Use of prescribed and non-prescribed medications among children living in poor areas in the city of Salvador, Bahia State, Brazil

Consumo de medicamentos prescritos e não prescritos entre crianças residentes em áreas pobres de Salvador, Bahia, Brasil

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Abstract

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A cross-sectional study of children living in poor areas in the city of Salvador, Bahia State, Brazil, was carried out in 2006 to investigate the prevalence of use of prescribed and non-prescribed medication. This population-based study included 1,382 children aged 4-11 years. The use prescribed and non-prescribed medication during the 15 day period preceding the interview was adopted as the dependent variable. Of the 1,382 children, 663 (48%) had used at least one type of medication in the 15 days prior to the interview: in 267 cases (40.3%), mothers reported that the child had taken prescribed medication, while in 396 cases (59.7%), the child had taken medication that had not been prescribed by a physician. The most commonly prescribed drugs were analgesics (42.3%), systemic antibiotics (21.3%) and antiasthmatic (16.5%). With respect to nonprescribed drugs, the most common were analgesics (65.2%), antitussives (15.7%) and vitamins (9.3%). The results show a high prevalence of the use of non-prescription drugs among poor children, and large drug purchases of drugs by the head of household, highlighting deficiencies in coverage of the health system.

Drug Prescriptions; Pharmacoepidemiology; Child; Nonprescription Drugs

Introduction

Prevalence of infectious disease is higher in the pediatric population compared to other agegroups, leading to a greater need for healthcare services and more use of both prescription and over-the-counter drugs ^{1,2}. Children incur risks to their health due to high levels of consumption of prescription and over-the-counter drugs, particularly because medication use is largely empirical, based on low levels of evidence and involves products that are inappropriate for the pediatric population ^{3,4}.

Self-medication in children is understood to be the exposure of the child to a drug as a consequence of a decision made by a person, generally a parent or guardian, who is unauthorized to prescribe 5,6. This type of practice is common in both developed and developing countries, and is considered indicative of the substitution of formal healthcare 6,7,8. In developed countries, self-medication predominantly involves overthe-counter drugs ^{9.} However, in Latin American countries, including Brazil, the ease with which prescribed drugs can be freely acquired is a factor that means that self-medication is done with a combination of two categories (over-the-counter and prescription drug sales) 6,10,11. Risks are incurred through self-medication, including the possibility of concealing the signs and symptoms of a disease that may lead to a consequent delay in diagnosis as parents or guardians frequently fail to report this practice to the physician ¹².

Making use of prescribed medication is an important instrument for promoting for the rational use of drugs, principally in children ^{13,14}. Since the majority of the population uses the public healthcare system, the medical prescription profile in Brazil largely depends on the array of drugs available on the Unified National Health System (SUS). An advantage of this system is that the availability of drugs through the SUS is based on selection criteria that form part of a policy to promote the rational use of medication and give major consideration to the efficacy and safety of the product.

Few published studies exist that compare the use of prescribed and non-prescribed medicines among children. It is however important to study these patterns of drug use in pediatric populations because they involve different standards of treatment 15. The prevalence of the use of prescribed drugs in children in developing countries varies from 50 to 80% 14,16,17,18,19. In general, the most commonly used category of drug prescribed by a physician to children were medications that act on the respiratory system, whereas the most common type of non-prescribed drugs were analgesics 6,19. In Brazil, the limited number of comparative studies that exist show that more than 60% of the drugs used in children were indicated by physicians ^{20,21,22}. However, non-systematic estimates of the prevalence of self-medication among children of different ages in Brazil vary from 7.1 to 56.6% 20,21,22,23.

The objective of this study was to analyze patterns of use of prescribed and non-prescribed drugs in children aged 4-11 years, living in poor areas in the city of Salvador, Bahia, Brazil. Differences in these use patterns according to sex and age group were of special interest. The data obtained by this study serves to orient interventions that focus on the promotion of adequate children's access to health care and medicines and informative/educational programs geared at rational drug use among this population.

