Evaluation of the attitudes towards the use of drugs in an urban Northeastern population of Brazil

Avaliação das atitudes de uma população urbana do nordeste do Brasil com relação ao uso de fármacos

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ABSTRACT

BACKGROUND AND OBJECTIVES: The use of drugs has improved general population quality of life and health conditions. However, pharmaceutical industries spread a purely curative view and total well-being associated to its use. This study aimed at evaluating population attitudes with regard to the use of drugs in the city of Frei Paulo/SE, Brazil.

METHODS: Data were collected by means of a questionnaire applied by trained people and in the presence of the community health agent, in the micro-regions of the Family Health Strategy.

RESULTS: Participated in the study 186 people, predominantly females (77.95%) with mean age of 45.25±14.91 years. 73.12% of respondents have reported reading patient information leaflets, however approximately 40.0% of respondents have not completed elementary school, which might have impaired the understanding of such information. 31.72% have stated knowing that drugs in high doses may harm health. However, 9.14% of participants have confirmed using drugs in doses higher than those prescribed, and from them, 29.41% had complications.

CONCLUSION: It is imperative the development of public policies focusing on population information and awareness with regard to the responsible use of drugs.

Keywords: Attitudes, Drugs, Headache.

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RESUMO

JUSTIFICATIVA E OBJETIVOS: A utilização de fármacos tem aumentado a qualidade de vida e as condições de saúde da população em geral. Entretanto, as indústrias farmacêuticas propagandeiam uma visão puramente curativista e de pleno bemestar associado ao seu uso. O objetivo deste estudo foi avaliar as atitudes da população frente ao uso de fármacos no município de Frei Paulo/SE, Brasil.

METODOS: Os dados foram coletados por meio da aplicação de um questionário por pessoas treinadas e na presença do agente comunitário de saúde, nas microrregiões da Estratégia de Saúde da Família.

RESULTADOS: Foram entrevistadas 186 pessoas, com predominância do gênero feminino (77,95%) com média de idade de 45,25±14,91 anos. 73,12% da população relataram praticar a leitura da bula, todavia, aproximadamente 40,0% da população não completaram o primeiro grau, o que pode ter prejudicado a compreensão das informações presentes nela. 31,72% afirmaram conhecer que os fármacos, em doses elevadas, podem causar lesões à saúde. Entretanto, 9,14% dos participantes confirmaram a utilização de fármacos em dose maiores do que as prescritas e, destes, 29,41% apresentaram complicações.

CONCLUSÃO: Dessa forma, é imperativo o desenvolvimento de políticas públicas com foco na informação e conscientização da população quanto ao uso responsável de fármacos.

Descritores: Atitudes, Cefaleia, Fármacos.

INTRODUCTION

The use of drugs has improved quality of life (QL) and health condition of the general population¹. However, in search for new market achievements, pharmaceutical industries spread a purely curative and welfare-related vision associated to the use of drugs. This context targets the misuse of certain drugs, with consequent increase in the onset of side effects, thus increasing expenditure of public money. In an attempt to rationalize the use of drugs, governmental initiatives have been launched aiming at controlling the sale of drugs^{2,3}. The pharmacist is the professional in charge of the whole process of dispensing drugs, which comprises from a detailed analysis of the prescription to providing information necessary for the therapy to be carried out⁴. However, researches have shown that the clerk is the most frequently present professional in the direct orientations to the user whenever the dispensation occurs^{5,6}. In Brazil, 35% of

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drugstores do not have the full-time presence of the pharmacist⁷. That situation, associated to advice from clerks, may distort the adequate process of drug dispensation and patient orientation, since these professionals are not skilled to play such role.

The aim of the study was to evaluate the attitudes of the population towards the use of drugs in the city of Frei Paulo, Sergipe, Brazil.

METHODS

This is a transversal study part of the research project on the use of drugs, "Self-drugs practices: an approach to the behavior of patients and the main risks", conducted from September 2013 to January 2014 in Frei Paulo/SE, a city with 13,974 inhabitants located 64 km away from the capital Aracaju. The research universe was the 8,213 inhabitants that live in the urban area of the city. Sample size was calculated taking into account 5% sampling error, 95% confidence interval and estimated prevalence of self-drugs of 90%, adding up to a minimal sample of 137 subjects. People aged between 18 and 80 years agreed to participate in the study by signing the free and informed consent term (FICT). Data were collected with questionnaires applied by trained people and in the presence of the community health agent.

The study comprised 13 micro-regions (76.47% of the urban micro-regions). In each region, the questionnaire was applied in the first and in the seven subsequent houses, always following the constant of three, totaling 216 houses.

Participants were asked about reading of patient information leaflets, about asking clerks for help and the use of drugs in doses different from those prescribed; they were also asked about their view on whether the use of drugs could harm health.

