Background Over recent decades, the pharmacist’s role has evolved with the development of pharmaceutical care, defined as the active participation of the pharmacist in patient care, in collaboration with the doctor and other healthcare professionals in order to improve the patient’s quality of life. Based on this, we have established a pharmaceutical care programme in an emergency department (ED).

Purpose

1. To describe more frequent pharmaceutical interventions (PIs) in an ED
2. To analyse the rate of acceptance of the PIs and which were accepted.

Materials and Methods

Descriptive-prospective study, for six months, in a University Hospital. All medical prescriptions from the ED were evaluated. If any drug-related problems (DRPs) were detected, the prescriber was notified of a recommendation. The following variables were collected: sex, age, reason for the intervention, DRPs especially adaptation to the pharmaceutical guide used in the hospital (AE), medical service (emergency, medical unit, surgical unit), type of PI, type of DRP, acceptance rate (accepted, not accepted, not assessable). Data was analysed with SPSS vs 5.

Results

The pharmacist reviewed the medical orders of 987 patients. A total of 669 interventions for 320 patients (77 years ±15, 50.3% female) were recorded. The pharmacist carried out an average of 0.7 interventions/patient throughout the study period. PIs/unit: emergency 85%, medical unit 75%, surgical unit 76%.

Interventions by a clinical pharmacist had a major impact on the quality and safety of care provided.

No conflict of interest.

Materials and Methods

A longitudinal and descriptive study of pharmaceutical interventions (PIs) conducted in a Brazilian public hospital specialising in psychiatry with 145 beds, from 5 January to 30 September 2012. The drugs analysed were lithium, levothyroxine, phenytoin, risperidone, clozapine, olanzapine, quetiapine, and ziprasidone. The searches for DIs were done once a week and categorised according to severity (mild/moderate/severe). [4]

Results

134 DIs were analysed in 108 patients. Of the 134 DIs 59.85% were mild; 19.71% moderate and 2.92% severe risk. 1.46% of all prescriptions showed moderate to severe risk and 11.68% showed mild to moderate risk. Of the 134 DIs detected, 59 resulted in a written communication to the physician. The 59 written communications sent to physicians resulted in 25 prescriptions interventions, therefore 34 did not generate a medical intervention. The drugs most frequently involved in an interaction were: lithium (58); olanzapine (44); risperidone (19); levothyroxine (4) and clozapine (7).

Of all 25 prescription interventions, 14 removed the potentially risky drug; in 4 the doctor reduced the dose and the other 7 the appearance of adverse reactions was monitored. In all prescriptions with severe and moderate/severe risk the drug with potential risk was replaced and the number of DIs reduced due to pharmaceutical interventions.

Conclusions

The study demonstrated the importance of pharmaceutical evaluation of potential DIs in prescriptions and provided information for the prescribing physician to increase patient safety. In addition this study showed that potential DIs generally unnoticed by the prescribing physician were detected by pharmaceutical interventions.

References


No conflict of interest.

Background

The ‘Study on patient safety in primary health care’ (AFEAS), published in 2008 by the Spanish Health Ministry declared that 48% of adverse events (AEs) detected in these patients were due to medicines errors (MEs). The Institute for Safe Medication Practices (ISMP) promotes the development of internal systems to report medicines-related incidents in hospitals in order to achieve effective preventative measures.

Purpose

To analyse total errors in an intravenous mixing unit and establish checkpoints to prevent them.

Materials and Methods

Prospective observational study (August–December 2011) which included outpatients who might be exposed to an error with intravenous medicines. The variables were: Wrong drug, original prescription service, prescription type (manual or printed), who detected the error and process error (prescription, validation, preparation or administration). Errors were classified according to severity category and error type based on the