Methods

A cross-sectional population-based study was nested in a cohort of children residing in the city of Salvador between February and May 2006. This study forms part of a larger project carried out in Salvador on the risk factors for asthma and allergies in children (SCAALA) ²⁴.

The characteristics of the cohort were described in a previous study ²⁴. The study population was selected from a sample of children re-

siding in 24 micro-areas representing the poorest regions in Salvador. This sample was obtained from two epidemiological surveys undertaken in Salvador. The first survey was conducted between 2000 and 2002, with the aim of assessing the impact of a sanitation program on the health of children aged 0-4 years 25. This cohort was also studied in a second epidemiological survey of risk factors for asthma and allergies conducted in 2005, which characterized the population covered by the SCAALA project 24. Thus, during the period of home interviews in 2006, 1,382 children aged 4-11 years participated in the study, comprising 95.6% of the initial cohort of the SCAALA project (1,445 children) 24. A total of 63 children were excluded from the analysis: 26 could not be located due to change of address and the remaining 37 were excluded because it was not possible to obtain information on their mothers.

A structured interview was used for data collection that contained a specific section on the use of medication, and sections regarding the demographic and socioeconomic variables of mother and child, information on the child's health and use of healthcare services. The interviews were carried out by six trained field workers, after piloting on children outside the study population but of the same target age. The purpose of this pilot was to test the interviewee's understanding of questions, verify the interview and the instruction manual, and serve as training for the interviewers. Data quality control was performed through a second visit to 10% of the sample members and application of a shortened version of the interview.

The questionnaires were applied during a home interview carried out with mothers or guardians. If the interviewee was not at home or refused to participate, the interviewers returned at least twice. If these attempts failed, a visit was made by the field supervisor. During application of the section of the interview regarding the use of medication during the 15 day period prior to the interview, mothers or guardians were asked, where possible, to show the medical prescriptions and packages of the drugs used to ensure that the details of the product were accurately recorded. Drugs that were reported by the mothers as having been used but for which prescriptions and packages were not available at the time of the home interview were also taken into consideration.

All data were entered using a specifically created data entry form designed to assess the consistency, adequacy, and accuracy. Epi Info version 6.04d (Center for Disease Control and Prevention, Atlanta, USA) was utilized for the double entry of

data and verification of possible inconsistencies. Data analysis was carried out with Stata version 9.0 (Stata Corp., College Station, USA).

The use of prescribed and non-prescribed drugs during the 15 days prior to the interview was adopted as the dependent variable. The outcome was defined by the following question: (1) "Has the child used any drug or medication in the last 15 days? Which medication, for example, medication for fever, headache, vomiting, diarrhea, infection or products such as vitamins and supplements? (Note: exclude teas/home remedies, preparations from compounding pharmacies and herbal medicines)". If the answer is yes: (2): "Who recommended the medication?" (3) "Do you have the prescription?" To check the validity of this information, the interviewee was also asked to present the prescription and/or package. The children were then classified into three groups: those who had not used any medication; those who had used medication prescribed by a physician in the last 15 days; and those who had used medication not prescribed by a physician in the last 15 days. The active ingredients of each medication were indentified and classified in accordance with the Anatomical Therapeutic Chemical Classification Index with Defined Daily Doses (ATC/DDD index) developed by the World Health Organization's Collaborating Centre for Drug Statistics Methodology 26.

The demographic and socioeconomic variables were: child's completed age in years, sex, mother's education level (completed years of study) and monthly family income (range of 1, 1-2, and 2-5 minimum wages – MW).

The prevalence of the use of prescribed drugs according to sex was calculated using the proportion of children who had taken prescribed drugs in the previous 15 days divided by the total number of children of each gender in each age-group for mother's education level and monthly family income. The same procedure was used to calculate the prevalence of non-prescribed drug use. The prevalence of the use of prescribed drugs from particular pharmacological groups was calculated according to the proportion of children who had taken a drug from the group in the previous 15 days divided by the total number of children of each gender in each age group. The same procedure was used to calculate the prevalence of the use of non-prescribed drugs from particular pharmacological groups. The significance of the linear trend (chi-squared test) was assessed across all age groups and for each gender. Analyses with a p value less than 0.05 were considered statistically significant.

