ABSTRACT

Objective: to learn how the practice of self-medication in children by their parents is done. Method: qualitative, exploratory and descriptive study, developed with 17 family caregivers of children hospitalized in a hospital in the South of Brazil. Data was collected in 2016 through interviews and analyzed by Content Analysis. Results: self-medication occurred in cases of fever, pain and colic; the most used drugs were analgesics, antipyretics, as well as remedies for colic, respiratory tract and medicinal plants; aimed at softening the symptoms; reported difficulty in getting to a health care center, indicating family members, pharmacists and pediatricians in a previous visit. Conclusion: the self-medication of the child, by their parents, is a reality, and it is necessary for the nurse professional to discuss more about the issue by working with families to guide and avoid their use or minimize their risk. Descriptors: Self Medication; Child; Family; Caregivers; Medication Errors; Nursing.

RESUMO

Objetivo: conhecer como se dá a prática da automedicación em crianças por seus pais. Método: estudo qualitativo, de caráter exploratório e descritivo, desenvolvido com 17 familiares cuidadores de crianças internadas em um hospital do Sul do Brasil. Os dados foram coletados em 2016 por meio de entrevistas e analisados pela Análise de Conteúdo. Resultados: a automedicación ocorreu nos casos de febre, dor e cólica; os medicamentos mais utilizados foram analgésicos, antitérmicos, além de remédios para cólica, trato respiratório e plantas medicinais; visavam a amenizar os sintomas; referiram dificuldade de locomoção até um atendimento de saúde, indicação de familiares, farmacêuticos e pediatras em consulta anterior. Conclusão: a automedicación da criança, por seus pais, é uma realidade, sendo necessário o profissional enfermeiro discutir mais acerca da temática atuando junto às famílias para orientar e evitar seu uso ou minimizar seu risco. Descriptors: Automedicação; Criança; Família; Cuidadores; Erros de Medicación; Enfermagem.

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INTRODUCTION

Self-medication occurs when the individual or their caregiver, affected by a pathological or painful complaint, decides which medication to use without the consultation of a specialized professional to verify the efficiency of the previous medication or by indication of friends, relatives or pharmacists. This practice has the purpose of providing both relief of symptoms and benefits in the treatment of diseases by the practitioners.1

Medication self-therapy can be carried out responsibly when the individual chooses to treat illnesses with medications that are approved and available without a prescription.2 However, improper adoption of such a practice can cause adverse effects such as intoxication, drug interactions, bacterial resistance, and dosage errors. This effect becomes more aggravating when it comes to pediatric patients.

The administration of medications the child is a widespread practice, however, it can lead to numerous health damages, since, besides medical guidance, it requires attention from parents and caregivers. One study verified that 71.42% of the children were medicated prior to medical care by their parents or guardians, revealing the high index of this practice by the parents.3

A study shows that parents emphasized dipyrone, paracetamol and expectorant syrups as the main medications used in children's self-medication. The research also revealed that most parents had misconceptions about the medications offered and performed self-medication mainly when they found that the child had a fever. Parents justified their actions by the custom of administering such medications and by the fact that they were available at home.4

The age group with the highest prevalence of self-medication has been in children under five years of age. This fact is justified by the probability of reusing old prescriptions in relation to older siblings.5 Another relevant factor, which may contribute to the reuse of medications by children under five years, is related to the physiological condition of the children, since they are more prone to developing small health problems, especially respiratory disorders.6

The World Health Organization (WHO) estimates that at least half of the drugs are inadequately prescribed or sold, and about 50% of them are improperly consumed. This is a result of free trade for many of them, abusive use of self-medication, lack of supervision, encouragement of medicalization by manufacturers, and human impulse to consume medications.7

In the world scenario, self-medication has become a public health problem due to the vast availability and irrationality in the consumption of therapeutic medications leading to important consequences in the sanitary health system and making it difficult to measure the potential risks of its inappropriate use.8

In Brazil, self-medication is one of the most complex problems in public health. Data from the National Toxic-pharmacological Information System showed that, in 2013, drugs were the most frequent cause of intoxication in Brazil.9

Medication self-therapy has also been aggravated by the great difficulty of the population to access health services and, consequently, the non-renewal of revenues. Added to this is the low level of education associated with the disinformation of the correct use of medications, impairing medication efficacy.10 In addition, the vast number of drugstores and pharmacies in the country facilitate access to drugs. Another relevant factor is the advertising about the medications, which instigates their consumption, as well as the custom of having home pharmacies where the inadequate maintenance and the invalidity of the medications can result in other aggravations.

