Parents/Caregivers’ knowledge towards medicines administration in paediatrics patients

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Background

The increasing complexity in paediatric patient care emphasises patient safety as a topic of high priority. Parents/caregivers’ lack of knowledge on how to administer extemporaneous formulations in paediatrics can be a potential source of medication errors.

Objectives

The aim of this work was to assess parents/caregivers’ knowledge towards medicines administration in paediatric patients.

Methods

A 2-month cross sectional study was conducted with a convenience sample of paediatric outpatients’ parents/caregivers from four hospitals in Lisbon. A questionnaire was developed to assess knowledge on how to administer the medicine (being either a liquid or a powder formulation), how to measure the dose to be administered, administration schedule, storage conditions, use-by date of the extemporaneous formulation, and adequate behaviour in case of missing a dose or vomiting immediately after taking the medicine. A univariate analysis was performed using SPSS v.19.

Results

Eighty-four individuals participated in the study. The mean (SD) age was 34 (18.6) years, 26.0% were non-Caucasian, 75.3% were married, 46.8% had an average of nine years of education and 50.6% were professionally active.

The mean level of knowledge as assessed by the questionnaire was 53.7%. The lowest levels of knowledge were found for adequate behaviour in case of missing a dose or vomiting after taking the medicine, for which only 10.7% and 20.2% parents/caregivers, respectively, gave the correct answer (Figure 1).

Non-Caucasian parents/caregivers and lower education level were significantly associated with a deficit of knowledge (p<0.05).

Conclusion

Low levels of knowledge were found among parents/caregivers of paediatric patients. Strategies to enhance knowledge, such as promoting short educational programmes at the hospital level, should be considered to improve patient safety.