This study was approved by the Comitê de Ética do Instituto de Saúde Coletiva da Universidade Federal da Bahia (Bahia Federal University, Institute of Collective Health Ethics Committee). The interviews were undertaken with mothers or guardians who signed an informed consent form.

Results

A total of 1,382 children between the ages 4 to 11 years were analyzed, 53% of whom were male. The most prominent age group was 7-8 years (33%). Family income varied from less than 1 MW to 5 MW. However, the majority of families (52%) survived on a monthly income of less than 1 MW. The Brazilian MW at the time of this study was R\$ 300.00 per month (approximately US\$ 160.00). With respect to mothers, 56% had completed less than 9 years of schooling and 64% had no formal employment (data not shown).

Of the 1,382 children, 663 (48%) had taken at least one medication in the previous 15 days. Of this total, 267 (40.3%) were reported by the mother to have taken drugs prescribed by a physician and 396 (59.7%) to have taken drugs not prescribed by a physician (data not shown).

Patterns relating to prescribed drug use

A total of 439 prescribed drugs were used by 267 children, consisting of 181 different commercial brands and 88 active ingredients. Most of the drugs (67%) were acquired in private pharmacies. However, 23% were obtained from health center pharmacies. Of a total of 88 active ingredients, 57% were listed in the *Relação Nacional de Medicamentos Essenciais* (Brazilian National Inventory of Essential Medication – RENAME, 2006) ²⁷. Of a total of 439 prescribed drugs, 83.8% were confirmed with the medical prescription or the package of the drugs (data not shown).

There was no statistically significant difference in the prevalence of use of prescribed medication between boys and girls (18.8% and 18.6%, respectively; p=0.934). The use of prescribed drugs decreased significantly with age (p=0.001). Between the youngest and oldest age-groups established for this study population (4-5 and 9-11 years), prevalence decreased from 23.4% to 12.7% in girls (p=0.082) and from 26.1% to 12.4% in boys (p=0.017). There was no statistically significant difference between gender associated with mother's education level and monthly family income (Table 1).

According to the information provided by the mothers, the six most reported reasons for using prescribed drugs were: fever (23.9%), labored breathing (10.9%), sore throat (8%), cough

Table 1

Prevalence (%) of use of prescribed and non-prescribed drugs, according to sex and age group. Salvador, Bahia State,
Northeast Brazil, 2006.

	F	Population	า	Drug use prevalence (%)								
				F	Prescribed	ł	Non-prescribed					
	Female	Male	Total	Female	Male	Total	Female	Male	Total			
Age group (years)												
4-5	128	138	266	23.4	26.1	24.8	37.5	29.0	33.1			
6	146	165	311	21.9	18.8	20.2	30.1	29.1	29.6			
7-8	222	239	461	17.6	19.7	18.7	32.0	26.4	29.1			
9-11	150	194	344	12.7	12.4	12.5	30.7	23.2	26.5			
p-value (age trend)				0.082	0.017	0.001	0.555	0.555	0.361			
Mother's education level												
(completed years of study)												
0-4	154	172	326	16.2	16.3	16.3	33.1	24.4	28.5			
5-8	191	244	435	17.8	16.8	17.2	32.5	29.1	30.6			
9 or more	301	320	621	20.3	21.6	20.9	31.9	25.9	28.8			
p-value (age trend)				0.548	0.228	0.140	0.965	0.530	0.778			
Monthly family income												
< 1 MW	332	391	723	19.9	16.1	17.8	30.4	26.8	28.5			
1-2 MW	191	223	414	13.6	20.6	17.4	35.1	27.3	30.9			
2-5 MW	123	122	245	22.8	23.8	23.3	33.3	24.6	29.0			
Total	646	736	1382	18.6	18.8	18.7	32.3	26.6	29.3			
p-value (age trend)				0.086	0.115	0.124	0.530	0.848	0.683			
p-value (sex)					0.934			0.020				

MW: minimum wages.

