



## Medication Safety in Iran

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It has been more than two decades since Luciane Leape and co authors published the results of Harvard Medical Practice Study which attracted the attention of clinicians around the world on the subject of patient safety in the medical care environment (1-2). Since then the issue of errors in medicine has been highlighted in different healthcare settings. From the reports published since then, it seems that medical errors have become epidemic throughout the world and no one country is immune from it.

The report by Kohn and her colleagues show that as many as 98000 people die annually in the US due to medical errors, 7000 from medication errors alone (3). We don't have any statistics in Iran in this regard, but in a very simple estimation, if we for the sake of discussion keep all other parameters equal between the two countries' healthcare settings (including quality of care which is a big assumption I know), and consider that Iran's population is one-fourth of US's, we may then have somewhere around 24,500 people die every year in Iran due to medical errors which could be an underestimation, of course. This may be compared to the average 21,000 road traffic fatalities occurring annually (4). Yet, the latter receives huge media attention whereas the former is not discussed at

all. Similar estimation would lead to the figure of 1700-1800 people who die as the result of medication errors in Iran on an annual basis. Given that most of these errors are preventable, it puts forth a huge task to come up with strategies to reduce these numbers and make our health care system safer for our patients.

In Iran, although not much is seen published about medical errors such as diagnostic errors or mismanagements of patients, but fortunately in the last decade or so, we see quite a few published reports of medication errors in Iran. Most of these studies have been conducted by nurses and clinical pharmacists but interpreting some of these data and making comparisons becomes difficult as methods for detection and definitions of medication errors are quite different among these studies. However in a recent review of studies in Iran, administration errors (14.3%-70%) were identified as most prevalent followed by transcribing (10.0%-51.8%), prescribing (29.8%-47.8%) and dispensing errors (11.3%-33.6%) (5). Some of these numbers (dispensing errors occur in one third of medication orders) do not seem realistic at all!

We as pharmacists in Iran as well as policy makers should first try to detect the real magnitude of this problem. We should realize that there are parameters such as poor quality of hand written prescriptions unique to our healthcare system which may contribute to medication errors. We then should strive to develop a national agenda for patient safety and in particular medication safety in our health care settings. Safeguarding patients from human fallibility only happens when we all accept that to err is human. Building a culture of safety doesn't

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come by easy and fast and requires patience and careful planning.

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