

Medical Error in Iran: The effect of Health Transformation Plan

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Dear Editor

Medical errors (MEs) are one of the main factors affecting the quality of hospital services and reducing patient safety in health care systems, and occasionally may lead to death, especially in developing countries. Despite scientific development in diagnostic and therapeutic technologies, complaints of MEs are on the rise worldwide.¹

Iranian government implemented Health Transformation Plan (HTP) to improve the delivery of healthcare services, decrease the economic burden of households, and upgrade quality of care with eight service packages on May 5, 2014.² In this regard, many studies showed that despite worthy effects of HTP in the health system, the number of MEs has increased in recent years in Iran.³ According to a meta-analysis report in Iran, the rate of MEs after HTP was higher than before it (OR=40%; CI: 33%-49% vs OR=30%; CI: 25%-35%).⁴ Lack of manpower at the beginning of the project reduced the health services cost and increased the patient visits, and integration of HTP into routine services has led to MEs in the recent years.⁵

A study found that most of the participants had observed MEs. However, estimates are always less expressed in official reports.⁶ Moreover, another study carried out during 2017-2018 on 1,050 enrolled errors estimated that most of them (45.9%) had occurred in the women's surgery department.⁷ At least 58.4% of the nurses had committed MEs and the most common of which (36.6%) were mistaken dose.⁸ A study reported that 47.9% of the nurses had made MEs. He demonstrated that approximately 35.2% of the nurses had made 2-3 errors, and 51.5% of the errors had occurred on the night shift. The most recurrent non-injectable MEs were errors in drug dose calculation, route of administration of the drug, and improper medicine. Nurses declared that the high number of patients and lack of nurse to patient ratio was the first main cause of MEs.⁹ To solve this problem, Ranaei stated that some principal plans approve limiting or reducing MEs; for example, building a powerful pharmacology understanding base among the nurses and nursing medical students enhances the work status and improves the link between the nurses and medical practitioner.¹⁰

It is recommended that all healthcare personnel on the inter professional team should be aware that MEs not only hurt the patients, but also lead to medical malpractice litigation. There are several causes of MEs and most of the hospitals have introduced act and regulations to minimize them with a system of surveillance and more monitoring. Moreover, use of Computerized Physician Order Entry (CPOE) could lower MEs in hospitals.¹¹ At the end, constant awareness by most members of the multi-professional groups is the main way to reduce ME.

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