USER SATISFACTION ASSESSMENT IN PHARMACIES OF THE PUBLIC HEALTH SYSTEM

Avaliação da satisfação dos usuários das farmácias do sistema público de saúde

Evaluar la satisfacción de los usuarios de las farmacias del sistema público de salud

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ABSTRACT

Objective: To assess the access to medicines and the level of satisfaction in users of public pharmacies in the municipality of Ijuí, Rio Grande do Sul, Brazil. Methods: Quantitative observational and analytical cross-sectional study conducted with users of pharmacies from 14 health care centers who were randomly selected in the waiting room in January and February 2013. Data were collected using a semi-structured questionnaire on socioeconomic aspects, health conditions, and use of health services and medicines. Satisfaction was measured by a score of zero to 10. Data were analyzed using the Mann-Whitney, ANOVA and Kruskal-Wallis tests. Results: Participants were 134 users: 75.4% (n=101) of them were women and mean age was 48.95 ± 16.28 years. Most (n=89 - 66.4%) of the participants reported long term use of medicines, 54.5% (n=73) reported access to all the medicines in the pharmacy of the center, and 74.6% (100) reported buying the medicine if the pharmacy was out of them. The main problem identified was the lack of medicines (n=50 - 37.3%), followed by service and lack of human resources (n=17 - 12.6%). Mean satisfaction with the services was 8.7 ± 1.5. Greater satisfaction was found in those with lower levels of education, those who have access to medicines and those who have their doubts clarified. Conclusion: There is satisfaction with the services provided; however, the findings highlight the poor access to medicines and the need for effective qualification of the pharmaceutical services provided to ensure access to treatment with quality and problem-solving capacity.

Descriptors: Pharmaceutical Services; Health Services Accessibility; Patient Satisfaction; Drug Utilization.

RESUMO

Objetivo: Avaliar o acesso aos medicamentos e o grau de satisfação dos usuários de farmácias públicas do município de Ijuí, Rio Grande do Sul. Métodos: Trata-se de um estudo observacional, transversal, analítico, de abordagem quantitativa, realizado com usuários das farmácias de 14 unidades de saúde do município em estudo, selecionados aleatoriamente na sala de espera das unidades durante os meses de janeiro e fevereiro de 2013. A coleta de dados aconteceu na unidade de saúde através de questionário semiestruturado, com perguntas referentes a aspectos socioeconômicos, condições de saúde, uso do serviço de saúde e medicamentos. Mensurou-se a satisfação com nota de zero a dez e os dados foram analisados pelos testes de Mann-Whitney, ANOVA e Kruskal-Wallis. Resultados: Participaram 134 usuários, sendo 75,4% (n=101) do sexo feminino e idade média de 48,95±16,28 anos. A maioria (n=89 - 66,4%) dos participantes relatou ter acesso contínuo a medicamentos, 54,5% (n=73) informaram acesso a todos os medicamentos na farmácia da respectiva unidade e, na falta destes, 74,6% (n=100) informaram comprá-los. O principal problema que surgiu nas farmácias foi a falta de medicamentos (n=50 - 37,3%), seguido pelo atendimento e a falta de recursos humanos (n=17 - 12,6%). A satisfação média com os serviços ofertados pela farmácia foi de 8,7 ±1,5. Verificou-se maior satisfação entre os participantes de menor escolaridade, que têm acesso aos medicamentos e as dúvidas
INTRODUCTION

Pharmaceutical services (PS) have been organized and strengthened as a public policy through the National Medicines Policy (Política Nacional de Medicamentos – PNM) published in 2001 with the aim of ensuring the safety, efficacy and quality of medicines in addition to the promotion of the rational use of medicines and the access to essential medicine(1). In the current configuration of Brazil’s National Health System, also known as Unified Health System (Sistema Único de Saúde – SUS), PS are a determinant component for the quality of care which results in successful resolution of the patients’ condition, contributing in a decisive way to the control of diseases and increasing the population’s life expectancy and quality of life. Its effectivity, however, depends on adequate and consistent financial, physical, human, and technological resources in each territory(2).

In this context, the access to medicines in public health services in Brazil has increased in recent years, rising from 26.40% (in 2003) to 48.55% (in 2008), as reported by a household survey conducted in the city of São Paulo. The study also found a greater access by the population with lower purchasing power and the expansion of public access to medicines by the population with higher income. Importantly, universal drug expense coverage and equity in access to medicines are still challenging for the SUS, since lack of access to and irrational use of medicines jeopardize the investments made through health care actions(3).

