**Results** Drugs dispensed by ADSs represent 60% and 71.6% respectively of total medicines consumed in ICU and ED.

Four years after implantation:

- The quantity of drugs dispensed and drug stock has decreased in both units.
- The pharmacy department knows the type and amount of medicines to be found in each unit and in real time.
- The information it provides has helped to improve patient safety in relation to a better quality of prescription.

Since the implementation of ADSs, consumption has decreased compared to 2007:

Reduction in cons	umption in the Intensive Ca	are Unit from 2007 to:	
2008	2009	2010	2011
-12.52%	-16.86%	-20.25%	-40.65%
Consume reduction	on in the emergency depart	ment from 2007 to:	
2008	2009	2010	2011
-1.49%	-14.94%	-29.18%	-40.79%

**Conclusions** The implementation of ADS has meant an estimated saving of 938,330€.

The ADSs have increased drug control by the pharmacy department, have achieved a better rationalisation of resources and have improved efficiency in drugs use.

No conflict of interest.

## DSL-011 EFFICACY AND SAFETY OF EPOETIN ZETA IN DIALYSIS **PATIENTS**

doi:10.1136/ejhpharm-2013-000276.254

<sup>1</sup>J Bajraktar, <sup>2</sup>B Lazarova, <sup>3</sup>E Najdovska, <sup>2</sup>L Mihajlova. <sup>1</sup>Institute of nephrology, Hospital Pharmacy, Struga, FYROM; <sup>2</sup>Clinical Hospital, Hospital Pharmacy, Stip, FYROM; <sup>3</sup>Clinical Hospital, Hospital Pharmacy, Bitola, FYROM

Background Anaemia in chronic kidney disease (CKD) remains one of the predictable and modifiable non-traditional cardiovascular risk factors. Epoetin zeta, which is a biosimilar product, is used in the treatment of anaemia associated with chronic kidney disease.

**Purpose** This study was performed to evaluate the efficacy and safety of the biosimilar product epoetin zeta to maintain stable haemoglobin levels in dialysis patients.

Materials and Methods This study was conducted in 2 dialysis centres with 33 patients. Before the study 30 of the 33 patients were on various erythropoiesis-stimulating agents (ESA). After a run-in period of 2 months, all patients were switched to epoetin zeta and were followed for 6 months. The initial weekly doses as well as the frequency of use per week were kept constant (1–3 times/week). During the follow-up, haemoglobin levels, iron status, dialysis efficiency, body weight and adverse events were monitored at least once a month

Results 33 patients were treated with biosimilar Epoetin zeta (27 men and 6 women); average age 59.1 (28-76) years; the frequency of used was 1-3 doses/week subcutaneously, over a period of 6 months. Dosing was to be adjusted to keep the Hb levels within 10.5-12 g/dl. Anaemia management and iron supplementation were at the discretion of the investigator and was to be in compliance with the current label. Throughout this study epoetin zeta was within the target range for Hb levels (10.5–11.5 g/dl  $\pm$  0.5 g/dl). The main AEs (adverse events) were in 1 patient hypotension (3%), in 1 patient in-dialyzer clotting (3%) and SAE (serious adverse event) was in 1 patient thrombosis of arteriovenous fistula (AVF) (3%). No anti-epoetin antibodies and no clinical signs of pure red cell aplasia (PRCA) were observed in any patients on the study.

**Conclusions** Treatment of anaemia with Epoetin zeta was shown to be effective and safe. The mean Epoetin zeta doses remained stable in patients switched from all pre-study ESAs. The observed adverse events profile was in line with expectations for the study population.

No conflict of interest.

## DSL-012 EVALUATING THE STANDARDS OF HOSPITAL PHARMACIES IN THERAPEUTIC CENTRES AFFILIATED WITH OF KERMANSHAH UNIVERSITY OF MEDICAL SCIENCES, IRAN

doi:10.1136/ejhpharm-2013-000276.255

<sup>1</sup>R Tahvilian, <sup>2</sup>MR Siahi Shadbad, <sup>3</sup>H Hamishehkar, <sup>1</sup>V Aghababa Gharehbagh. <sup>1</sup>Kermanshah University of Medical Sciences, Pharmaceutics, Kermanshah, Iran; <sup>2</sup>Tabriz University of Medical Sciences, Pharmaceutics, Tabriz, Iran; <sup>3</sup>Tabriz University of Medical Sciences, clinical pharmacy, Tabriz, Iran

Background Nowadays pharmaceutical care departments located in hospitals are amongst the important pillars of the healthcare

Purpose To evaluate the quality of hospital pharmacies affiliated to the Kermanshah University of Medical Sciences.

Materials and Methods In this cross-sectional study a validated questionnaire was used which enquired about all the necessary and standard requirements of an ideal hospital pharmacy. The questionnaire was filled in by the one of the researchers in all seventeen hospital pharmacies located in the teaching and non-teaching hospitals affiliated to the Kermanshah University of Medical Sciences. Data analysis was done using SPSS (version 17).

**Results** The results shows that in the hospitals observed, 24% of pharmacy environments, 25% of pharmacy store and storage conditions, 49% of storage procedures, 25% of drugs ordering and supplies, 73% of supplies reception (proper procedures followed for receiving supplies), 35% of supplies reception (prompt action taken if deterioration of drugs received is suspected), 23.35% of drugs supplied to patients and finally 0% of stock cards used for inventory control met these standards in full. Several instances of incorrect processes of ordering, receiving, storing and delivering medicines to the patient were detected that have led to wasted money in hospitals and considerable decrease in the quality of medical services.

Conclusions Non-standard space allocation, incorrect ordering, receiving, storing processes and delivery of medicines to the patient were revealed by the questionnaire. These issues may reduce the efficiency and safety of pharmaceutical services and drug administration in hospitals.

No conflict of interest.

## DSL-013 **EVALUATION OF THE LIMITS OF AUTOMATION AND** IMPACT ON DRUG MANAGEMENT AT MOHAMMED V **MILITARY TEACHING HOSPITAL PHARMACY, RABAT, MOROCCO**

doi:10.1136/ejhpharm-2013-000276.256

<sup>1</sup>W Enneffah, <sup>1</sup>B Adouani, <sup>2</sup>S Makram, <sup>3</sup>N Cherkaoui, <sup>1</sup>A Bennana, <sup>1</sup>Mohammed V Military Teaching Hospital – Faculty of Medicine and Pharmacy, Clinical Pharmacy – Therapeutic Chemistry, Rabat, Morocco; <sup>2</sup>Mohammed V Military Teaching Hospital – Faculty of Medicine and Pharmacy, Pharmacy – Pharmacology, Rabat, Morocco; <sup>3</sup>Mohammed V Military Teaching Hospital - Faculty of Medicine and Pharmacy, Pharmacy - Galenic Pharmacy, Rabat, Morocco

**Background** Nowadays, hospitals tend to automate medicines management to increase quality, efficiency and safety of drug dispensing. At Mohammed V Military Teaching Hospital (MVMTH), a centralised Automated Drug Dispensing System (ADDS) was installed at the duty pharmacy. We expect this experience will be decentralised to all hospital services.