(6.6%), helminthiasis (5.2%) and influenza/common cold (4.6%) (data not shown).

Of the prescribed drugs, analgesics/antipyretics were the most commonly used groups, principally dipyrone and paracetamol. A significantly higher prevalence of the prescribed use compared to the non-prescribed use of systemic antibiotics, antiasthma drugs, antihistamines and systemic corticosteroids was found (Table 2).

With respect to gender, statistically significant differences and higher prevalence were found in the use of vitamins and anthelmintic medication for girls and the use of antiasthmatics in boys. In girls, the prevalence of use of antibiotics decreased significantly with age. In the prescribed drugs category, statistically significant differences existed between the prevalence of use of analgesics/antipyretics, antiasthmatics, vitamins and anthelmintic drugs and gender and age-group (Table 3).

Of the prescribed drugs, analgesics/antipyretics were indicated for fever in 98% of the cases of use. Of the systemic antibiotics, 41% were indicated for a sore throat and 11% for labored breathing. Antiasthmatics were used principally

for labored breathing (64%) and for allergic rhinitis (11%). Antihistamines were used for allergies in 40% of cases and for poor appetite in 16%. Of the children who took vitamins, the majority did so for lack of appetite (36%) or influenza/colds (28%). According to the information provided by the mothers, nonsteroidal antiinflammatory drugs were used for sore throat in 50% of cases and for fever in 13% of cases. With respect to the antitussives/expectorants, 57% were indicated for coughs, while 22% were used for influenza/colds (data not shown).

Pattern of use relating to non-prescribed drugs

A total of 591 non-prescribed drugs were used by 396 children, consisting of 153 different commercial brands with 60 active ingredients. Mothers were responsible for recommending the treatment in 79% of the cases, followed by friends, neighbors or relatives (14%) or pharmacists (4%). Main reasons given to justify the use of non-prescribed medication were that the mothers already had knowledge of the drug (68%), it was recommended by someone/a neighbor (12%)

Table 2 Prevalence (%) of use of prescribed and non-prescribed drugs among children according to pharmacological groups and active ingredients. Salvador, Bahia State, Northeast Brazil, 2006 (N = 1,382 children).

Pharmacological groups/Active principles	ATC	Pres	ribed	Non-prescribed		
		n	%	n	% 18.7	
Analgesic/Antipyretics	N02	113	8.2	258		
Dipyrone	N02BB02	75	5.4	168	12.2	
Paracetamol	N02BE01	34	2.5	67	4.8	
Acetylsalicylic acid	N02BA01	4	0.3	39	2.8	
Antibacterials for systemic use	J01	57	21.3	36	9.1	
Amoxicillin	J01CA04	31	11.6	12	3.0	
Sulfamethoxazole + trimethoprim	J01EE01	13	4.9	17	4.3	
Cefalexine	J01DA01	2	0.7	4	1.0	
Others		12	4.5	5	1.3	
Cough and cold preparations, expectorants and mucolytics	R05	23	8.6	62	15.7	
Ambroxol	R05CB06	9	3.4	18	4.5	
Carbocisteine	R05CB03	5	1.9	17	4.3	
Guaiafenesin	R05CA03	3	1.1	20	5.0	
Others		6	2.3	12	3.0	
Drugs for obstructive airway diseases	R03	44	16.5	23	5.8	
Salbutamol	R03CC02	32	12.0	16	4.0	
Budesonide	R03BA02	9	3.4	2	0.5	
Fenoterol	R03CC04	3	1.1	6	1.5	
Others		2	0.7	1	0.2	
Antihistamines for systemic use	R06	37	13.9	27	6.8	
Dexchlorpheniramine	R06AB02	19	7.1	9	2.3	
Ketotifen	R06AX17	6	2.2	3	0.8	
Cyproheptadine	R06AX02	5	1.9	14	3.5	
Others		10	3.7	10	2.5	
Vitamins	A11	25	9.4	37	9.3	
Ascorbic acid	A11GA01	10	3.7	21	5.3	
Multivitamins with minerals	A11AA03	9	3.4	12	3.0	
Others		8	3.0	6	1.5	
Antiinflammatory and antirheumatic drugs	M01	24	9.0	24	6.1	
Diclofenac	M01AB05	15	5.6	20	5.0	
Nimesulide	M01AX17	5	1.9	3	0.8	
Others		4	1.5	1	0.3	
Anthelmintics	P02	19	7.1	26	6.6	
Mebendazole	P02CA01	13	4.9	14	3.5	
Albendazole	P02CA03	3	1.1	6	1.5	
Others		3	1.1	7	1.8	
Antianemic preparations	B03	14	5.2	14	3.5	
Ferrous sulfate with folic acid	B03AD03	4	1.5	11	2.8	
Ferrous sulfate	B03AA07	8	3.0	3	0.8	
Others		2	0.7	2	0.5	
Corticosteroids for systemic use	H02	12	4.5	2	0.5	
Prednisolone	H02AB06	7	2.6	2	0.5	
Prednisone	H02AB07	3	1.1	-	-	
Others		2	0.7	-	-	
Total number of children treated		267	19.3	396	28.7	

