



## ALUMNI SERIES

### PHARMACISTS TO PATIENTS: A LITTLE NOTE ON THE APPROPRIATE STORAGE OF MEDICATION

Effective management of medication storage at home is crucial to maintaining a patient's treatment over time. This is based on a previous study, where many consumers of medicines were found to practice improper methods of medication storage at home. For instance, it was discovered that they did not know the appropriate places to store their medications and instead kept them under inappropriate surroundings. They were also reported to be unaware of how the medications' stability and shelf life would be impacted by the improper storage conditions.

#### **Medication storage – Why appropriateness matters?**

The surrounding temperature, avoidance of direct heat or sources of heat, protection from direct light, and cool, dry places (somewhere with low humidity) are among the external factors that may influence the appropriateness of medication storage. Here are a few examples on the reported effects of inappropriate medication storage. For instance, raising or extremely lowering the storage temperature has a considerable impact on insulin's potency. In addition, medications in liquid form are also reported to be mostly affected by direct sunlight. The presence of moisture in the environment also could potentially reduce the stability of medicine through the hydrolysis of active substances, and hydrolysis can happen to medications in the forms of solution, suspension, and solid dose.

Medicines whose stability was impacted by an inappropriate storage condition might have poor potency and efficacy. For example, poor blood sugar control in a patient could be partly due to the effect of improper storage of insulin at home. Consequently, the poor control of diabetes might increase the risk of the patient to develop diabetic complications. Another possibility is that an appropriate medication storage could avoid the risks of accidental medication ingestion, where it could be fatal in certain cases, especially when children are involved. Hence, this is why the appropriate medication storage is important!

#### **Appropriate medication storage – How can pharmacists help?**


In general, lack of understanding and knowledge often leads to the poor practice of proper medication storage. This is where the pharmacists may offer help by providing the necessary information to the patients when dispensing the drug. The information may include the right way to use, take, transport and store the medicine. Pharmacists also could remind patients to follow the recommended storage conditions as stated on the label of their medications. Simple sentences like "Please store your medicines as recommended on the label" or "Refer to your label for the proper storage condition of your medicines" should be included in the instructions to every patient during dispensing. This practice will not only help deliver information to the patients, but also makes the pharmacists to always be updated with the latest knowledge on medication storage.

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