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Role of Pharmacovigilance centre in Detection and Prevention of Medication Errors

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Commentary

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Discovery of Medication errors needs cooperation between different associations, such as patient safety organizations, Pharmacovigilance centre etc [1]. Pharmacovigilance centre focus on detect, identify, analyse, and allocate medication errors and carry out causality analysis, which is an important tool in avoiding medication errors [2-4].

The roles of Pharmacovigilance in preventing medication errors include informing medical professionals concerning the importance of reporting Errors and making a culture of patient safety [5-8]. Pharmacovigilance aims to avoid medication errors collaborating with poison control management. Such collaboration gives enhanced detection and enhanced preventive methods. In addition, collaboration with regulatory authorities is vital in finalizing decisions [9].

Medication errors are a threat to patient safety. These errors account for prolonged hospitalisations, additional medical interventions, morbidity and even death. Hence it is a preventable and needless strain to both patients and hospitals [10-13]. Medication error is nothing but failure in the treatment method that results in or has the potential to harm to patients and also include the Dosage, Route of administration, Prescribing, Compounding, and dispensing of drugs [14,15].

Medication error could be a deviation from the physician's medication order as written on the patient's chart. Mostly in hospitals medication errors occur as a result of errors in Prescription order and treatment method. Hospitals maintain the Medication Error reporting system [16-18]. There are some reporting strategies such as "Incident report review, review of patient charts, direct observation and interventions by pharmacists to prevent Medication errors [19].

Pharmacovigilance centres place major role in minimizing the risks of adverse drug reactions and has an increasing specialize on detecting and prevention of Medication errors. Pharmacovigilance carry out a retrospective analysis of ADRs from the patient's history, by applying the preventive ways to discover preventable ADRs [20].

Pharmacovigilance centres providing coaching courses and seminars to all health care professionals and practitioner for increasing the attention on the importance of reporting of adverse events, Medication errors and on the use of preventive ideas to analyse ADRs [16,21]. Pharmacovigilance specialize in the way to collect and investigate ADR reports, the fields that are necessary for optimal capture of adverse

events due to MEs either already exist in the Pharmacovigilance ADR reporting forms, or can be easily added to the forms [22].

Special skills are required and should be created available at the Pharmacovigilance centres for assessing the causative relationship between the medication and the adverse reaction, and for assessing the preventability of an adverse event [23]. Effective communication between PVC employees, Health care professionals, and patients is of paramount importance for collective learning to avoid MEs and to improve patient safety [24].

Medication safety is the main aspect of patient safety that bridges the patient safety and Pharmacovigilance activities. Detecting the Medication Errors and finding their root causes are the primary steps in establishing prevention strategies to avoid their reoccurrence [25]. Medication errors can be identified by

1. Individual case safety reports
2. The yellow card and other individual reporting forms
3. Detecting medication errors in practice. Eg: Incident reports, Patient history review, etc.
4. Reporting Medication errors eg: Incident date, Error description, name of the drug involved etc.

In order to understand the cause of Medication error, the review and analysis of ME incident reports should be required. The error occurred by wrong dilutions in the medication as done by a nursing intern. Some few explanations behind this might be extra time working, under trained staff, unsupervised nursing assistants, complicated and unclear protocols, interpersonal correspondence gap between health care professionals furthermore poor availability of ideal resources [6,9,26]. Pharmacovigilance centers should alert health care professionals in regards to the significance of reporting medication errors by bulletins and Journals.

Adverse drug reactions might be occur because of improper use of dosage, over dose, or patient's previous health history etc. however among all those, Medication errors are important cause for adverse drug reactions those will be preventable [27].

Conclusion

The role of Pharmacovigilance centres in preventing adverse events and medication errors include alerting healthcare professionals to the significance of reporting such medication errors, making them aware of the factors that cause them, supporting them to improve a safety culture that leads to enhanced awareness, and stressing the need for commitment among healthcare professionals in avoiding medication errors and enhancing patient care.

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