Table 3

Prevalence (%) of use of drugs in pharmacological groups (prescribed, n = 267 children and non-prescribed, n = 396 children), according to sex and age group. Salvador, Bahia State, Northeast Brazil, 2006.

Age group (years)	An	algesic/ <i>F</i>	Antipyre	tics	,	Antibact systen	erials fo	r		Cough a rations/ Muco			Drugs for obstructive airway diseases			
	Prescribed		Non- prescribed		Prescribed		Non- prescribed		Prescribed		Non- prescribed		Prescribed		Non- prescribed	
	F	М	F	M	F	М	F	M	F	M	F	М	F	М	F	М
4-5	46.1	41.7	66.7	77.5	33.3	30.6	10.3	2.5	7.7	11.1	25.6	27.5	20.5	22.2	5.1	15.0
6	25.0	29.0	68.2	58.3	12.5	16.1	9.1	6.3	12.5	3.2	15.9	16.7	12.5	22.6	2.3	6.3
7-8	48.7	25.5 *	57.7	66.7	15.4	23.4	15.5	9.5	10.3	6.4	9.9	15.9	7.7	25.5 *	5.6	7.9
9-11	47.4	45.8	65.2	66.7	5.3	12.5	4.3	11.1	10.5	8.3	17.4	6.7 *	0.0	8.3	6.5	4.4
4-11	41.9	34.0	66.8	63.5	18.6	21.7	7.7	10.5	10.1	7.2	16.0	16.3	11.6	21.0	5.0	8.2
p-value (age trend)	0.60	0.85	0.60	0.52	0.01	0.19	0.65	0.11	0.75	0.70	0.21	0.01	0.10	0.39	0.58	0.12
p-value (sex)	0	.08	0.	36	0.	43	0.	21	0.	31	0.	98	0	.01	0.	.10

F: female; M: male.

or the drug was already available at home (9%). The majority of drugs (70%) were acquired from private pharmacies, whereas, in 26% of cases the medication was already available at home. Of a total of 60 active ingredients, 38% were listed in the RENAME ²⁷ (data not shown).

There was a higher prevalence of use of non-prescribed drugs in girls than in boys (32.3% and 26.6% respectively (p = 0.020)). The use of non-prescribed drugs decreased with age, although not significantly (p = 0.361). In the youngest and oldest age-group categories of this study sample (4-5 and 9-11 years), prevalence decreased from 37.5% to 30.7% in girls (p = 0.555) and from 29% to 23.2% in the boys (p = 0.555). There were no statistically significant differences between gender associated with mother's education level and monthly family income (Table 1).

