

## EDITORIAL

## Alteration of Abused Drugs Should be Added to the Medical Curricula

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Drug abuse is prevalent in all countries across the world and induces variety of adverse effects (1). Health problems arising from drug abuse commonly cause significant health challenges in the affected population and deteriorate many aspects of the patients' performance and quality of life. Comorbidities are discovered in 60 to 75% of addict patients, suffering from various drug-related disorders (2).

Drug dependences and its consequences are of important health problems in Middle Eastern region including Iran (1, 3, 4). Based on a report released in summer 2013 by the Iranian campaign for drug abuse - a national study of prevalence of drug abuse amongst Iranian citizens- the prevalence of the consumption of narcotics and psychotropic substances in the 15-64 year population in Iran is 2.65%. In the studied population, the most commonly abused substances included: opium and its derivatives, crystal meth, crack, heroin, cannabis and ecstasy, respectively. The main consumption routes amongst the users were smoking, eating, snuffing and injection, respectively (5).

Drug suppliers and dealers might add various heavy-weight metals to these substances in their preparation process to increase the weight and potential effects (6). Subsequently, drug dependent subjects complain from clinical manifestations which are not related to the abused substance, and could be explained by the additives, such as stomachache and neuropathy (7-10).

Economic and pharmacologic adulteration of drugs is common and the most prevalent additives include lead (11, 12), thallium (13, 14) and different mediations including steroids (15, 16) and so the consequences might be extensively variant (17, 18).

While controlling or preventing the exposure to intoxication by added impurities to illicit drugs is

seemingly impossible, the harms of intoxication by them just can be partially controlled. The timely process of diagnosis of high levels of them in urine and blood, and proper management before is important. Therefore, it is essential for the first-line health respondents and clinicians who manage the admitted poisonous patients to understand the importance of early and accurate diagnosis of these patients.

Training on how to manage substance abuse and its toxicological aspects is an interdisciplinary field; while current course plans are focused on clinical, psychological and social domains (19). It seems that modification of the future medical syllabus is required by adding the current paradigm of economic and pharmacological adulteration of the street drugs.

Current medical curriculum is adopted from developed countries. Pattern of drug abuse is different in the developing countries (20), which are not fully considered (21). Paradoxically, while there is suitable knowledge and attitude for conducting the high-quality research in Asia, applicable research are not funded (22). Research on large populations and substances in Asia needs regional understandings of the issue as well as incorporating international scientific evidence (23-28). Therefore, an effective curriculum that gives appropriate perspective to the future clinicians should be developed (1, 29-31) to be accountable for the target population (32, 33).

Introducing drug adulteration should be added to Iranian medial syllabus. Furthermore, we need to conduct multicenter studies (24) to monitor the current trend to provide the appropriate training contents to the students and medical instructors as well as decision-makers (34). Most updated health technology assessments in regard to the management of these patients are recommended (25, 32, 35, and 36).

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