

Strategies for improving documentation and reducing medication errors related to drug allergy

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Abstract New technologies like computerized physician order entry systems, that includes a support alert for drug allergies, can be an effective tool to prevent medical errors related to drug hypersensitivity most of them caused by lack of documentation and information.

Keywords Computerized physician order entry · Drug allergy · Medication errors

Khalil et al. [1] in their article highlight the importance of the acknowledged drug allergy of the patients at the time of prescribing and administrating drugs. It is estimated that Adverse Drug Reaction (ADR) affect 10–20% of hospitalized patients, and one in four of ADR can be classified as allergic or pseudo-allergic reactions [2].

Every day, hospitals admit patients who self-report allergies but only 6–10% of them actually have drug allergies. The fact that hypersensitivity reactions to a drug are not always properly documented or transferred is cause of an increase of medication errors, morbid-mortality and costs especially in events originated by antimicrobial agents [3].

We agree with Khalil et al. that many preventable medical errors related to drug allergies are mainly caused by lack of drug allergy information, and the importance of acknowledged allergy status of the patient at the time of

prescribing and communicating information between healthcare professionals.

In this context, new technologies like computerized physician order entry (CPOE), that includes a support alert for drug allergies, can be an effective tool to prevent these types of prescription errors. There are many associated benefits to CPOE rather than handwritten system for pharmacological prescriptions. These may include: (1) improving communication between healthcare professionals (physicians, nursing staff and pharmacists) and better flow of information, (2) avoiding forgetfulness because the program requires completion of allergy boxes prior to start with pharmacological prescriptions, (3) warning the physicians when prescribing a drug to which the patient is allergic, (4) providing information about cross reactions, alternative treatments and costs (5) avoiding illegible handwritten prescriptions (6) preventing misspelled drug names that can lead to incorrect identification, among others [4].

In our experience, according to data collected in the pharmacy department, after implementation of this technology in the hospital (1,400 bed large hospital) there was a significant reduction of medication errors associated to drug allergy documentation compared to those when physicians used manual prescriptions. Nevertheless, few data are available concerning patterns of the effect of this prescription system on these type of medication errors, but mostly agree with us [5].

Comprehensive documentation about drug allergies is indispensable to reduce medication errors related to drug allergies. CPOE can contribute to prevent these fails and improve the accuracy and the quality of allergic patients care as well as polices of multidisciplinary collaboration among all health professionals.

Conflicts of interest None.

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