No.1/2026

EVOLUSI DEKAD
DEWAN LATIHAN MARA ke UiTM
1956-2026

UNIVERSITI TEKNOLOGI MARA

MED BULL'

FACULTY OF MEDICINE UiTM

A new column inside!

Featuring Assoc. Prof. Dr. Norhafiza Razali

Through the Medical Lens

eISSN 2805-4628

9 772805 462000

DRUGS IN OUR DAILY LIVES: THE RARELY NOTICED SCIENCE

Assoc. Prof. Dr. Norhafiza Razali

Department of Pharmacology

MOST of us interact with pharmacology long before we know how to pronounce it.

It often begins with a simple paracetamol, famously known as Panadol, for a headache; an antihistamine for an allergy; or a cough syrup when the cough seems determined to outlast your patience. Many of us start the day with coffee (yes, caffeine is technically a drug), add a vitamin C after breakfast for that "just in case," and end the evening with something for heartburn after gobbling dinner like a pro. Without realising it, we are living in a world quietly supported by pharmacology.

We tend to imagine "drugs" as something dramatic like chemotherapy drips, emergency injections, or complex hospital treatments. In reality, most medicines are far less theatrical. They are the small tablets taken daily to control blood pressure, the inhaler that allows someone with asthma to breathe comfortably, the insulin injections that help regulate blood sugar, and the vaccines that prevent serious disease before it even begins.

Behind each of these is careful science. A drug must be strong enough to work, but not so strong that it causes harm. It must act long enough to be effective, but not so long that side effects linger. It treats the illness while coexisting safely with the rest of the body. Pharmacology is a delicate balancing act between what the drug does to the body and what the body does to the drug[1].

"All things are poison, and nothing is without poison; only the dose makes a thing not a poison"[1]. This principle remains at the heart of pharmacology. A medicine that heals at one dose can harm at another. Even everyday foods can cause problems when taken excessively. The difference between remedy and risk often lies not in the substance itself, but in the amount.

Medicines are not limited to prescriptions. Herbal products, supplements, and even certain foods can influence how drugs behave. Mixing medications without proper advice may create unintended consequences. Taking "just a little extra" because the pain has not gone away can turn something helpful into something harmful. Stopping a long-term medicine abruptly because "I feel better now" may bring surprises no one asked for.

In an era where information is easily accessible and medications are readily available, responsible use becomes even more important. Asking simple questions like, What is this for? How should I take it? What should I watch out for? can make a meaningful difference. Medicines are powerful tools and work best when used with knowledge and care.

As a pharmacologist, I often remind both patients and students

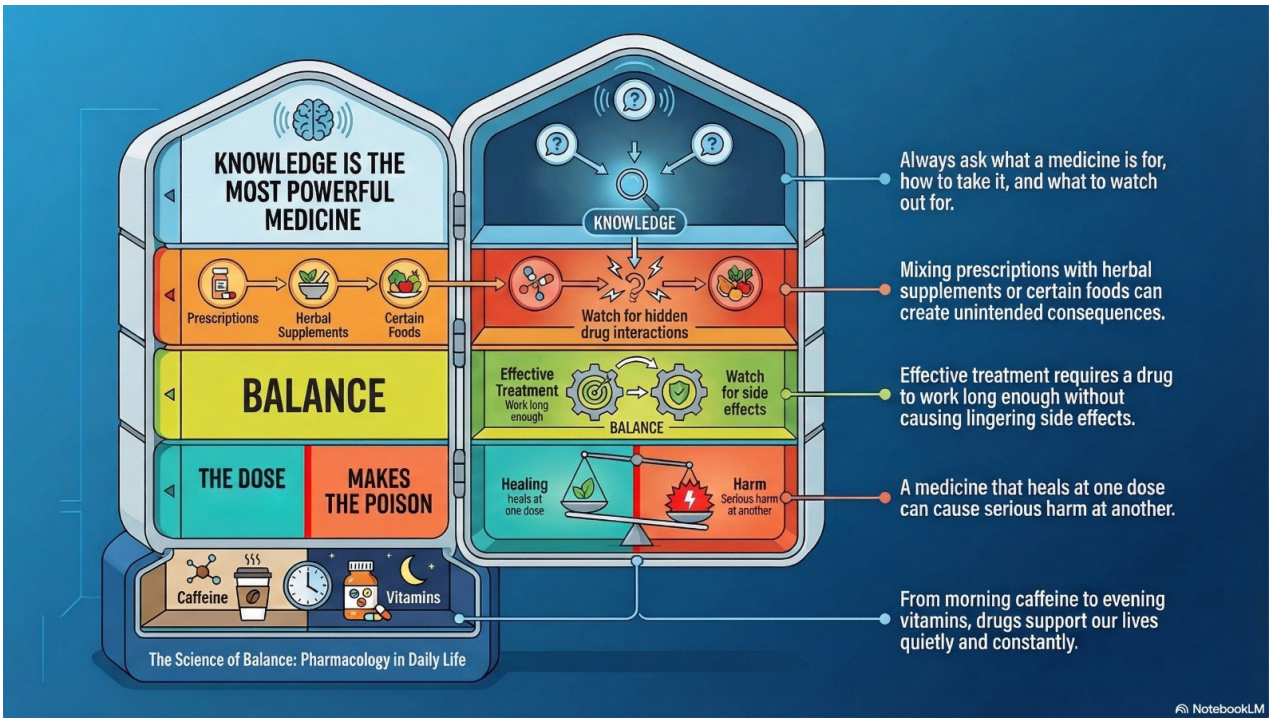

Image generated by NotebookLM

that medicines are not merely substances to be consumed. They are carefully designed interventions. Understanding why you are taking a medicine, how it works, and what to expect transforms treatment from passive consumption into informed healthcare. The most powerful medicine, in many cases, is knowledge about the medicine itself.

For those seeking reliable information, it is important to turn to trusted sources. Patient-friendly drug information can be found through organisations such as MedlinePlus[2]. Online interaction checkers, such as Drugs.com[3], can help identify potential drug-drug or drug-food interactions. Locally, the National Pharmaceutical Regulatory Agency (NPRA)[4] provides information on registered medicines and medication safety updates. Nevertheless, online resources should complement, not replace, advice from qualified healthcare professionals.

Pharmacology may sound like a complicated academic subject, but at its heart, it is deeply practical and profoundly human. It exists to reduce suffering, improve daily living, and prevent future illness.

So the next time you reach for a medication or even your morning coffee, you might smile and remember that pharmacology is already part of your daily routine.

References:

1. Rang HP, Ritter JM, Flower RJ, Henderson G. Rang & Dale's pharmacology. 9th ed. Philadelphia: Elsevier; 2020.
2. U.S. National Library of Medicine. MedlinePlus: drug information [Internet]. Bethesda (MD): National Library of Medicine; [cited 2026 Mar 5]. Available from: https://medlineplus.gov/druginformation.html
3. Drugs.com. Drug interactions checker [Internet]. Auckland (NZ): Drugsite Trust; [cited 2026 Mar 5]. Available from: https://www.drugs.com/drug_interactions.html
4. National Pharmaceutical Regulatory Agency (NPRA). NPRA Malaysia: medicines safety and regulatory information [Internet]. Petaling Jaya: Ministry of Health Malaysia; [cited 2026 Mar 5]. Available from: https://npra.gov.my