

Extemporaneous preparation as the last resort for drug shortage during covid-19 pandemic-lessons learned.

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Letter to Editor

COVID-19, as a newly emerged pandemic caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2), attacked almost 17 million patients with more than 668 thousand fatalities (8%) as of today July 30, 2020 (<https://coronavirus.jhu.edu/map.html>), Created a significant strain on the pharmaceutical industries as well as pharmaceutical supply chains in terms of drug availability and delivery to the requested countries. This strain referred to many reasons, including but not a limited to; the Vast number of patients in a short period that increased demands, locked-down strategies adopted by some countries as a precautionary measure which limited the drug Import/Export process, shifting some pharmaceutical manufacturers their production lines to produce certain drugs in high demands, e.g., Intensive care and different antiviral drugs.

These decisions, whether originated from the pharmaceutical manufacturer or it was a governmental decision, passively impacted patients with sometimes life-threatening consequences.

Extemporaneously preparing pharmaceutical dosage form as a way of providing suitable forms for drugs not available in these forms before was adopted by many hospitals' pharmacy since ages. Unfortunately, during this pandemic, where even commercially available drugs become in shortage or in out of stock status, this dramatic change in drug availability creates an urgent need for compounding formulas for these ready to use pharmaceutical formulations, although they had never been in out of stock status before.

These formulas should be handy and feasible to be prepared by pharmacy personal during these unexpected drug shortages. Although creating such recipes need a great collaboration between different pharmaceutical industries, pharmaceutical stakeholders, research centers, universities, regulatory bodies, and researchers, this has to be done on an urgent basis preparing for any similar significant Drug shortage situation in the future.

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