### - Letter to the Editor

# Role of medical toxicology educational programs in improvement of the maternal health

Ali Banagozar Mohammadi<sup>1</sup>, Sahar Bagheri<sup>2</sup>, Maryam Zaare Nahandi<sup>3</sup>

**Corresponding author and reprints:** Maryam Zaare Nahandi. EDO, Sina Educational Hospital, Tabriz University of Medical Sciences, Tabriz, Iran.

Email: dr\_mzaare@yahoo.com Accepted for publication: 5 July 2015

## Keywords: Medical Toxicology; Maternal Health; Human Development Index; Training

Cite this article as: Banagozar Mohammadi A, Bagheri S, Zaare Nahandi M. Role of Medical Toxicology Educational Programs in Improvement of the Maternal Health. SDH. 2015;1(3):128-130.

#### Dear editor,

Mothers' health and lives are constantly exposed to different risks such as accidents, injuries, and poisoning, so some mothers may lose their health and lives, which is understood as a social damage. Various studies have found that in vulnerable groups of the society, women of childbearing age are the most susceptible group to suicide following self-poisoning (1, 2). Acute intentional poisoning is a major public health problem in all societies and is a common reason for patients referring to clinics or self-poisoning hospitals. Suicidal morbidity or mortality of the victims impose irreversible harms to the society. Especially, a large percentage of the victims ask for help because they regret after committing suicide, thus they will not commit suicide after recovery (3). Although this is a serious health problem, most of the hospitals have faced a lack of facilities to admit and treat the poisoned patients. Moreover, the poisoned patients may be treated tastefully since there is lack of referral or reference hospitals to support these patients. Despite the presence of forensic and medical toxicology specialists - one of the medical specialties in Iran - in many of the academic centers, most of the university departments do not have equipped independent toxicology centers (4). In addition, according to the current curriculum of the medical schools, Clinical Toxicology Courses are missing in the medical training (5). So, control and treatment of poisoning is absent in our health care system.

According to the final outlook of 20 years Perspective Document of Islamic Republic of Iran, at the end of the program (in 2026), Iran will be an inspired country in the Muslim world. It will be known as a developed country with prominent social, economic, and health welfare. It is also stated that Iran will enjoy an advanced health system and welfare as well as productive science and technology system (6). It is obvious that these goals cannot be reached without the development of health care system. In this regard, reducing maternal mortality could be

<sup>&</sup>lt;sup>1</sup> Toxicology Ward, Internal Medicine Department, Medical Philosophy and History Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>&</sup>lt;sup>2</sup> Medical Student, Toxicology Ward, Sina Educational Hospital, Tabriz University of Medical Sciences, Tabriz, Iran

<sup>&</sup>lt;sup>3</sup> Nephrology Ward, Internal Medicine Department, Chronic Kidney Disease Research Center, Medical Education Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

regarded as a way of improving health and thus promoting health care system.

In the modern world, health care has taken a broader perspective with several factors as determinants of the health status. These factors can strongly affect the social health status spontaneously or in combination with each other. Due to the increasing complexity of the health system, medical schools that include higher education, research, and health promotion levels have played a crucial role to achieve our national goals on health care. So the role of health in improving Human Development Index is irrefutable and confronting the causes of health inequalities in the society is the duty of all people and authorities (7, 8). As generally accepted, the prevention of diseases is prior to the treatment, meaning that involvement in the factors affecting health can play a greater role compared with that of the treatment. So a question should be answered, "Is prevention enough?" Obviously, the answer is negative. In case of illness, treatment is necessary to prevent patient's exacerbation and to protect public health with regard to human dignity and the sanctity of human life. Also, according to the religious and humanistic values of the human life, patients' treatment should be concerned with the highest quality and lowest cost in a fully respected manner. This health care system should be provided by healthcare professionals, planners, and practitioners in different medical fields so the only factor probably causing suffering in the patient should be the disease (9). This objective signifies the role of general practitioners as primary health care providers and requires proper teachings of the basic medical principles. Thus, regarding the social values and strategies for the equity in health research education and design, implementation of the clinical toxicity courses for general medical students should be taken into account to improve the health status of the community. That is because we

are all responsible for the consequences of uneducated general practitioners who cannot manage poisoning cases and impose a great burden by the death of pregnant women or maternal suicides. Finally, as the social health care system can improve the maternal life expectancy and prevent serious diseases, we hope that quality and quantity of education and research in the fields of health care be improved by the efficient and effective use of potential capabilities of the country in all the related fields, including medical toxicology training courses, which leads to improvement of the maternal health in the country.

#### References

- Cox S, Kuo C, Jamieson DJ, Kourtis AP, McPheeters ML, Meikle SF, et al. Poisoning hospitalisations among reproductive-aged women in the USA, 1998–2006. <u>Inj Prev.</u> 2011;17(5):332-7.
- McClure CK, Katz KD, Patrick TE, Kelsey SF, Weiss HB. The epidemiology of acute poisonings in women of reproductive age and during pregnancy, California, 2000–2004. Matern Child Health J. 2011;15(7):964-73.
- 3. Banagozar Mohammadi A, Banagozar Mohammadi A, Zaare Nahandi M. Legal and ethical challenges of inappropriate treatment in poisoned patients. IJFM. 2015;21(2):71-4.
- 4. Banagozar Mohammadi A, Zaare Nahandi M. Clinical Education of Poisoning Management for Medical Students: a Step Towards Health Promotion. Hakim Health Sys Res. 2015;18(1):91-3.
- General Specification, Schedule and Course Syllabi in Doctoral of Medicine Iranian Ministry of Health and Medical Education: Deputy Ministry for Education; 1986 [Accessed 2016]. 17th Meeting of the Council [Available from: http://scume.behdasht.gov.ir/uploads/172\_275\_S arfasl\_64.pdf.
- 6. The Islamic Republic of Iran's 20-year vision document Iranian government information center 2006 [cited 2016]. Available from: www.dolat.ir/PDF/20years.pdf.
- Human Development Reports-Human Development Index (HDI): United Nations Development Programme; 2015 [Accessed 2016]. Available from: http://hdr.undp.org/en/content/humandevelopment-index-hdi.

- 8. Health Equity Indicators -Equity in health: The Secretariat of Social Determinants of Health-Iranian Ministry of Health and Medical Education; 2012 [Accessed 2016]. Available from:
- http://sdh.behdasht.gov.ir/index.aspx?fkeyid=&siteid=331&pageid=34215.
- 9. General policies of health: The office of the Supreme Leader; 2014 [Accessed 2016]. Available from: http://www.leader.ir/fa/content/11651.