Another important factor is the unavailability of medicines in health services, which may be correlated with lower adherence to drug therapy(4-7), poorer health status, increased treatment costs, greater use of health services and complementary therapies, interfering with the satisfaction of the users of such services4-8. Inadequate execution of the last stages of OS – for instance, drug dispensing and pharmaceutical counseling – also contribute to irrational use of medications and dissatisfaction with the PS provided. A study carried out in public pharmacies in Ribeirão Preto, São Paulo(9), identified a high prevalence of older patients with with wrong medication doses. The finding was correlated to the lack of information about medication use. In addition, lack of knowledge on medication use directly influenced hypertensive patients’ non-adherence to drug therapy in health care centers of Minas Gerais(9).

The use of medicines is an important tool for the health care of the population as it helps to promote, protect and recover health and prevent injuries(1). In this context, the importance of knowing the public services that offer medicines and the satisfaction of users is indispensable for obtaining information that shall support the planning of actions carried out by health teams and thus improve the quality of care(9).

In view of these considerations, the present study aimed to assess the access to medicines and the level of satisfaction in users of public pharmacies in the municipality of Ijuí, Rio Grande do Sul.
METHODS

This is a quantitative observational and analytical cross-sectional study conducted with users of public pharmacies in the municipality of Ijuí, Rio Grande do Sul, Brazil. The municipal PS include: one drug center, one exclusive pharmacy for controlled medicines, one pharmacy for specialty medicines, one pharmacy for Specialized Care Service (Serviço de Atendimento Especializado – SAE), one pharmacy for strategic medicines and 14 pharmacies in health care centers for essential medicines.

The study used an intentional sample of 10 users from each public pharmacy. In all, 134 users were randomly chosen in the waiting room of the facilities during the months of January and February 2013. Users aged 18 years of both genders were included. Patients who could not answer the questions asked by the researchers were excluded.

Data were collected using a semi-structured questionnaire with open- and close-ended questions on sociodemographic aspects (gender, age, and education), health conditions (presence of chronic diseases), and use of and access to health services and medicines. Interviewers were pharmacy students who had been previously trained prior to the research. The questionnaire was validated in pilot study.

Users’ satisfaction with the pharmaceutical service was measured by a score of zero to ten, the latter being the maximum and indicating better satisfaction. The use of medicines by the interviewees was self-reported. Continuous use of medicines was that in which a certain medicine was used in an uninterrupted manner without any information on when the treatment should end. The data were compiled in tables using the Statistical Package for the Social Sciences (SPSS), version 18.0. Simple descriptive analysis resources, such as mean, standard deviation, and minimum and maximum values, were used. The Kolmogorov-Smirnov test was used to check for normality of the variables. The Mann-Whitney test was used to compare means in non-parametric and independent samples. The ANOVA and Kruskal-Wallis tests were used to compare the mean scores of the groups. Values of p≤0.05 were considered statistically significant in all the tests.

The present study is in accordance with the ethical precepts of research involving human beings and was approved by a Research Ethics Committee under Approval No. 176.210/2012.

RESULTS

The sample was composed of 134 users, 75.4% (n=101) of whom were women, with a mean age of 48.95±16.28 years (minimum age of 19 years and maximum of 95 years). Age 60 predominated (29.1% - n=39) and most participants had eight or more years of study (50.7% - n=68), as presented in Table I.

Table I - Sociodemographic data of users of pharmacies in health care centers in Ijuí, Rio Grande do Sul, Brazil, 2013 (n=134).

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>101</td>
<td>75.4</td>
</tr>
<tr>
<td>Men</td>
<td>33</td>
<td>24.6</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-29 years</td>
<td>16</td>
<td>11.9</td>
</tr>
<tr>
<td>30-39 years</td>
<td>29</td>
<td>21.7</td>
</tr>
<tr>
<td>40-49 years</td>
<td>24</td>
<td>17.9</td>
</tr>
<tr>
<td>50-59 years</td>
<td>26</td>
<td>19.4</td>
</tr>
<tr>
<td>≥ 60 years</td>
<td>39</td>
<td>29.1</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;8 years of study</td>
<td>66</td>
<td>49.3</td>
</tr>
<tr>
<td>≥8 years of study</td>
<td>68</td>
<td>50.7</td>
</tr>
</tbody>
</table>

Most of the participants (66.4% - n=89) reported the continuous use of medicines. Of these, 89.9% (n=80) reported having some chronic disease.

With regard to the access to the prescribed medicines, 54.5% (n=73) of the participants reported they get all the medicines in the pharmacy of the health care center. Additionally, 29.1% (n=39) of the participants said they do not get the medicines in the health center and 16.4% (n=22) said they sometimes get the medicines in the health center. The analysis of the relationship between access to medicines and sociodemographic characteristics – gender (p=0.879), age group (p=0.094) and education (p=0.118) – did not present significant differences.