Nursing, as a profession that acts directly in the care of the child and their family, plays a fundamental role in the diffusion of health education on the aggravations of self-medication and the clarification to parents on how to administer medication safely. The great importance of nurses in the care of victims of medication intoxication is also observed, since they have the ability to identify the clinical situation of the patient and, consequently, to initiate the treatment in a way that minimizes the possible complications inherent to the cases of intoxication.

The Nursing professional acts through Nursing care in order to preserve the life of the individual and to minimize damages to health. It also acts on prevention, guiding families about the risks of medication interactions, adverse reactions and easy access to medications at home, promoting discussions about health risks, when there is pediatric, medication poisoning, and the danger that it can provoke, leading to death.11

There is a need for studies in the Nursing area that identify factors belonging to the pediatric context and favor the creation and
implementation of measures aimed at preventing self-medication problems in this population. Self-medication, in the child population, mainly reinforces the need for better clarification to parents about their risks. In this context, the guiding question of this study was: what is the practice of parents with self-medication in children?

**OBJECTIVE**

- To learn how the practice of self-medication in children by their parents is done.

**METHOD**

Qualitative, exploratory and descriptive study. The descriptive research allows for the description of the investigated phenomenon, the way in which it manifests itself and the factors with which it is related. It is qualitative because it makes it possible to understand the perceptions and subjectivities of human beings by emphasizing the realities of the subjects and seeking to contemplate the people whose experiences are being studied.12

It was carried out in the second half of 2016 in a Pediatric Unit of a University Hospital (UH) in Southern Brazil. The Pediatric Unit of the UH has 18 beds intended for children between the ages of zero and twelve, incomplete, who are hospitalized for both clinical and surgical consultations rendered by the Unified Health System (UHS).

Participating in the study were 17 parents of children hospitalized in the UH who met the inclusion criteria: being a parent, mother or family caregiver responsible for the child during the period of hospitalization and having already self-medicated. Those who did not affirm self-medication and who accompanied the child in the sector were excluded.

The data collection was carried out through a semi-structured and individual interview with each participant. They were operationalized by a script with questions about the identification data of the child and the familiar caregiver and about their knowledge about self-medication. The data was analyzed by the Content Analysis technique operationalized by the pre-analysis, when the registry units that guided the analysis were identified; exploration of the material, when the initial data was classified and aggregated into categories, and treatment of the obtained results, when the data was interpreted correlating them with authors who study the subject.13

The research followed the ethical precepts contained in Resolution 466/12. It was started by accepting and signing the Free and Informed Consent Form, authorized by the management of the hospital and the School of Nursing and approved by the Ethics Committee in Research in the Health Area (CEPAS / FURG), with opinion number 91/2016. Participants were identified by the letter F followed by the interview number as a way to guarantee their anonymity.

**RESULTS**

Among the 17 participants, there were 14 mothers, a father, an aunt and a grandmother in the age groups between 17 and 43 years. As for the level of schooling, one participant had complete higher education and two, incomplete; six had completed high school and one, incomplete; three had completed elementary school and three, incomplete. One caregiver reported having studied at a special education institution (Association of Parents and Friends of the Exceptional). The children had ages between five days and 11 years; four were infants; three were between one and two years old; three, two to five years and four were more than five years old. As for sex, ten were girls and seven boys.

Data analysis revealed three categories: Signs and symptoms presented by the child that motivated self-medication; Medications used for self-medication and Reasons cited by parents to carry out self-medication of the child.

Signs and symptoms presented by the child that motivated self-medication: Caregivers reported that fever was the main symptom that led to self-medication of the child.

