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ORIGINAL ARTICLE

Quality of Home Medication Collection in the Emergency Department: Reconciliation Discrepancies☆,☆☆

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KEYWORDS
Reconciliation;
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Home medication;
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Abstract
Introduction: The objective of the study was to assess home medication data collected at the emergency department in a tertiary hospital. It also aimed to identify whether any possible deficiencies in this collection were translated as reconciliation errors on admission, to analyse and classify these data and identify the pharmacological groups involved.
Methods: A prospective observational study was carried out which analysed the pharmacotherapeutic data collected at the emergency department. Patients who were admitted to the Pneumology and Internal Medicine wards at the Miguel Servet University Hospital in Zaragoza were included. A list of the home drugs taken before the hospital stay was compiled, assessing whether the quality deficiencies in data collected in the emergency department translated as reconciliation errors at admission. Unjustified discrepancies were considered and classified in line with the criteria of the consensus document on terminology, classification and assessment of the drug reconciliation programmes for 2009.
Results: We included 136 patients, finding reconciliation errors in 86.8%. The total number of reconciliation errors found was 519. The most frequent types were: omitting a drug, missing dose information, missing administration frequency information. Almost 40% of the reconciliation errors found in the Internal Medicine ward were not resolved, which was double to that of the Pneumology ward. Most discrepancies were found for the Digestive System and Metabolism group (24%).
Conclusions: The percentage of patients that experienced reconciliation errors was high (86%), observing an important opportunity to improve at patient admission to the emergency department.

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PALABRAS CLAVE
Conciliación;
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Urgencias

Calidad de la recogida de la medicación domiciliaria en urgencias: discrepancias en la conciliación

Resumen
Introducción: El objetivo del estudio fue valorar la calidad de la recogida de información de la medicación domiciliaria en el servicio de Urgencias de un hospital de tercer nivel, e identificar si las posibles deficiencias en esta recogida se tradujeron en errores de conciliación al ingreso, analizar estos y clasificarlos, así como identificar los grupos farmacológicos implicados.
Métodos: Se realizó un estudio observacional prospectivo en el que se analizó la información farmacoterapéutica recogida en el servicio de Urgencias. Se incluyeron los pacientes que ingresaron en la Unidad de Neumología y de Medicina Interna del Hospital Universitario Miguel Servet de Zaragoza. Se elaboró un listado con la medicación domiciliaria del paciente antes del ingreso, y se valoró si las deficiencias de calidad en la información recogida en urgencias se tradujeron en errores de conciliación al ingreso. Se tuvieron en cuenta las discrepancias no justificadas y se clasificaron siguiendo los criterios del *Documento de consenso sobre terminología, clasificación y evaluación de los programas de Conciliación de la Medicación 2009*.
Resultados: Se incluyeron 136 pacientes, hallando errores de conciliación en el 86.8%. El número total de errores de conciliación encontrados fue 519. Siendo los subtipos más frecuentes: omisión de algún medicamento, falta de dosis y falta de frecuencia de administración. Cerca de un 40% de los errores de conciliación encontrados en el servicio de Medicina Interna no fueron resueltos, el doble de los encontrados en el servicio de Neumología. El grupo farmacológico en el que se encontraron más discrepancias fue el de aparato digestivo y metabolismo, con un 24%.
Conclusiones: El porcentaje de pacientes con errores de conciliación es elevado (86%), observándose una importante oportunidad de mejora al ingreso de los pacientes en el servicio de Urgencias.

Introduction

The Institute for Healthcare Improvement (IHI) defines medication reconciliation as a formal process to compile a list of all the medications a patient is taking before admission, and comparing it with the doctor's admission, transfer and discharge orders.[1] Discrepancies found should be reported to the prescriber, and where appropriate, should be corrected. The changes made should be appropriately documented and communicated to the following health provider and the patient.

In 2007, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) acknowledged that reconciliation errors compromise the safety of drug use and recommended hospitals to develop a system for obtaining patients' complete pharmacotherapeutic records, to ensure they receive the necessary drugs for the new situation.[2]

In the *Documento de consenso sobre terminología y clasificación en Conciliación de la Medicación*[3] (Consensus document on terminology, classification and assessment of the drug reconciliation programmes) endorsed by the Spanish Society of Hospital Pharmacy, discrepancies are defined as any difference between the chronic medication that the patient was taking before admission and the medication prescribed in the hospital. One discrepancy does not necessarily mean an error. In fact, most discrepancies are due to adapting chronic medication to the patient's newly diagnosed condition, or because the examinations and/or interventions performed could interfere with their usual medication. However, there are often differences that do constitute errors in the healthcare process, which could affect the patient's pharmacotherapeutic results.

Performing tasks that promote an adequate reconciliation has proven to be a powerful strategy for reducing medication errors when a patient's healthcare level changes. Over a period of 7 months, Whittington and Cohen[4] found that a series of interventions for a 7-month period, including medication reconciliation, would reduce medication errors by 70% and the frequency of adverse effects by 15%. Within this framework, the supplementary pharmacist programme was started in the region of Aragón in 2007. It involved two Hospital Pharmacy Specialists who develop medication reconciliation activities upon admission and discharge and various pharmacy-care tasks for the patient.

The aim of the study was to assess home medication data collected at the emergency department in a tertiary hospital. It also aimed to identify whether any possible deficiencies in this collection were translated as reconciliation errors on admission, to analyse these data and classify them, and to identify the pharmacological groups involved.

Methods

A prospective observational study was carried out, which analysed the pharmacotherapeutic data collected upon admission at the emergency department.