When questioned about their knowledge of the indication for the prescribed drugs, 85.1% (n=114) of the participants stated they knew the indication and 87.3% (n=117) said their doubts are clarified in the pharmacy. In case the pharmacy runs out of medicines, 74.6% (n=100) of the participants reported purchasing the medicines, 14.2% (n=19) said they benefitted from the Popular Pharmacy Program (Programa Farmácia Popular), 8.9% (n=12) got the medicine in another center, 3.7% (n=5) waited for the medicine, and 0.7% (n=1) reported going to court to get the medicine. The lack of medicines was pointed out as the

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main problem in pharmacies by 37.3% (n=50) of the respondents, and 50.7% (n=68) reported it occurs very often, as presented in Table II.

Table II - Assessment of the problems and necessary changes by users of pharmacies in health care centers in Ijuí, Rio Grande do Sul, Brazil, 2013, (n=134).

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems in the pharmacy in the health care center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No problems</td>
<td>61</td>
<td>45.5</td>
</tr>
<tr>
<td>Lack of medicines</td>
<td>50</td>
<td>37.3</td>
</tr>
<tr>
<td>Service/Human resources</td>
<td>17</td>
<td>12.6</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>6</td>
<td>4.6</td>
</tr>
<tr>
<td>Is lack of medicines common?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>68</td>
<td>50.7</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>29.1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>29</td>
<td>21.6</td>
</tr>
<tr>
<td>What do you wish it were different?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nothing, it is good the way it is/ I do not know</td>
<td>66</td>
<td>49.3</td>
</tr>
<tr>
<td>All medicines should be available</td>
<td>42</td>
<td>31.3</td>
</tr>
<tr>
<td>Service/Human resources</td>
<td>21</td>
<td>15.7</td>
</tr>
<tr>
<td>Better infrastructure</td>
<td>5</td>
<td>3.7</td>
</tr>
</tbody>
</table>

The mean score for the satisfaction with the services provided by the pharmacies analyzed was 8.7±1.5, with a minimum score of 3 and a maximum score of 10. The assessment of public pharmacies was related to education, access to medicines and clarification of users’ doubts. Participants with lower levels of education presented higher satisfaction scores, with a mean of 9.1±1.58, while those with higher levels of education presented a mean satisfaction score of 8.4±1.46 (p=0.000). Regarding the access to medicines, the highest mean score was found in those who reported full access to medicines in public pharmacies, followed by those with partial access and without access – 9.0±1.38, 8.45±1.54 and 8.36±1.87 (p=0.039). A significant difference was found between the participants with full access and those with partial access (p=0.033). As for the clarification of doubts, the results showed greater satisfaction of those who have their doubts clarified, with a mean of 8.9±1.41. Those who do not have their doubts clarified had a mean of 7.59 ± 2.0 (p=0.007).

**DISCUSSION**

The satisfaction with the services offered by the public pharmacies analyzed in the present study was high, which may indicate, based on the participants’ opinions, that the care provided is adequate. However, the lack of medicines was pointed out as the main problem in the pharmacies studied. A relationship between access to medicines and satisfaction with services was found, with greater levels of satisfaction among the participants who have access to all medicines. It should be noted that because the data were collected in the health care center, the participants may have omitted information due to insecurity or fear of not being served. In addition, the participants who reported that their doubts are clarified in the pharmacies located in the health care facilities also presented higher levels of satisfaction.

The analysis of sociodemographic variables showed that the participants with higher levels of education presented lower satisfaction with the services. A study carried out in the Metropolitan Region of São Paulo pointed out that education is correlated to the use of health services and its effect is higher than that of individual income, since individuals with higher levels of education seek health services mostly for preventive care(10). These findings demonstrate greater knowledge about health issues, which may influence the assessment of the services.

The other sociodemographic characteristics were not associated with access to medicines and satisfaction with the services provided. With regard to these characteristics, there was a predominance of women, which is in line with the findings of other studies carried out in Brazilian health services(7,8,12). Additionally, there was a prevalence of low levels of education, i.e., less than eight years of study, which has also been reported in other studies(7,12,13). As for the participants’ mean age, it was higher than those found in studies carried out in Belo Horizonte, Minas Gerais(14), and Blumenau, Santa Catarina(15) – 39.2 and 43.3 years, respectively. These results demonstrate that, despite the greater use of medicines by older people, younger individuals also present with continuous use of medicines, which reinforces the need for counseling for both adequate drug and non-drug treatments of related diseases.