According to the information provided by the mothers, the six most reported reasons for the use of non-prescribed drugs were: fever (32.5%), headache (11.3%), influenza/colds (10.1%), cough (9.6%), sore throat (6.6%), poor appetite (6.3%) and helminthiasis (4.9%) (data not shown).

Of the drugs not prescribed by a physician, analgesics/antipyretics, principally dipyrone and paracetamol, were the most commonly used groups. The prevalence of the non-prescribed use of analgesics/antipyretics and antitussives/expectorants was found to be significantly higher than the prescribed use (Table 2).

Prevalence was significantly higher in girls with respect to the use of antihistamines. Higher

prevalence was found in boys with respect to the use of antibiotics, antiasthmatics, vitamins and anthelmintic drugs. However, these differences were not statistically significant. In boys, the use of antitussives decreased significantly with age and a similar age-related decrease was found in girls associated with the use of nonsteroidal antiinflammatory drugs. Statistically significant differences were found with respect to the non-prescribed use of antitussives, antihistamines, vitamins and anthelmintic drugs and gender in the specific age-groups (Table 3).

Of the non-prescribed drugs, analgesics/antipyretics were used to treat fever in 64% of cases. Of the antitussives/expectorants, 63% were used to treat coughs, whereas 33% were used for influenza/colds. Vitamins were used for influenza/colds in 38% of cases and for poor appetite in 31% of cases. With respect to systemic antibiotics, 56% were used for sore throats, 14% for multiple wounds and 8% for influenza/colds. The use of antihistamines was motivated by lack of appetite in 40% of cases and allergies in 20% of cases. Anthelmintic drugs were used to treat helminthiasis in 100% of cases (data not shown).

Discussion

The prevalence of the use of at least one prescribed drug in children in Salvador during the 15 day period prior to the interview was 18.7%. This figure is lower than the findings of stud-

^{*} p < 0.05.

ies carried out in developed countries ^{1,16} but similar to results found in two cities in the Brazilian state of São Paulo ²³. The prevalence of use of non-prescribed medication (29.3%) corroborates findings from other studies that this practice is common, irrespective of socioeconomic status ^{6,23}. The most common group of therapeutic prescribed drugs (systemic antibiotics and antiasthmatics) and the most common non-prescribed drugs (analgesics/antipyretics, antitussives/expectorants and vitamins) were similar to those reported in developed countries and in Brazil ^{6,15,16,17,23}.

In the present study, the effect of age on the use of medication among children was similar for both prescribed and non-prescribed drugs, with use decreasing with age. These findings are coherent with results from various studies carried out in other countries. In one such study, in the Netherlands 16, researchers found a greater prevalence of use of prescribed drugs in children of less than 1 year of age followed by the 2-5 year age-group. The high prevalence of various morbidities in children under 5 years of age, associated with a greater parent and doctor with regard to this age, justify the high levels of consumption of prescribed drugs by this population. On the other hand, self-medication is prevalent in all age-groups, suggesting a need to promote greater responsibility among parents/guardians and also within the healthcare system with respect to the use of medication.

Studies carried out in Brazil and in other countries show that higher prevalence of the use of medication with or without a prescription may be partly related to the greater use of healthcare services by girls. This factor suggests that the mothers' tendency to take greater care of herself and of her family's health justifies giving greater protection to girls 9,11,15,28,29,30. According to these authors, the decision to use medication involves social and cultural issues related to mothers and their daughters ²⁰. However, in the present study, boys used more prescribed medication than girls, contradicting reports in the literature and suggesting the contribution of specific cultural factors in the specific setting studied.

Analgesics/antipyretics, antitussives and vitamins comprised 66.1% of the medication used without a prescription. 36 children (9.1% of the study population) used antibiotics without a medical prescription (amoxicillin in 12 cases, sulfamethoxazole + trimethoprim in 17 cases and cephalexin in four cases). In the present study, self-medication with antibiotics is indicative of habit formation based on previous prescriptions, since the mothers were responsible for the choice of the non-prescribed drug in 70% of cases. This

result is coherent with findings from other studies carried out in developed countries ^{7,9,12,31} and in Brazil ^{6,10,11}.

