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REVIEW ARTICLE ON ROLE OF PHARMACIST IN ADR MONITORING

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ABSTRACT

ADRs are a significant concern in healthcare, causing morbidity, mortality and increased healthcare costs. Pharmacist play a vital role in ADR monitoring, ensuring patient safety and optimizing therapy. Integration of pharmacists into healthcare teams is essential for optimizing patient safety and therapy outcomes.

KEYWORDS: Adverse drug reactions, pharmacist, patient safety, medication monitoring, pharmacovigilance.

INTRODUCTION

When treating patients with drug, the goal is to utilize the most effective agent to treat a condition while minimizing hazards of therapy. These hazards are usually known as adverse drug reactions (ADRs). WHO defined ADRs as unintended and undesired harmful effects of agents administrated at doses normally used in humans for diagnostic, prophylactic, therapeutic use or for the modification of the physiological function.[1]

Spontaneous reporting system (SRS) is the most widely used system globally to report adverse reactions by health care professionals, drug companies, or patients themselves to the national authorities regulating PV activities in the country.[2] SRS could improve the safety profile of a particular drug by detecting and reporting ADRs that may not have been detected during premarketing clinical trials or even during post-marketing surveillance.[3,4]

ROLE OF PHARMACIST IN ADR MONITORING

The role of pharmacists in ADR reporting has evolved over the past decade but still vary

geographically.[5,6] The variation in the role of pharmacists in PV activities can be explained by the variations in pharmacists' role within health care system across the globe from mere "dispenser" to the guardian of drug safety and patient outcomes. As the role of pharmacists within the health care systems continues to evolve, their role in ADR reporting is getting recognized. Research evidence shows that recruitment of pharmacists in public hospitals can not only detect and report ADRs but also prevent ADRs and reduce associated humanistic and financial costs.[7,8] This could be explained by the fact that pharmacists with a clinical background have greater awareness about ADR reporting system and are frequently engaged with prescribers.[9] Furthermore, regular contact with the patients coupled with the access to patient's medical records allow clinical pharmacists at the hospitals to develop a better understanding of the suspected ADRs.[10]

ROLE OF PHARMACIST IN REPORTING ADR

ADR reporting by pharmacists is a crucial part of the drug safety process.[11] Thanks to a pharmacy-based ADR reporting system, the number of ADR reports increased 8-fold through in the United Kingdom (UK).[12] The ADR reporting by hospital pharmacists significantly enhanced the UK Yellow Card Scheme, the nation's PV programme.[13]

