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Short Communication

Factors Contributing to Medication Errors

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DESCRIPTION

Medical errors, including medication errors, have raised concerns about drug safety. Due to the high consumption and self-medication of medicines by all, especially the elderly, the correct use and safety of medicines is at the forefront of public health concerns worldwide. Countries have different approaches to drug incident surveillance in accordance with their own health systems. This white paper highlights the efforts and aspirations of several countries around the world to create efficient error reporting systems to ensure public safety.

Our analysis indicates that established and effective medication surveillance systems exist in many developed countries. Different countries carry out activities ranging from collecting information on prescriptions, to interviewing physicians about side effects of medicines, to conducting sophisticated post-market surveillance. Such sophisticated systems are still needed in India [1]. Recently, however, there have been promising developments in building medication monitoring systems. The development of these systems could ultimately contribute to a global medication surveillance system that could mitigate medication errors and safety concerns.

Medication error terminology can be confusing due to overlapping definitions. An error may be an act of duty or omission. Defined as “errors that occur in the course of drug use,” it focuses on problems in administering drugs to patients [2]. Importantly, some medication errors harm patients, but most do not such as “near misses”. In fact, a study of the frequency of medication errors found that less than 1% of medication errors lead to adverse drug events. Examples of medication errors include giving the wrong patient medication, giving the wrong dosage, not prescribing an ordered medication, entering an order for the wrong patient, or missing an expired medication [3]. Drug safety also called pharmacovigilance focuses on the safety and regulation of drugs themselves. Science and activities related to, understanding, and prevention are defined as "problems related to".

Adverse events are defined as “adverse results that are attributed to the efficacy of a drug with a certain probability”. Adverse drug events may or may not be due to medication errors. For example, if a patient is on antibiotics for the first time and develops a skin rash, this is an adverse drug event not caused by a medication error. Conversely, if a patient is known to be allergic to an antibiotic and is given that drug, the rash that occurs is a medication error adverse event [4]. An avoidable event that may result in improper use of medication, harm to the patient while under control. Errors can occur during prescribing, dispensing, solution preparation, administration, or monitoring. Many adverse drug reactions would be retroactively considered "avoidable" if done more cautiously or proactively. In other words, what one prescriber sees as an adverse ADR may be another prescribing error.

Medication errors are very common. Medium-sized hospitals issue and manage thousands of prescriptions every day. A recent study in the UK suggests that between 7% and 9% of hospital prescriptions are in error and mostly written by young doctors [5]. Common hospital prescribing errors include drug omissions specifically, failure to prescribe regular drugs at admission or discharge, i.e., "medication matching", medication errors, unintentional prescribing, and improper documentation [6].

CONCLUSION

There are many different types of medication errors, and the consequences depend on the error made. For example, prescribing a drug that may interact with other drugs a patient is taking may introduce the risk of new or more serious side effects. In other situations, prescribing the wrong medicine can cause the patient not to receive the intended treatment and, as a result, worsen the patient's condition.

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