"Always a doctor, when she has a fever, then I use an antipyretic." (F1)

"Only yesterday it was just the medicine for fever, but she vomited. She was very feverish. We gave medicine for fever only." (F16)

Caregivers also reported self-medication in children who had fever and pain.

"With some pain, with something or with a fever, I give. Before I get here (hospital) I give." (F12)

"Always doctor when she has a fever or pain." (F7)

Colic was another reported symptom for self-medication in study children.

"So just for fever, medicine for fever and colic." (F8)

**Medications Used for Self-Medication**: Most of the family caregivers reported making use of antipyretics, painkillers and medication for colic, without a prescription. The most
commonly used analgesics and antipyretics were Paracetamol, Dipyrone, Novalgine and Ibuprofen.

I give only when you have a fever. I give it for a couple of days. Dou acetaminophen at home. If it does not improve then I'll take it to the doctor. (F13)

Paracetamol or Ibuprofen, for pain or for fever. Paracetamol for when you have a fever, as they (doctors) have taught me when they already had it. They said to intercalar, I intercalate, I do not always give the same. (F11)

Dipyrone and Alivium, both for fever. (F3)

Novalgina infantile. (F15)

For colic, the medications used were Alivium, Luftal and Simethicone.

And when he had very strong cramps that I gave Simeticone, that is typical of a child to take. (F9)

For colic Alivium (F6)

To release the gauzes use Luftal. (F8)

The use of medications for the treatment of respiratory diseases were also cited.

Treatment of bronchitis, which is the bombs, which is the serum for the nose, these things. (F14)

Desalex, has koide-d, has Aerolin, has Cienil. (F10)

Several family members have the habit of performing self-medication through the use of medicinal plants, especially teas for the treatment of abdominal pain, sore throat, colic, influenza, constipation and restlessness.

And for the belly so we use marcela tea, sweet-toothed tea, these things like that. (F2)

Ah, tea we give. Cinnamon tea, fennel tea, any little tea you have at home we give. Marcela, when she complains about some pain in her belly. Chamomile tea to calm down, those things like that. You have tea, you have tea for the rest of your life. The generation of today that is coming now, that will not arrive in tea time. (F14)

More for colic to relieve, to take colic. Marcela, carqueja, guaco for the throat. She frowns when she drinks tea, takes it very little, has to be sweet for her to take. (F17)

Already, so much more is lemon leaf, of orange, a small piece of lemon, more for flu itself. (F5)

Already. Fennel tea to go to the feet is wonderful. (F6)

A caregiver also makes use of tea associated with medication.

I've used fennel tea. But it was only once or twice. I used it for colic and I put paracetamol in, but it did not take. [...] (F12)

A family member reported never having used herbal remedies for self-medication in the child.

No, I never used it. (F1)

Reasons cited by parents for self-medication of the child: The main reason cited for self-medication in children at home, by relatives, was to alleviate the symptoms of fever and intense pain, avoiding possible complications.

It is to lower the fever. (F8)

Because she had a fever of 38 °C and then I gave the medication, not to increase. (F15)

With the fever itself, I'm very scared of the fever. I get scared because where there is a fever there may be some infection, something like that. Fever is the first sign of something that is not well. (F11)

I do not even expect the fever to go down, I give the medication before leaving the house, very high fever gives convulsion. (F11)

Just to ease her pains. (F1)

With no improvement in symptoms, caregivers reported that they seek health care after self-medication for children at home.

And when something more serious happens, his mother ends up bringing him here (hospital). (F14)

Usually, in the case of fever, even at home, it gives a fever, you can not take it to the doctor, then you give the medication, wait, then take it to the doctor. (F2)

It hurts me to see my daughter in pain, then the doctor, to relieve the symptoms. I give antipyretic before arriving at the doctor. (F1)

Family members also reported self-medication in children due to difficulty in getting to the place of health care.

