ABSTRACT

The objective of this study was to evaluate accessibility to primary health care services in the state of Goiás. A descriptive cross-sectional study was conducted based on secondary data from the National Program to Improve Access to and Quality of Primary Health Care. The study sample was composed of health professionals from 1,216 primary health care units. Results showed that 68.5% of the health units miss a screening room, thus considerably damaging prompt decision-making by professionals. The lack of medical offices in 2% of the sites hinders the primary health care services accessibility in Goiás. As regards opening hours and work shifts, 86% of the units are open five days a week in eight-hour shifts, which does not favor accessibility for users. This study confirms the lack of accessibility to health services and the need for additional investments to strengthen primary health care.

Descriptors: Health Services Accessibility; Primary Health Care; Health Evaluation; Community Health Nursing.

RESUMO

Objetivou-se analisar a acessibilidade aos serviços de saúde na Atenção Básica no estado de Goiás. Estudo descritivo de corte transversal com base nos dados secundários proveniente do Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica. A amostra do estudo foi constituída por profissionais de saúde das 1.216 UBS. Verificou-se que, a sala de acolhimento está ausente em 68,5% das unidades de saúde, o que prejudica, consideravelmente, os profissionais na tomada de decisão imediata. A ausência de consultórios clínicos em 2% dos locais dificulta a acessibilidade aos serviços de saúde na Atenção Básica em Goiás. Com relação ao horário e turno de funcionamento, verificou-se que 86% das unidades atendem cinco dias na semana em turnos de oito horas, não favorecendo a acessibilidade do usuário. Com este estudo constata-se a deficiência da acessibilidade aos serviços de saúde e a necessidade de maiores investimentos no fortalecimento da Atenção Básica.

Descritores: Acessibilidade aos Serviços de Saúde; Atenção Primária à Saúde; Avaliação em Saúde; Enfermagem em Saúde Comunitária.
INTRODUCTION

According to literature, accessibility to primary health care services is one of the main care-related problems\(^1-2\) These problems are related to the quality of services, inefficacious management; difficulty in scheduling appointments on the same day users seek care; queues for scheduling; long waiting time; and the distance of units in some regions\(^3\).

Primary health care services accessibility is directly linked to the Brazilian Unified Health System (SUS) consolidation and can be defined as one of the dimensions of access\(^4\). Hence, it concerns the problem-solving capacity of services so that supply is enough to meet the needs of people seeking care\(^5\).

The concept of access and accessibility are used in different ways and may vary depending on the context and over time. There are authors in literature that use the terms access and accessibility as synonyms, whereas others differentiate the meaning of these terms\(^1,4,6\).

The concept of health services access is considered to be the freedom of selecting services and their availability when one seeks care\(^1,4,6\). It can also be understood as the association among elements called availability, acceptability and information, and is increasingly confused with the concept of health equality\(^7\).

Accessibility can also be considered as a dimension of access. In this sense, it concerns the relation between the health system characteristics and the population served by it, or the degree of adjustment between the population’s features and supply of services\(^4\).

When we refer to accessibility, the quality of services and how these are provided to the population are promptly questioned. According to some authors, evaluating the structure, process and result\(^8\) is crucial to estimate health services quality.

The proper planning of health services considering the physical structure available at primary health care facilities contributes to a more responsive working process, increasing quality and accessibility for users seeking health services.

The quality of primary health care services has been discussed since the 1930s\(^9\). However, health services evaluation focused on care quality won over Brazil in the late 1990s, strengthening social control and appraising the community participation in planning and evaluation actions\(^10\).

In the search for services quality the evaluation processes are directly related to management development, which has engaged health professionals that typically do not adhere to the culture of evaluation and monitoring. Strengthening partnerships among education, service and management to provide sustainability to the managerial training of professionals in a transformative light is crucial to build this culture\(^11\).

In the scope of management development to improve health services quality, primary health care units should be structured so as to solve problems that lead to inefficacious accessibility to some services; insufficiency and non-responsiveness of managers’ and workers’ profile; hard access to inputs; little effectiveness of health policies and actions; and improper physical structure of some health units\(^12\).

Due to the aforementioned problems, the Ministry of Health is making an effort toward fostering public management based on induction, monitoring and evaluation of processes and measurable results ensuring accessibility to and quality of health care for the population as a whole\(^13\).

In this sense, several initiatives were proposed focused on the primary health care qualification, among which the National Program to Improve Access to and Quality of Primary Health Care - Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica (PMAQ – AB) is a highlight\(^13\).