Demographic, social and economic conditions, such as female gender, older age, presence of chronic diseases, low levels of education, and higher income, are associated with the greater use of health services and medicines(9,13), which influences the access to medicines and adherence to drug therapy, as reported in other studies(6,7). Low adherence to treatment was associated with...
with older age, occurrence of three or more morbidities, and the need for full or partial purchase of medicines in older people in Bagé, Rio Grande do Sul(8). The authors highlighted the importance of ensuring the access to medicines. According to them, the majority of the population served by the public health service presents low levels of income; therefore, free access is often the only alternative. In this regard, it is important to note that medication is an important part of health care and one of the most used therapeutic tools to treat diseases, promote quality of life and prevent complications and epidemics(15). In Brazil, the SUS, through PS policies, seeks to promote the population’s access to essential medicines, i.e., the medicines that treat most of the diseases and conditions that are used in priority actions targeted at the health of the population(2).

Most of the interviewees in the present research reported continuous use of medicines. However, almost half of the participants do not have full access to their treatment, which highlights a difficult access to medicines. Similar result was found in the National Household Sample Survey (Pesquisa Nacional por Amostra de Domicílios – PNAD) conducted with 19,427 people from five regions of the country. In the survey, 45.3% of the respondents received all medicines and 18.7% received only part of their medicines(12). Studies with adults from the South and Northeast Regions(10) of the country identified full access in 36.6% and partial access in 5.1% of the participants. In a health care center of Porto Alegre, Rio Grande do Sul(17), 86.75% of the respondents had full access to medicines and 13.25% had partial access. In Ribeirão Preto, São Paulo, 46.8% of the patients were able to get all their medicines through the SUS(9).

As regards the causes of the lack of access to medicines, a study with users of primary care in Blumenau found that 25.0% of the individuals did not get all the medicines prescribed. The main reasons for not getting the medicines reported in the study were: medicines were not supplied through the SUS (42.5%) and lack of medicines in the pharmacy inventory (40.7%)(7). In addition, a study conducted in Ribeirão Preto found that 31.3% of the older patients served by the SUS pharmacies were unable to get all their prescribed medicines because the pharmacies had run out of them(9), although they were standardized in the Municipal List of Essential Medicines (Relação Municipal de Medicamentos Essenciais □ REMUME).

The REMUME is a set of guidelines for prescriptions. When the medicines included in the list are correctly selected and effectively adopted by prescribers, the management of and access to the prescribed medicines are facilitated(18). However, the REMUME is composed of essential medicines for the treatment of most of the population’s problems, and, as recommended by the World Health Organization(19), at least 70% of the prescribed medicines must be in the REMUME, a condition that may generate some gaps in the treatment of certain diseases. In addition, the lack of medicines included in the REMUME in the municipal services may be due to insufficient financial resources, inadequate planning or problems in their distribution to public pharmacies. The present study did not check whether the medicines not found in the public pharmacies analyzed belonged to the REMUME, which is a limitation of the study.

It should be noted that insufficient access to medicines is directly associated with poorer health status, need for new treatments, increase in the number of visits and additional expenses(15). In this regard, in order to get the medicine when it is unavailable in public pharmacies, most of the respondents in the present study reported purchasing it, which is in line with the findings of other national studies(4,12). Brazil’s Popular Pharmacy Program was also mentioned by the participants of the present study. The program is a strategy of the Ministry of Health aimed at increasing access to medicines for diseases prevalent in the population, whether free or 90% cheaper, in the private network of pharmacies and drugstores(19). In the present research, the Popular Pharmacy Program was found to be a tool for access to medicines when they are not available in the pharmacies in the health care centers, contributing to the maintenance of drug therapy and adherence to treatment.

In addition, five participants of the present study reported waiting for the medicine, which represents discontinuity of and non-adherence to the treatment as well as potential risks of aggravating symptoms and complications of the disease. Research found that 8.8% of the interviewees in the five regions of the country did not get their medicines and pointed out that non-acquisition was associated with social class (lower socioeconomic status), education (lower levels of education), race (black people), and age group (young and adults)(12). Importantly, the participants of the present research were asked about how they got their medicines when they were not available in the public pharmacy, which may have contributed to a more resolute answer.

Lack of medicines was reportedly frequent and was pointed out as the main problem in the public pharmacies analyzed in the present study. Other problems included human resources and physical structure. In a study carried out in five municipalities in the state of São Paulo, the main complaint was the lack of medicines(20). Similarly, in a municipality of Sergipe, complaints in public services included: lack of medicines, poor infrastructure, bureaucracy, unsatisfactory physician-patient relationship, lack of courtesy and attention on the part of some health professionals, among others(21).