Statistical analysis

Collected data were accounted in double entry and tabulated on the Excel™ software for the identification and correction of typographical errors, which were organized in proportions. Fisher's test was employed to evaluate differences between groups. Bioestat 5.3™ software was used for data analysis, considering statistically significant p<0.05.

The study was approved by the Ethics Committee of the University Hospital of Aracaju/Federal University of Sergipe (CAEE n° 13832613.4.0000.5546).

RESULTS

Among all houses visited (n=216), 30 were excluded because residents did not agree to participate in the study. Thus, 186 residents were interviewed, and 145 of them (77.96%) were women. The average age of participants was 45.25±14.91 years, and around 40% of the population did not complete the elementary school. In the evaluation of attitudes of the population towards the use of drugs, it was found that 73.12% read patient information leaflets before taking the drugs, 92.47% always asked the clerk for information on the drugs purchased and 43.01% stated that drugs always harms health (Table 1).

Around 14% of those interviewed reported having used the drugs in doses different from the ones prescribed by the health professional;

9.14% used higher doses and 4.84% used lower doses (Table 2). It was observed that 29.41% of people who made use of the drugs in higher doses suffered some kind of complication, whereas only 7.10% of those who used the same or lower doses suffered complications (p = 0.0109) (Table 3).

Table 1. Attitudes of the population regarding the use of drugs. Frei Paulo/SE, Brazil, 2013-14

Variables	%
Read patient information leaflets Yes No	73.12 26.88
Ask information to clerk about the drugs purchased Yes No	92.47 7.53
Drugs can harm health Yes, always Yes, only high dose Sometimes No	43.01 31.72 16.13 9.14

Table 2. Use of drugs in doses different from those prescribed. Frei Paulo/SE, Brazil, 2013-14

Use drugs in doses different from those prescribed	%
Yes, higher dose	9.14
Yes, lower dose	4.84
No	85.48
Do not know	0.54

Table 3. Association between use of medicines in higher doses and complications. Frei Paulo/SE, Brazil, 2013-14

	Complication – Yes n %	Complication – No n %	p value
Dose Higher Equal or lower	5(29.41) 12 (7.10)	12(70.59) 157(92.90)	0.0109

DISCUSSION

Patient information leaflets, which are mandatory in drugs, could be an important ally against the inadequate use of drugs. According to the resolution of the Collegiate Board of Directors - RDC No 47/2009, information contained in patient information leaflets must follow the question-and-answer format, with a simple and complete language⁸. However, as it has been shown by a study performed by Sousa, Garcia and Gonçalves Junior⁹, patient information leaflets have a language that is hard to understand⁹. In the present study, 73.12% of those interviewed read patient information leaflets. Nonetheless, around 40% of the evaluated population are either illiterate or did not complete elementary education. This way, the low schooling associated to a sophisticated language contained in the leaflets may lead to wrong interpretations.

In the analyzed population 92.47% stated asking clerks for help about the drugs purchased, what can pose a risk to patient's health due to the fact that this professional does not have enough scientific and technical knowledge to take on such responsibility. This consultation with the clerk probably stems from the lack of a professional pharmacist, since it has been observed that 97% of the drugstores in the state of Sergipe do not rely on full-time pharmacists⁷. This

professional, who is technically responsible for the drugstore, has an important role in ensuring the correct and rational use of drugs¹⁰. In the context of the rational use of drugs, it is of high priority that information and guidance on physical characteristics, posology, conservation and application be well explained during the medical visit and in the final dispensation of the drug. However, studies have demonstrated that the knowledge on the drugs being used was considered, most of the times, as insufficient for its correct use to be ensured^{11,12}. That situation can also exist in the population studied because 14% of those interviewed stated having modified its therapeutics. Besides, that required medical prescription does not prevent the incorrect use of drugs. As it has been described by Mastroianni et al.¹³, 47.7% of individuals that handed the medical prescription did not use the drugs according to the prescription and 34.09% modified the doses recommended¹³.

Modifications of the doses made by patients increase the risk of the onset of complications. It was observed that 29.41% of users who increased the dose suffered some kind of complication such as allergic reactions, alteration in blood pressure and headache. These complications, such as headache, can lead to self-medication¹⁴. In the case of sub-doses or doses equal to the ones prescribed, 7.10% of patients suffered complications. In this group, major complaint was therapeutic inefficacy. One of the aspects of underdosing is practiced with antibiotics, since the use of these drugs in doses below that recommended, or even their interruption, may cause therapeutic resistance¹⁵.

CONCLUSION

The present study highlights gaps in the knowledge of the studied population concerning the use of drugs. That becomes evident when it is considered that 31.72% of interviewed individuals reported they believed that drugs only harms health in high doses, and also that 14% have ever changed the therapeutic routine prescribed. In light of all that, the development of public policies targeting the information and awareness of this population is necessary, concerning the responsible use of drugs. Besides, the presence of the full-time pharmacist in the drugstores must be motivated.

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