The percentage of prescribed medication acquired in private pharmacies (67%) is extremely high bearing in mind the income level of the study population (52% of the families were surviving on a monthly family income of less than one minimum salary), the coverage provided by the SUS in urban areas of the city of Salvador and the current pharmaceutical care policy in this country. This finding reflects the inequitable access to medications available through the national health service and the difficulties that exist in implementing current policies. This fact certainly contributes towards the association found by this present study between the use of prescribed medication and monthly family income.

Some of the methodological aspects of this study merit further discussion. Home surveys are subject to interviewer bias that is not always possible to control. The period selected for evaluation of the use of medication immediately prior to the study was 15 days, which is comparable with most studies. The recall problem was assumed to be small in our study, with a recall period of 15 days, and self-reported information did not vary across comparable groups. In the present study, some procedures were adopted to minimize bias, including standardization of data collection and requesting the packages and/or prescription of the drugs used. One important aspect concerns the difficulties of comparing results regarding non-prescribed medication with findings from studies carried out in developed countries due to the differing definitions used for this term. In English, non-prescription medication or over-the-counter medication refers to the use of medication that is sold freely and does not require a medical prescription. In the present study, non-prescribed medication was defined as medication that had not been prescribed by a physician and included products that require a medical prescription, since in Brazil products that do not require medical prescription are known as over-the-counter medication.

In conclusion, the present study describes the current panorama of the use of prescribed and non-prescribed medication among children from low-income families in Salvador. The use of non-prescribed medication in children is not common practice in developed countries with ample medical resources and universal health-care systems. In countries with characteristics similar to those of Brazil, the search for non-prescribed medication in pharmacies is largely based on previous prescriptions and includes

medication that should only be sold with a medical prescription. However, it also reflects the characteristics of the over-the-counter pharmaceutical market which is dominated by non-essential products, particularly non-rational use of combinations of medications. The prescribed medication profile in Brazil essentially reflects the list of drugs selected for distribution through the SUS and is certainly reflected in the choice of non-prescribed drugs. Such virtuosity is, however, perverted by the inefficacy of the supply of medications available through the SUS. The

amount of spending on medication in relation to income is therefore proportionally higher in the poorer classes and the choice of medication is relegated to non-essential products. It is hoped that these findings will contribute towards the implementation pharmaceutical care policies, including efforts related to service provision, continuing education for physicians and healthcare professionals and healthcare education for mothers or guardians of children to promote the rational use of medication among the pediatric population.

Resumo

A prevalência de uso de medicamentos prescritos e não prescritos foi investigada por intermédio dum estudo transversal, em crianças que vivem em áreas pobres da cidade de Salvador, Bahia, Brasil, em 2006. Estudo de base populacional que incluiu 1.382 crianças entre 4 e 11 anos de idade. O consumo de medicamentos prescritos e não prescritos nos 15 dias anteriores à entrevista foi considerado a variável dependente. Das 1.382 crianças, 663 (48%) haviam consumido ao menos um medicamento nos últimos 15 dias: 267 (40,3%) referidas pela mãe haviam consumido medicamentos prescritos e 396 (59,7%) consumiram medicamentos não prescritos. Os grupos farmacológicos prescritos mais consumidos foram analgésicos (42,3%), antibacterianos sistêmicos (21,3%) e antiasmáticos (16,5%). Os grupos farmacológicos não prescritos mais consumidos foram analgésicos (65,2%), antitussígenos (15,7%) e vitaminas (9,3%). Os resultados mostram uma alta prevalência do uso de medicamentos sem prescrição em crianças pobres, bem como elevada compra de medicamentos pelas famílias, evidenciando deficiências de cobertura do sistema de saúde.

Prescrições de Medicamentos; Farmacoepidemiologia; Criança; Medicamentos Sem Prescrição

Contributors

D. B. Santos, M. L. Barreto, H. L. L. Coelho participated in the conception of this project, data analysis and interpretation and in writing the article.

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