Not right, as I told you. Sometimes we end up having to do only part of the fever. You have to do it because you will not wait to take it to the doctor. Many people are not able to have a car, you have to end up waiting. (F5)

Because sometimes depending on the time, it's night, then it gets harder to get around. Sometimes you come to hospital at night, you leave two three in the morning, and you can not go back. Then if I see that it is a fever that has to wait until the other day, then I try to lower the fever that I know that can even convulsion, if I leave it imagine her with fever until the other morning! (F5)

Other family members still opt for self-medication in children due to the difficulty of access to health services and dissatisfaction with health care.

I say, I'd rather give it than go to the post. That sometimes you arrive at the post, it's full, crowded. Or you come here (hospital),
that many times I came here in the hospital he being in pain, annoyed like that. And many times I was sent to go to the post again and I was not taken care of in the hospital. Then you arrive at the station and the doctor is not in the mood to attend you. (F7)

The delay in consulting, usually the same answers as always known, it seems that it is already in the automatic, is already on in the automatic. Because we come here, and they talk, it’s a virus. [...] everything is a virus; Oh, it’s a virus! Oh, it’s a cold one! Oh, it’s just a little belly ache! Oh, that’s all, that’s all! So they do not have a problem like that, understand? Let’s take a blood test, a urine test, something in depth to see. So if it’s to hear this, and tell me to give exactly what I already knew, I’ll do it at home. It saves work and time. If I see that it does not improve, then yes I open my mouth, I mouth my trombone, and you will have to answer me and take it, whether you like it or not. (F17)

Other relatives reported self-medication self-knowledge.

I'd rather give it myself. The doctor did not prescribe anything to me, she just said that her throat was bruised. I got home, I started to give Diclofenac to her, she improved, she was well. (F17)

Family caregivers reported self-medication in children by indication of pediatricians in prior consultations.

[...] The pediatricians even have to give sometimes depending on the child's weight, in the case of 6/6 h from 8/8 h, as soon as they have it done. (F16)

I think everyone without a prescription is already dangerous. I only give acetaminophen because the pediatrician gave and said if in case he had a fever it was to give. (F13)

Every medication I gave [...] I had a fever, before taking it to the doctor, to the hospital I already gave medication at home. It was a medication suggested by the pediatrician. So I never gave anything like that, I'll give it because I think it's good, no! I will give this medication because the pediatrician said that when she had fever or pain I could give this medication. She always, always followed up with her pediatrician. (F10)

The influence of family members and pharmacists as motivation to perform self-medication was also reported by caregivers.

And, the only one that influenced me these days was the pharmacist. I wanted the childlike Benegripe who left now. But I did not find him in any pharmacy. Oh, I got mad because there was a pharmacist there who shoved my husband a drug there that she said was similar. Only it was for adult use, not pediatric use. [...] (F17)

My mother (grandmother) told me Dipirone. (F6)

DISCUSSION

The use of medications in children by their caregivers without prior medical consultation is a common practice in the pediatrics unit. According to the National System of Toxic and Pharmacological Information of the Oswaldo Cruz Foundation in Brazil, in 2013, 42,128 cases of human intoxication were reported, with the age group of one to four years being the most affected, with 11,985 cases of medication intoxication, corresponding to 28.45% of intoxications and with a record of 46 deaths.9

In relation to the signs and symptoms presented by the child that motivated the self-medication, a study showed that the symptom fever caused 58% of the cases, according to the interviewees, followed by cough (36%), throat inflammation and general pain (32%), headache and influenza (26%), vomiting (14%) and colic (28%). The research explains that the total percentage was exceeded because there was more than one reason cited for the use of medications.4 The fact that the greater use of medications is due to the presence of fever, reveals a greater safety of the caregivers regarding this use because it is a common and recurrent symptom in infants.

