in Iran: An Evidence-based Report to Local Policymakers

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Received: 17 September 2024

Accepted: 21 October 2024

Abstract

Pedestrians are 23% of the victims of road traffic crashes in Iran. The second cause of injuries in these accidents is also assigned to this group. The most important cause of this vulnerability is the behavior of pedestrians. Nevertheless the interventions to change behavior in solving this major problem have been the least effective. The cause of this lack of effectiveness is related to voluntary choice in behavior change, seen in all regions of the world. This brief report introduces the use of effective interventions to policymakers by explaining the role of public health in promoting the safety of pedestrians. Reducing the speed of vehicles in residential areas by implementing measures that will change speed control from a voluntary choice to a compulsory choice is a very effective strategy for improving the health and safety of pedestrians.

Keywords: Pedestrians, Road traffic accidents, Public health.

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Please cite this paper as: Sadeghian F, Jalali T. Effective Interventions for the Safety of Pedestrians from Urban Traffic Accidents in Iran: An Evidence-based Report to Local Policymakers. Shahroud Journal of Medical Sciences 2024;10(3):29-30.

Road traffic crashes (RTCs) are the second cause of death in Iran. Years of life lost due to premature death of RTCs in Iran is more than in many regions of the world. Among RTC victims, 23% are pedestrians, and effective interventions for this group are very crucial¹⁻⁴. Implementation of traffic safety laws, including appropriate penalties and public awareness campaigns, is known to be the most important measure in the global reduction of injuries caused by road traffic crashes⁵.

In Iran, pedestrian injuries account for the second cause of RTCs after motorcycle riders⁶. One of the most important reasons for the vulnerability of pedestrians in traffic crashes is their risky behaviors, such as not using the pedestrian bridge, not checking the street, not crossing the pedestrian lines, and using mobile phones while walking⁷.

Comprehensive studies have analyzed solving the problem of pedestrian safety in road traffic. The results point to the lowest effect on pedestrian behavior control and the highest effect on vehicle speed control⁸.

Changing the behavior of road users through training does not necessarily lead to improving their health. Paying attention to the definition of health promotion (Health promotion is the process of enabling people to increase control over, and to improve their health)⁹ Concerning this gap to voluntary choice in behavior change, and points out that the missing link should be sought in public health (Figure1).

Speed management is considered one of the most challenging issues in road safety policy and practice in low and middle countries when its achievement is sought in behavior change¹⁰. It should be noted that the speed limit plays a very important role in reducing the total number of traffic accidents¹¹.

The strategies of using speed cameras and speed calming have the greatest potential to reduce the complications caused by road accidents. According to the evidence, these two strategies lead to a major, sustainable, and very cost-effective reduction in road deaths and injuries. It is effective not only for high-risk groups but for the entire population¹².

In the projects used by the government of Iran in cooperation with the World Health Organization, speed management has been recognized as a key factor in achieving a safer traffic system, and the findings confirm the reduction of speed in the use of infrastructure for electronic enforcement actions¹³.



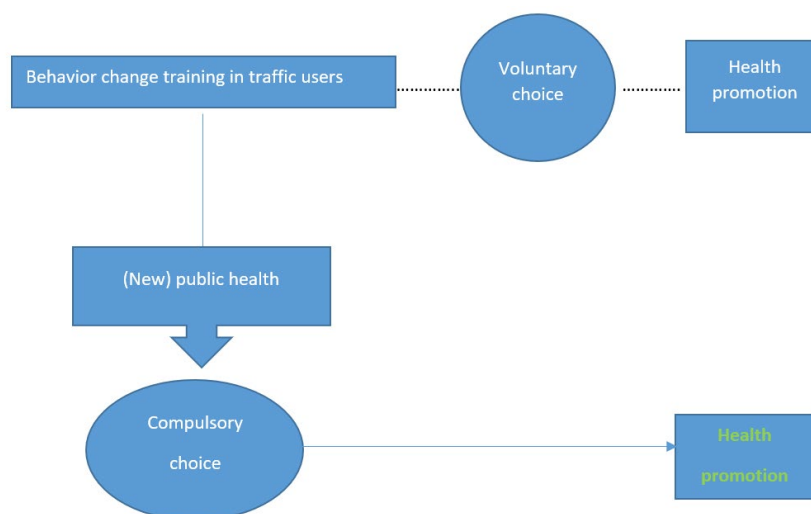


Figure 1. Schematic diagram of the role of public health in health promotion

Public health is defined as "the art and science of preventing disease, prolonging life, and promoting health through the organized efforts of society" (Acheson, 1988).⁵ 'New Public Health' is defined by Tulchinsky & Varavikova, 2010 "a contemporary application of a broad range of evidence-based scientific, technological, and management systems implementing measures to improve the health of individuals and populations"⁹.

In Iran, according to the available evidence, the safety of pedestrians through the provision of infrastructure based on needs, especially in the elderly group, is one of the demands of the people. These demands can be achieved through broad strategies that include training, law enforcement and coordination between institutions, and different levels of government¹⁴.

This Brief report tries to increase the understanding of stakeholders by summarizing the evidence on a key issue in social accountability and provides a practical way to address the discussed issue¹⁵.

Local measures focusing on the hidden and open demands of society are a step towards effective national measures.

Ethical Considerations

There is no ethical consideration.

Conflict of Interest

There is no conflict of interest.

Funding

There is no funding.

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