



Reconsideration of Driving License Delivery Policies Based on Screening of Personality and Sleep Disorders in Iran

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Dear Editor-in-Chief

At present, road traffic accident (RTA) and injuries caused by it are the second leading cause of death among the ten major causes of deaths in Iran (1). The prevalence of RTA in Iran is 51.5% and after 2010 had increased by more than 5% (2). From 1990 to 2016, the years lived with disability (YLDs) resulting from these injuries are 210 years and disability-adjusted life years (DALYs) are reported to be 1,738 years per 100,000 (3). From the financial perspective, the burden of these events and the deaths and injuries resulting from it is close to \$ 4.5 billion a year (1).

Although there are several causes for RTA, factors such as being male, less than 40 yr of age and illiteracy are the main causes of the frequency and severity of driving accidents and deaths caused by it in Iran (4, 5). In addition, there are some psychological parameters such as personality traits, personality disorders, and sleep disorders that have so far been neglected. There is a positive relationship between driver positive behaviors with extraversion, openness, conscientiousness, and agreeableness (but negative with neuroticism) (6, 7). Particularly, lower levels of agreeableness, and higher sensation-seeking and sensitivity to reward are associated with high-risk driving (7).

Meanwhile, impulsive, histrionic, anxious, and dependent personality disorders are significantly more common among victims of RTA (8). In addition, sleep disorders such as sleep apnea and sleepiness increase 1.2 to 4.9 times and 1.9 to 3.4 times the likelihood of driving accidents, respectively (9, 10).

Despite the highlight role of personality traits and aforementioned disorders, many people do not have a good insight into their high-risk personality traits and disorders such as impulsivity, sensation-seeking, reward dependence, and histrionic characters. Moreover, the general awareness about sleep problems and the importance of their treatment is very weak. Therefore, people with these problems do not take action to get proper treatment and in most cases, they live for many years with these disorders. After obtaining a driving license, these people are potential factors of many driving accidents that their high-risk traffic patterns are not so influenced by modified traffic rules, upgraded hardware safety, and duplicate financial penalties to prevent traffic violation (1). In order to reduce the frequency of injuries and deaths caused by RTA and the resulting financial burden, it is necessary to pay attention to the



drivers' psychological mechanisms before delivery of the driving license. For this purpose, drivers' personality and sleep disorders may be screened before delivery of the driving license. In addition to referring these individuals for appropriate treatment before the delivery of driving license, there must be some limitations on speed, hours allowed for road traffic, and progressive financial penalties in case of misconduct and repetition. Probably, this process can be effective in reducing traffic accidents in Iran.

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Conflicts of interest

There is no conflict of interest.

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