WHAT IS A MEDICATION ERROR?

A medication error is defined as “any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health-care professional, patient, or consumer” (1). Medication harm accounts for more than half of the overall preventable harm in medical care globally, with an estimated annual cost of €4.5–21.8 billion in Europe (2).

In Europe there is great variation in terms of the scale and nature of this harm. The rate of medication error in hospitals ranges from 0.3% to 9.1% in prescriptions, from 1.8% to 2.1% at the dispensing stage (3).

References
WHAT ARE THE COMMON MEs?

Several different types of MEs are possible. These can relate to drug prescription or administration, timing, communication, human error, among others.

25%

25% of patients with type 2 diabetes suffered at least one drug error, mostly due to prescribing a wrong dose (6).

MOST COMMON MEs

Examples of the most common types of MEs reported are incorrect dosage (34.7%), omission of a dose (40.0%), and wrong administration speed (7).

WHY DO MEs OCCUR?

• MEs can occur due to weak medication systems, human factors such as fatigue, or poor work conditions such as heavy workload and staff shortages (8).

• Health-care staff directly or indirectly involved in such adverse events, also referred to as the “second victims”, may suffer from serious emotional harm as a result.

WORK LOAD

Heavy workload and lack of health-care personnel contribute to more than 20% of MEs, according to estimates (3).

MENTAL HEALTH

It is estimated that more than 1 in 10 nurses suffering from mental and psychosocial health disorders have been involved in an adverse event with serious consequences for the patient, mainly during the COVID-19 pandemic (9).

References


WHO Office on Quality of Care and Patient Safety (Athens, Greece)
**WHEN DO MEs OCCUR?**

MEs can happen at any of the following stages – during prescription, transcription, preparation, dispensing, administration and/or monitoring.

**29%**

29% of patients have unintended medication discrepancies (UMDs) and MEs at admission or at discharge from hospital (10).

**ERRORS**

Distribution of errors in one country by phases of medicine use has been reported as: prescribing (21.3%), transcription (1.4%), dispensing (15.8%), administration (54.4%) and monitoring (7.0%) (3).

**WHAT CAN BE DONE TO PREVENT MEs?**

WHO recommends prioritizing the following three areas to avoid MEs and to protect patients from medication harm (11).

**High-risk situations:** understanding situations where evidence shows that there is a higher risk of harm from particular medicines is key. Tools and technologies may help health-care professionals who use high-alert medications, and also enhance patient knowledge and understanding of these medications.

**Polypharmacy:** the standardization of policies, procedures and protocols is critical in the case of poly-pharmacy. This is applicable from initial prescribing practices to regular medication reviews. Technology can also serve as a useful aid by enhancing patient awareness and knowledge about the medication use process.

**Transition of care:** transition of care increases the possibility of communication errors, which can lead to serious MEs. Good communication is vital, including a formal comparison of medicines pre- and post-care, so-called medication reconciliation.

**ADDITIONAL WHO RESOURCES**