As for the medications used for self-medication, a study conducted in Minas Gerais showed that dipyrone (54%) and paracetamol (36%) are the most used medications, followed by expectorant syrups (22%).4 This data is also confirmed in another study which described the main classes involved in self-medication were the analgesics and antipyretics, which act in the nervous system (75%), represented by paracetamol (45%) and dipyrone (15%), followed by ibuprofen (6%) and by acetylsalicylic acid (3%).5

Self-medication becomes a risk when dealing with children due to the adverse effects that can be generated due to its misuse and side effects. Paracetamol is generally a safe drug, within recommended doses, in previously healthy individuals. However, it has a narrow therapeutic index and is hepatotoxic dose-dependent. Another class that can cause liver problems are herbal medicines.14

Medications for the treatment of respiratory diseases associated with the use of medicinal plants were cited as a practice for the self-medication of children. The use of
medicinal plants is a widespread practice among caregivers who administer them mainly without consulting the physician. The high use of medicinal plants (74.9%), corresponding to 37.7% of teas and 37% of infusions, was also found in another study.15

The family members perform the self-medication of the child in order to alleviate the symptoms of fever and intense pain avoiding possible complications. These results diverge from those found in other researches that has as a main justification for this practice the fact that caregivers are already accustomed to self-administering medication to children without medical consultation.4 Practicality (88%), fever (58%) and pain (12%) are shown as motivating situations in another study about the self-medication of children attended in an outpatient clinic of a school hospital.16

The difficulty of getting to health care and access to health services, as well as the dissatisfaction with the health care received, were factors that motivated self-medication by the caregivers of children in their homes. This reality is also present in another study that states that 30% of the self-medication practiced by the mothers can be justified by the difficulty of access to the doctor.17 Another study carried out in the municipalities of Pará and Piauí corroborates these difficulties where the impossibility of obtaining medical care due to the child's distance from home to health services and maternal work were triggering factors for self-medication.7

Self-medication, in the study, was motivated by the indication of pediatricians, in previous consultations, and also by the influence of relatives and pharmacists. In contrast, one study shows that the decision to self-medicate paracetamol in the child was mostly on its own (45%), followed by medical prescription (20%), the nurse (6.5%) and the medical or pharmaceutical negociator (4 , 3%).18

CONCLUSION

The data makes it possible to conclude that the child's self-medication is a reality in our environment. The study showed that the family caregivers performed self-medication without a prescription. This practice, however, presents serious risks to the health of the child, highlighting the hepatotoxic effects.

Family caregivers reported feeling frightened and scared when they encountered the child with intense symptoms of fever and pain. They identify that the symptom of fever is an indication that there is some clinical change in the child and may worsen if not combated through non-pharmacological and pharmacological measures. Having witnessed the relief of symptoms, through the use of self-medication, may present as a motivator for the continuation of such a practice.

The difficulty of reaching the health service due to the distance of the relatives' residences, locomotion problems, as well as difficulties of access to the health service due to overcrowding, long waiting time and negligence of health professionals in not attending and investigating the symptoms, requesting laboratory and clinical examinations to detect the diagnosis of their patients, are motivating factors for the practice of self-medication in their homes. Therefore, it is necessary to guarantee access and health care to all children, regardless of their place of residence. The quality of health care still needs to be improved so that there is integrality and universality of health.

The improvement of the symptoms presented by the child, especially fever, was the fundamental benefit identified for self-medication. Moreover, the practicality of taking medication at home, gaining time due to the rapid effect of medication and correlating all previous actions with the feeling of tranquility in having helped to improve the symptoms are beneficial actions, in the eyes of the caregivers, which aim at the well-being of the child. When seeing that the symptoms were not alleviated by the self-medication in the child, the relatives seek health care to assist in the care. The influence of the pharmacist and family members has been relatively small for medication self-therapy, but it is still present.

Within the whole scenario of self-medication and its aggravating factors, the nurse professional stands out with a fundamental role in identifying the errors and grievances generated by this practice, carried out by parents or caregivers of children, in their vast fields of activity. The nurse therefore acts in the promotion of health education to parents, children and the general population about the efficacy and safety of drug administration, as well as the prevention of the risks of self-medication for infants' health.

It is necessary, in the context of self-medication, to have awareness campaigns and information for the population on the adequate use of the medications that are available in the market, being of fundamental importance the presence of the...
multidisciplinary assistance of doctors, nurses and pharmacists for the guarantee of education in order to intervene in the unsafe discontinuity of this practice.

The data from the study made it possible to conclude that the self-medication of the child by their relatives is a common reality in this environment, and it is necessary to discuss more about the issue by working with families to guide and avoid their use or minimize their risk.

REFERENCES


