

Use of analgesic and anti-inflammatory drugs before assistance in a children's first aid unit*

O uso de fármacos analgésicos e anti-inflamatórios prévio ao atendimento em pronto socorro infantil

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ABSTRACT

BACKGROUND AND OBJECTIVES: Drug administration to children is a widely spread practice, however it may lead to several health problems, because in addition to medical guidance it requires attention of parents and caregivers. This study aimed at identifying the prevalence of drug administration in children by their tutors, before medical assistance.

METHODS: This is a quantitative descriptive research involving adults who were escorting children, before medical assistance in a Children's First Aid Unit of a medium-sized city of the *Vale do Paraíba Paulista* in the months of June, July and August 2011, being data recorded by means of a specific form.

RESULTS: Participated in the study 105 adults responsible for the children who reported that 71.42% of children were medicated before medical assistance and only 28.58% have not adopted such practice. Most frequent symptom was fever, present in 40% of participants, and drugs used were paracetamol and dipirone.

CONCLUSION: Our results allow concluding that there has been a high rate of drug administration to children before medical assistance, with predominance of non-steroid anti-inflammatory drugs, which may be noxious to health. It is clear the need for the adoption of measures which favor the access to health services, in addition to the awareness about the risk of administering drugs without medical prescription.

Keywords: Analgesics, Anti-inflammatory drugs, Children, Self-medication.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A administração de fármacos na criança é uma prática amplamente difundida, porém pode levar a inúmeros prejuízos à saúde, pois além da orientação médica, exige atenção dos pais e cuidadores. O objetivo deste estudo foi identificar a prevalência da administração de fármacos na criança, por seus responsáveis, previamente ao atendimento médico.

MÉTODOS: Trata-se de uma pesquisa quantitativa descritiva, envolvendo adultos que acompanhavam as crianças antes do atendimento médico em um Pronto Socorro Infantil de um município de médio porte do Vale do Paraíba Paulista, nos meses de junho, julho e agosto de 2011, sendo os dados registrados por meio de um formulário específico.

RESULTADOS: Participaram do estudo 105 adultos responsáveis pelas crianças que relataram que 71,42% das crianças foram medicadas previamente ao atendimento médico e apenas 28,58% não adotaram essa prática. O principal sintoma citado foi febre, presente em 40% dos participantes, e os fármacos mais utilizados foram o paracetamol e a dipirona.

CONCLUSÃO: Os resultados obtidos permitem concluir que houve um alto índice de administração de fármacos nas crianças previamente ao atendimento médico, com domínio dos anti-inflamatórios não esteroides, fármacos esses que podem causar lesões à saúde. Evidencia-se a necessidade de adoção de medidas que favoreçam o acesso aos serviços de saúde, além da conscientização sobre os riscos da administração de fármacos sem a devida prescrição médica.

Descritores: Analgésicos, Anti-inflamatórios, Automedicação, Criança.

INTRODUCTION

The association of self-medication and fewer visits to physicians, as well as less expenses with drugs, favor the replacement of formal health assistance by this practice¹.

The habit of self-medication may bring damages to patients' health, such as the appearance of undesirable effects, worsening and masking of diseases, pharmacological

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largely involved with such practice².

Safe administration to children poses a series of problems which are not found when drugs are administered to adults, widely varying according to age, weight, body surface area, capacity of absorbing, metabolizing and excreting them. Different from adult drugs, there are few standardized pediatric dose ranges; for this reason, and with few exceptions, substances are prepared and packaged with mean values for adult doses³.

Drug consumption pattern in Brazil is strongly influenced by the lack of control throughout the distribution chain, since production to commercialization, leading to abusive and irrational use of over-the-counter products and even of those needing medical prescription. As a consequence, there is growth in the number of intoxication and poisoning cases, which suggests inadequacies in production, circulation or use of pharmaceutical products⁴.

Among different self-medication methods there are: acquiring without prescription, sharing with other family members or social cycle, using prescriptions leftovers, reusing old prescriptions and non-complying with professional prescription by prolonging or early interrupting it¹.

Since 1970, there has been increasing concern with the safety of some products or drugs potentially noxious for children, determining that they should be commercialized in adequate packages and with this the incidence of children poisoning is significantly decreasing. However, even with such advances, poisoning is still a significant health concern and most cases are seen in children below six years of age³.

