EFFICIENCY OF MEDICATION ERRORS REPORTING IN IMPROVING PATIENT CARE; REVIEW

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Abstract:
An effective method for reporting drug errors is essential for ensuring trustworthy medical practice and serves as an indicator of progress in achieving safety. The focus on enhancement initiatives and system adjustments in drug mistake reporting systems should be on minimizing the probability of harm to future patients. Nevertheless, the purpose of this study is to offer a comprehensive assessment of the significance of reporting medication mistakes and its potential to enhance patient safety outcomes. Electronic databases were search through the literature for studies that address medication error reporting and its influence on patient safety and healthcare system promotion. Disclosing prescription errors, which can result in warnings, and encouraging the spread of an attitude of safe practice are all benefits that can be gained via reporting. Increasing the dependability of the system may be accomplished by combining and contrasting data from a variety of sources of information, which also promotes the spread of an environment that values safe workplace practices.

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Introduction:

A medication error (ME) refers to any avoidable incident that has the potential to result in improper drug usage or injury to the patient, occurring when the medicine is being managed by a healthcare professional, patient, or consumer [1]. These mistakes can occur at any stage of the drug delivery process, ranging from prescription to drug administration, and at any location where pharmaceuticals are given [1].

The National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP) provides a definition of a ME as an avoidable incident that has the potential occurring when the medication is under the supervision of a healthcare professional or patient as result in improper medication usage or harm to the patient. These occurrences can be associated with processes, medical supplies, professional conduct, as well as systems including prescription, order transmission, dispensed medication monitoring, labeling of products, distribution, the process of compounding administration, naming and the packaging, education, and utilization [2]. These instances are associated with various aspects of healthcare, including the production and distribution of medical supplies, procedures, ethical practices, and the management of medications. This encompasses activities such as naming and packaging, storage and distribution, prescription and transcription, documentation and review, preparation and labeling, education, dispensing, and finally, administering drugs and evaluation [2,3]. ME significantly affect the health of people, organizations, and medical facilities. As to a research from NCCMERP, pharmaceutical errors are the sixth leading cause of death in the United States. Approximately 5-10% of the reported drug errors are considered hazardous [2].

This review was conducted in purpose to address the importance of medication error reporting in promoting the patient safety and avoiding or hazarders on healthcare system.

Overview:

The objective of pharmacological therapy is to attain optimal therapeutic results and enhance the patient's quality of life. Regrettably, therapeutic administration of medications has risks, such as adverse drug responses and prescription mistakes [4]. Medical errors (ME) have profound consequences for patient safety, as they can occur at every stage of medicine usage, including placing an order, authorization, dispensed medication and administration. Error identification reveals and exposes mistakes, hence promoting a culture of safety [5].

ME are characterized as inadvertent errors, whether due to oversight or deliberate action. Medical errors can be categorized as either errors of execution or errors of planning. Errors of execution refer to the failure to successfully carry out a deliberate action, while errors of planning involve the use of an inappropriate plan to achieve a goal. Another type of medical error is when there is a deviation from the standard process of care, which has the potential to impact the patient [5].

In March of 2017, the World Health Organization (WHO), published an article titled "pharmaceutical Without injury, WHO Global Safety for Patients Challenge" to accelerate efforts in minimizing the negative effects of patient injury caused by hazardous pharmaceutical practices carried out by healthcare professionals [6].

Earlier study [1] that was conducted as A pre-test, post-test research was done on all hospitalized patients at a 177-bed medical center, where the clinical pharmacist watched all drug operations in each ward. The data revealed that the incidence of medication mistakes was greater during the ordering/prescription stage, accounting for 38.1% of the total errors, whereas the administration phase accounted for 20.9% of the errors. Approximately 45% of mistakes were experienced by the patients, with 43.5% being non-threatening and 1.4% resulting in injury. 7.7% of the cases were identified as possible mistakes, while over 47% had the potential to be avoided. Following the therapy, the error rates experienced a drop from 6.7% to 3.6%.

ME reporting platforms serve as a fundamental instrument for retroactive drug safety risk control in several healthcare organizations, since they offer information on events that have taken place. Nevertheless, these processes may deteriorate if sufficient safeguards are not implemented to provide a conducive atmosphere for reporting medical errors [7].

The most important members of the medical staff in the healthcare industry are registered nurses. They are the primary caretakers for patients and play an essential part in the prevention and identification of adverse events in patients. Due to the fact that they are directly engaged in the administration of the great majority of the drugs that are ordered in hospitals, their involvement in the reporting of medication administration errors (MAEs) are quite important [7].

In the health care system across the world, infectious diseases are the greatest source of

unnecessary patient damage, and nurses are among the most significant contributors to the development of infectious diseases [8]. According to the findings of a comprehensive study conducted by Ferrah, Lovell, and Ibrahim [10], the incidence of MEs among nurses ranges from 16 to 27 percent. According to the findings of Al-Worafi [9], the incidence of MEs is 39% among physicians, 38% among nursing staff and 23% between pharmacists at the same time.

Because of the alarming nature of these numbers, nurses who report MAEs inside the healthcare system will contribute to an improvement in root cause analysis. The determination of the precise causes of MEs will result from this, and as a result, real remedies will be provided to limit the amount of damage that patients experience as a result of medicine. It is particularly vital for nurses to disclose medication errors since nurses are the final safe check in the series of events that occur throughout the process of administering drugs, and they are the one who is responsible for ensuring the patient's wellness [8].

The absence of medical recording systems in many hospitals is known to be a contributing factor in the large proportion of medication mistakes that are not reported across all healthcare organizations [5]. This is another problem that has to be addressed. Despite the fact that the reporting of medication errors provides data that may be utilized for the purpose of finding areas in which patient safety can be improved, the development of patient safety is hampered, and the absence of formal reporting is widely acknowledged [10].

Therefore, several preventive programs were created to monitor mistakes targeting causes and/or influencing variables of medication errors [7]. These programs were executed by utilizing well defined establishment-wide reporting procedures to identify the potential origins of medication errors [7,8].

Conclusion:

Errors in medication are a widespread issue that impose a significant strain on healthcare systems. These errors may frequently be avoided by putting into practice preventative measures that are both effective and efficient. One of the most important aspects to consider when evaluating the efficiency of the reporting system is the degree to which the information that is obtained is properly utilized to improve the safety of each individual patient. A medication error disclosing program that is successful will have the following characteristics: it will be safe for the person who is reporting the error, it will provide helpful recommendations and improvements that are beneficial, it will involve everyone, and it will be backed by the necessary resources. An opportunity to collect data for the purpose of conducting an analysis of the root causes of mistakes is made available via the institutionalization of an appropriate method of reporting for ME reporting. By concentrating on the system rather than the individual, this will further improve the effectiveness of a systems approach to dealing with the challenges and concerns associated with MEs.

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