

## **Editorial**

### **Importance of Attainment of Prescribing Skill to be Good Medical Doctor**

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Prescribing is the most important and frequent work as a medical doctor throughout their career.<sup>1</sup> World Health Organization reported that around 50% of medicines prescribed either incorrectly or irrationally.<sup>2-4</sup> It has been reported from multiple countries that the quality of prescribing does not meet the national or international standard.<sup>5-8</sup> Additionally, freshly graduated medical doctors' prescription often contains errors and generate adverse drug reactions.<sup>9, 10</sup> Although young graduates are frequently blamed for their poor prescribing and quality. Prescribing errors are also noticed among all medical doctors including seniors<sup>11-14</sup>. Error is a part of human life and frequently observed in any healthcare system all over the planet.<sup>15</sup> Patient safety is a global public health issue that necessitates knowledge and skills in several areas, together with human aspects and organizations' problems. Nevertheless, human factors remain as principal and significant basis of an error in a complex healthcare structure.<sup>16,17</sup> There has been evidenced that medical error is often fatal. Prescribing errors are considered as a prescribing mistake, that happens through a weak or wrong prescribing choice or prescription inscription procedure. This is frequently unanticipated, and many occasions, treatment interventions were conducted incorrect time; afterward, medication was not useful or increased the possibility of harmful or adverse effects among treated patients. Additionally, therapeutic options chosen by the health professionals were not commonly recognized as good prescribing practices.<sup>18</sup> Errors can be categorized as mistakes, slips, or lapses. Mistakes are errors in the preparation of action. Reduced knowledge level frequently the basis of

mistakes. Slips and lapses are faults in booming out an activity - a slip through a flawed act and a lapse through an inaccurate recall.<sup>19</sup> Prescription errors comprise principally associated with the inscription of a prescription, although prescribing culpability or guilt includes irrational (illogical) prescribing, inappropriate (untimely and unsuitable) prescribing, underprescribing, overprescribing, and ineffective prescribing, rising as of flawed medical decision or choices regarding treatment and or therapeutic monitoring.<sup>4,20-24</sup> Inappropriate prescribing precisely regarded as when other available medicines are more effective and safer, i.e., with minimum adverse effects for the same disease.<sup>25</sup> "Appropriate prescribing results when errors are minimized and when the prescriber actively endeavors to achieve better prescribing: both actions are required."<sup>21</sup> Inappropriate prescribing of drugs often promotes the substantial risk of adverse drug reactions.<sup>25</sup> Overall irrational /inappropriate prescribing (polypharmacy, underprescribing, overprescribing, misuse) frequently correlated with significant morbidity, mortality, hospital admission, increase hospital days, and healthcare costs.<sup>4, 26-30</sup> Another European study evaluated twenty-four systematic reviews and reported that significant improvement achieved in minimizing inappropriate medicine prescribing when multiple intervention strategies merged.<sup>31</sup> Another systematic review analyzed twenty-four original studies revealed similarly for multiple strategies to avert prescribing errors.<sup>25</sup> Multiple studies revealed that either educational interventions alone or in combination, increase possibility of reducing inappropriate medicine selection and hospital stay.<sup>25, 32-37</sup> Several

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studies reported that educational program to minimize inappropriate selection of medicine should be planned either alone or combination for all stakeholders of healthcare system, that must include medical doctors, specialists, other health professionals, patients or caregivers to obtain better outcome.<sup>25, 32, 38</sup> As medical doctors are one of the principal stakeholders of prescribing and healthcare system, other than nurses, paramedics, pharmacists, consumers / patients, healthcare managers, proprietors of private healthcare, insurance establishments, pharmaceutical industries, public policymakers, and government.<sup>39, 40</sup> Any intervention program success depends primarily when it is conducted as early as possible. Since, when situation gets total worse it is tough to revert and improve the situation.<sup>41, 42</sup> Thereafter, several studies reported that the intervention program attainment of good prescribing skills should be started during undergraduate medical studies.<sup>1, 43, 44</sup> Several medical school's curriculums around the globe already implemented a prescribing skill program to improve future medical doctors prescribing quality. As repeated "training through workshops leads to increase the level of knowledge, function, and satisfaction in the medical students."<sup>45</sup> Again, such instructive and informative practical

program intensifies medical students' specialized skills and equips future medical doctors to face life-threatening clinical circumstances.<sup>45</sup> There has been a consensus achieved among European Association for Clinical Pharmacology and Therapeutics (EACPT) regarding 252 teaching-learning issues; that need to include in the syllabuses undergraduate clinical pharmacology and therapeutics (CPT) of medical education program to confirm that European future medical graduates are empowered to prescribe carefully and efficiently to ensure best treatment outcome.<sup>46</sup> CPT is a specialty that possesses such inherent strength to address the recurrent transformation of therapeutic options.<sup>46-49</sup> Additionally, EACPT has advocated teaching-learning issues that need to swot and studied regularly by the Network of Teachers in Pharmacotherapy of Europe.<sup>46</sup> Finally, to conclude, there is an urgent need to take care and update medical education course program, both undergraduate and postgraduate, with special attention to the CPT section of pharmacology and therapeutics, to develop expertise about prescribing skills and safeguard human life.<sup>50-52</sup>

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Authors posses no conflict to declare.

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