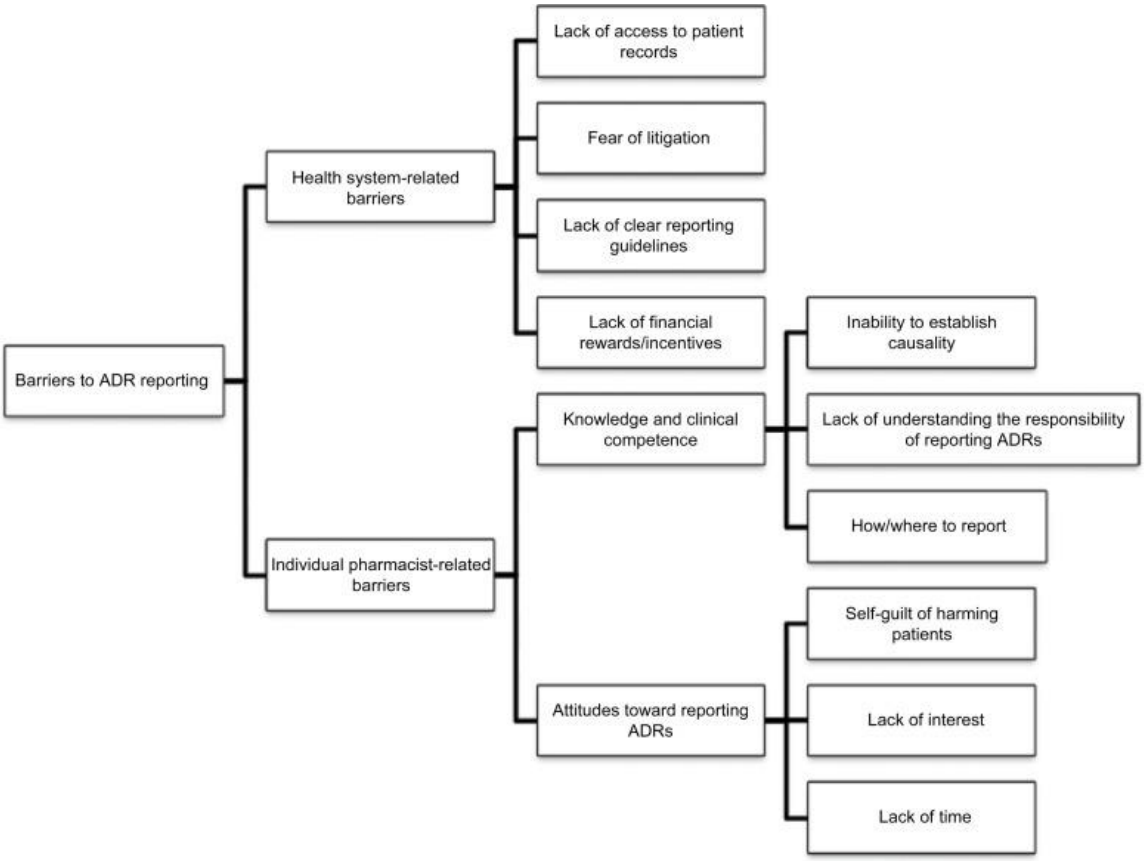
Spontaneous reporting of suspected ADRs is the key feature of PV.[14] With round the clock observation of inpatients, the hospital setting is very favorable in detecting and reporting the signals for ADRs.[15]

Under-reporting of ADRs is a cause to concern.[16,17] ADR under-reporting could be decreased through educational interventions.[18] Providing customized trainings and educational sessions would help to improve ADR reporting. It has also been suggested that a hospital written policy on PV would certainly add value in the process of detecting and reporting ADRs.[19] Hospital pharmacists should be taught with the value of ADR reporting which would alter their attitude towards a social responsibility.[20,21]

BARRIERS TOWARDS ADR REPORTING

With round the clock observation of the inpatients, the hospital setting is very favorable in detecting and reporting the signals for ADRs With round the clock observation of the inpatients, the hospital setting is very favorable in detecting and reporting the signals for ADRs Given that both community and hospital pharmacists can play an important role in ADR reporting, a number of studies have been conducted globally to evaluate knowledge,

attitudes, and practices of pharmacists toward ADR reporting with an aim to identify knowledge, attitudes, practices, and barriers to ADR reporting, so that appropriate interventions can be designed and implemented to overcome these barriers.[22,23]



The uncertainty of pharmacists toward ADR reporting could have been influenced by their lack of awareness about ADR reporting. Furthermore, pharmacists may be reluctant to report minor reactions and would only report an ADR once they have established the association of the ADR with the suspected drug.[24]

STRATEGIES TO IMPROVE ADR REPORTING

As a broad principle, strategies for improving ADR reporting should be targeted both at the health care system level and individual pharmacist level. In addition to encouraging pharmacists to report ADRs, their knowledge and skill deficits in detecting and reporting ADRs should also be fulfilled through continuous professional development programs.[25,26]

On health-system level, to engage community pharmacists more in ADR reporting, providing community pharmacists with access to patient's medical and medication history will enable pharmacists to establish ADR causation and report ADRs as inability to establish causation

deter pharmacists from reporting ADRs. Research evidence suggests that electronic ADR tools can also improve spontaneous reporting of ADRs.[27,28]

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