This study aimed at identifying the prevalence of drug administration to children, by their tutors, before medical assistance.

METHODS

This is a quantitative descriptive research. The study was carried out with tutors of children before they were assisted in a Children's First Aid Unit of a medium-sized city of the *Vale do Paraíba Paulista* and who accepted to participate. Sample was collected before medical assistance as from interview carried out by researchers with tutors who were escorting children in the waiting room, and lasting 2 to 3 minutes each. Data were collected in June, July and August 2011. Data were recorded in a form with three groups of variables: child identification data, tutors data and data regarding the use of drugs for the child.

This study was approved by the Research Ethics Committee, University of Taubaté, under CEP/UNITAU nº 096/2011.

RESULTS

Participated in the study 105 adults, tutors of children, who were escorting them and were interviewed before chil-

dren were assisted by the Children's First Aid Unit.

To characterize children's age, the following age group criteria were used: neonate, infant, pre-school age and school age³.

Age groups of children participating in the study were: infants 51.42%, pre-school age 24.76%, school age 22.85% and neonates 0.97%. As to gender, 50.48% were females and 49.52% were males.

With regard to previous diseases, tutors have reported that 81.90% had no disease and 18.10% had diseases, being them: renal, Down syndrome, bronchitis, asthma, convulsive crisis, laryngitis.

When asked whether the child had already presented some type of pharmacological allergic reaction, 80.95% of tutors have said no, 15.24% had said that there had been already some allergic reaction and 3.81% could not answer. As to the regular presence of children in medical visits, 70.47% of tutors have said yes, 25.72% have said no and 3.81% could not answer. Regarding tutor taking children to the children's first aid unit, 69.52% were taken by the mother, 23.81% by others, among them grandmother, aunt, godmother and neighbor, and 6.67% by the father.

With regard to using drugs before medical assistance, it was found that 71.42% have medicated them and 28.58% have not medicated them previously.

With regard to continuous use of some drug by the child, their escorts have reported that 84.76% do not use and 15.24% use, being major drugs mentioned valproate, dextchlorpheniramine, vitamin D, flunazirine and ferrous sulfate.

As to the reason why looking for Children's First Aid Unit assistance, most prevalent symptoms were fever, productive cough, vomiting, diarrhea, abdominal pain, sore throat, dyspnea and earache.

With regard to duration of signs and symptoms taking children to assistance, 80.95% of them had symptoms for 1 to 3 days, 11.43% for 4 to 6 days, 3.81% for 7 to 9 days, and 3.81% had symptoms for a period of 13 to 15 days.

As to who has indicated the drug, in 78.67% it was the mother, in 13.33% the neighbor and in 8% the grandmother.

Among tutors medicating children before medical assistance, 55.23% have referred that the bottle of the administered drug was already open and, from these, 32.38% have referred checking its validity date.

Figure 1 shown drugs administered to children before Children's First Aid Unit assistance, according to reports of their escorts, pointing out that more than one drug has been administered to some children before looking for medical assistance.

As to the period using drugs before Children's First Aid Unit assistance, data are shown in figure 2.

Figure 3 shows the place where the drug administered before Children's First Aid Unit assistance was acquired.