In this context, poor access to medicines decreases adherence to drug treatment(6). It should be noted that access to medicines constitutes the first stage of quality PS and its effectiveness depends on improvements in pharmaceutical care in order to obtain effective results, with greater adherence and smaller household medication inventory(7). Receiving medicines does not necessarily imply better health or quality of life, since poor prescriptive habits and dispensing failures can lead to ineffective and insecure treatments(6,7). These considerations are consistent with the complaints about the care and the lack of human resources and information about medicines in the present research.

Most of the participants of the present study reported receiving information and clarifying their doubts about the drug therapy in the pharmacy in the health care center. This finding differs from that of a study carried out in a municipality...
in Bahia, where dispensing services were restricted to the rapid delivery of the medicines by nursing technicians, without any communication or guidance provided to the user\(^4\). Other studies carried out with Family Health Care services in Ponta Grossa and with hypertensive patients receiving care from Family Health Care services in the countryside of Minas Gerais also reported lower percentages: 76.2\% and 79.3\% of the respondents, respectively, received counseling on medication use\(^8\),\(^9\).

Unlike the present study, the aforementioned studies used data collected in the participants’ homes, which may have interfered with the affirmative answers regarding the clarification of doubts. In addition, the provision of information does not imply good understanding, and the answers used in the present study were self-reported, which is another limitation.

The conditions that compromise the quality of PS in several municipalities\(^23\) include shortage of financial resources, lack of professional education; failures in the selection of medicines, lack of planning and management of drug procurement, and inappropriate storage of medicines. A study carried out in twenty municipalities in the Northwest region of the state of Rio Grande do Sul revealed problems with material, financial and human resources, especially regarding the presence of the pharmacist in public pharmacies\(^25\). In a health care center in Porto Alegre, Rio Grande do Sul, the role of the pharmacist in medication counseling in the health team was found to be inconsistent with the current recommendations\(^25\).

The dispensing of medicines performed by professionals other than the pharmacist hinders the provision of information about treatment, which may result in the irrational use of medicines. The presence of the pharmacist in the health care center improves the management of the PS in the center, mainly with regard to the dispensing of medicines, counseling, and decision making regarding therapy. Drug therapy follow-up helps minimize difficulties related to the use of medicines and improves adherence to treatment and quality of life\(^4\). In addition, when assessing the satisfaction of hypertensive patients with the service offered in the present study, 80\% of the participants considered it important to have the pharmacist and the physician work together and 100\% answered that they would continue to use the service, indicating it to friends and relatives.

Importantly, the pharmacist is the professional trained to guarantee the population’s access to quality medicines, offer pharmaceutical services and promote the rational use of medicines among users and in the community, thus helping them. The presence of the pharmacist in Family Health Care services also helps the health team, since s/he can train and assist the multidisciplinary team in activities related to the use of medicines. In the community, the pharmacist participates in education and health promotion activities and ensures the provision of counseling and information to users, assisting them in the correct administration of medicines and in the adherence to drug therapy\(^28\).

Assessing users’ satisfaction is thus essential to improve the management of the services provided, since the understanding of the users’ assessment points to strategic and operational decisions that influence the quality of the services\(^9\). In this regard, the challenges related to the demands and improvements of PS in the SUS demonstrate a need to raise managers’ awareness to invest in physical structure, human resources, organization of processes and permanent training of workers involved in activities that are part of the PS cycle; in addition, it is important to include the pharmacist in these places, which shall make access to drugs viable, rational and more efficient\(^23\),\(^26\).

The presented study was limited by the fact that it did not check the prescriptions of the individuals attending the public pharmacies or assessed the dispensing of the prescribed medicines and the presence of such medicines in the official lists of the SUS, which are important indicators for the assessment of the planning and execution of PS and their capacity achieve the successful resolution of the patients’ condition.

**CONCLUSION**

The score regarding the satisfaction with the health services was higher than eight, which represents a general positive assessment of the services provided by the pharmacies of the health care centers of the municipality analyzed. Despite this assessment, only half of the participants have access to all the prescribed medicines in public pharmacies and the lack of medicines was pointed out as a major and frequent problem by the interviewees.

These results demonstrate the poor access to medicines in the SUS as well as the need to carry out all the stages of PS, which include the appropriate selection of medicines, the support from a multidisciplinary team with regard to the prescription, as recommended, and quality dispensing services that seek to promote the rational use of medicines.

**REFERENCES**


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