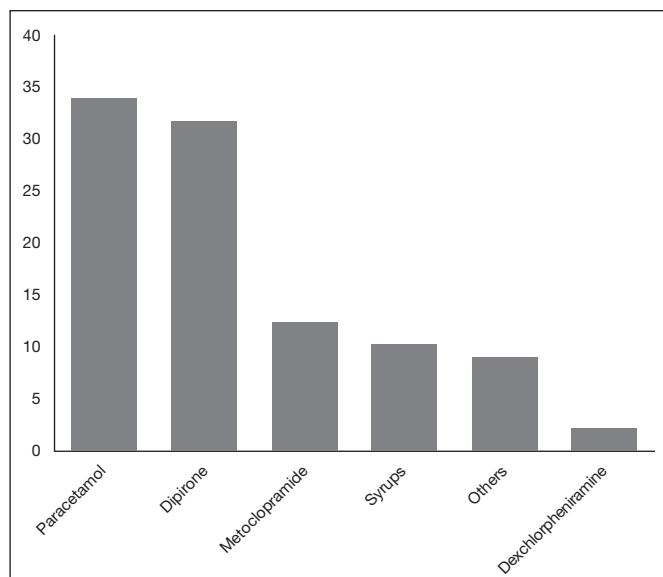


Figure 1. Drugs administered before medical assistance. Taubaté, 2011

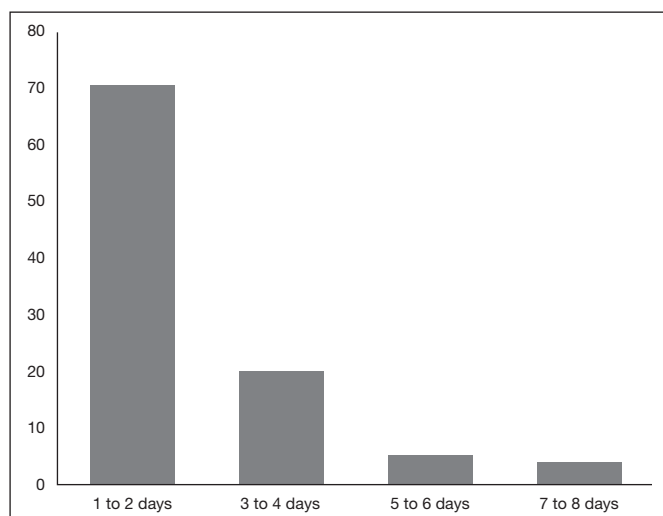


Figure 2. Period using drugs administered by tutors in home care before medical assistance. Taubaté, 2011

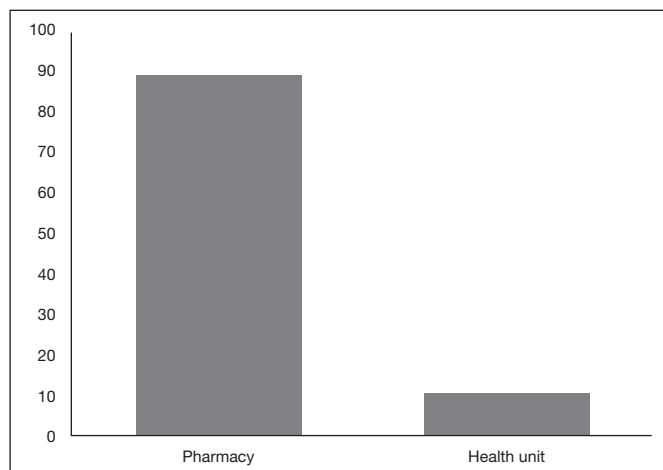


Figure 3. Places where the drug was acquired. Taubaté, 2011

DISCUSSION

A study on the use of drugs in children up to six years of age and enrolled in childcare units has found as most frequent diseases: bronchitis, rhinitis, allergy, sinusitis and asthma, among others, data which coincide with our results where prevalence of respiratory diseases was found⁵.

With regard to the reason why looking for assistance, most prevalent symptoms are similar to those presented by Carvalho et al.⁵ and Pereira et al.⁶.

Although fever is one of the most common complaints during pediatric assistance, being the first manifestation of acute viral infections, its presence is feared because it may be early sign of severe disease⁷.

According to figure 1, analgesics and antipyretics have been also mentioned by other authors as the most popular drugs for children's self-medication^{5,6,8}.

Although drugs like paracetamol and dipirone are relatively safe analgesics and antipyretics for children, provided adequate doses are respected, chronic and abusive use of these medications should be avoided, since there are reports of liver toxicity with paracetamol and decreased blood defense cells with dipirone⁹.

Figure 2 shows that 53 (70.66%) drugs were administered for a period of 1 to 2 days, suggesting that children have not improved signs and symptoms.

Study on children's self-medication has found that mothers were largely responsible for indicating the drug, and this was consequence of previous use of such drugs under medical prescription⁶. Approach found in this study, and deserving special attention, was the use of drug bottles which had been opened in other moments, since after being opened, conservation conditions may alter the efficacy.

A study by Beckhauser et al.¹⁰ has found the pharmacy as the place where drugs for self-medication were largely acquired, similar result to our study and confirming the hypothesis that it is more practical to acquire a drug in a pharmacy than scheduling medical visits for the same purpose, however with greater risks.

CONCLUSION

Our results show high prevalence of children's self-medication, being analgesics and anti-inflammatory drugs the most widely used by mothers, suggesting the need for actions of collective health services to provide access and guidance to the population with regard to the risks of indiscriminate use without medical prescription.

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