The program was established through Ordinance 1654 GM/MS dated July 19, 2011, and resulted from an important process of negotiation and consensus-building among the three SUS managerial spheres\(^13\). It is a four-stage complementary process that sets up a continuous cycle of improvement of access to and quality of primary
health care, as follows: Adherence and Contracting; Development; External Evaluation and Re-contracting.\(^\text{[14]}\)

Besides fostering the primary health care team self-evaluation and offering services that guarantee greater access and better quality as a response to the concrete needs of the population, the PMAQ is also a challenge to managers. This program also aims at ensuring a quality standard benchmark at national, regional and local levels to increase transparency and effectiveness of governmental actions oriented to primary health care all over Brazil\(^\text{[15]}\).

The challenges posed to public primary health care services management are countless and have been object of broad discussions in the last few years, mainly after health management has been decentralized to municipalities as provided for by the SUS. One of the difficulties permeating discussions regards human and material resources management in health services. Health services products depend not only on material and technological resources and proper physical structure, but also on professionals duly qualified to converse inputs into results\(^\text{[16]}\).

Management development and the need for evaluative processes demanded the establishment of instruments approaching these issues. Hence, the aim of this study was to analyze accessibility to primary health care services in the state of Goiás through a national evaluation on primary health care performed by the Ministry of Health.

**METHODS**

This is a descriptive cross-sectional study sourcing from secondary databases from the first cycle of the external evaluation component of the National Program to Improve Access to and Quality of Primary Health Care in Goiás. Data were gathered from July to September 2012 through the Primary Health Care Department of the Ministry of Health in partnership with research and higher education institutions.

Data were collected using a three-module instrument. The first one approached aspects on the infrastructure status; the second one characterized the organization of services and working process through interviews made with health professionals; and, the third one concerned interviews with users to analyze their satisfaction and perceptions about access to and use of health services. This study used data from the first module related to infrastructure status regarding accessibility to health services.

Following the logistic of the primary health care external evaluation process in Brazil, by the Ministry of Health, the Brazilian states were pooled into five consortiums. The state of Goiás was part of the consortium made up by the states of Rio Grande do Sul, Santa Catarina, Minas Gerais, Maranhão and the Federal District, under the general coordination located in the Federal University of Pelotas, in the state of Rio Grande do Sul.

The PMAQ was developed into four phases: the first one corresponded to adherence and contracting by municipalities; the second to development, self-evaluation, monitoring, permanent education and institutional support; the third one was composed of external evaluation, whereas the fourth was re-contracting.

The study sample comprised health professionals from the 1,216 primary health care units of the 246 municipalities in the state of Goiás that answered module I of the third phase of the external evaluation of all municipalities and primary health care teams participating in the Program. The exclusion criterion was the absence of professionals in the team for reasons of vacation or leave.

Data were collected from the PMAQ-AB (first cycle) External Evaluation Component which applied three modules of questionnaires in electronic means. Eight teams collected data on different itineraries. Teams were divided based on maps of the highways and rivers that cross the state of Goiás; by the association of the existing
micro and macro-regions; and, by the support of the Superintendence of Policies on Comprehensive Health Care of the Goiás State Health Secretariat. Each team was composed of one field supervisor and four interviewers, on average, duly trained to apply the research.

Data were collected using a structured, standardized and previously validated instrument to the external evaluation of the primary health care unit. The instrument was structured by a team of the Ministry of Health.

The study proposal was approved by the Research Ethics Committee of the Federal University of Pelotas through protocol 38/2012, and complied with the ethical requirements for research with human subjects provided for in Resolution 466/2012, of the National Research Ethics Commission (CONEP).

By the end of each interview, data were sent to a database of the Ministry of Health using tablets and the Internet network. After being sent, data were stored and pooled into modules I, II and III. Statistical analysis was performed using the Statistical Package of the Social Sciences software, version 19.0.

RESULTS

This study was performed with health professionals from 1,216 primary health care units that are part of the primary health care network in the state of Goiás. These units had been included in the first cycle of the national evaluation performed by the Ministry of Health through the National Program to Improve Access to and Quality of Primary Health Care, corresponding to the research module I.

Data analysis enabled establishing two categories: environments that improve accessibility and environment conditions that favor accessibility.

Environments that improve accessibility

Environments that improve accessibility are related to spaces that provide information, privacy, humanization, problem-solving capacity, offer and provision of services. These environments are important to consolidate accessibility as they bring users closer to the service.

Regarding environments part of the primary health care units’ physical structure, it is worth mentioning that most of these were equipped with a reception desk and a waiting room, as shown in Figure 1. When it comes to screening rooms, the situation is quite the opposite, since 834 (68.5%) units were not equipped with it.

![Figure 1: Environments part of the physical structure of primary health care units in the state of Goiás, 2012](source: Data from the PMAQ-AB - Goiás - first cycle, 2012)
As regards environments devoted to pharmacy and medicine stock room, the most evident result observed in health units was the existence of one pharmacy in each facility. However, Figure 2 also highlights the lack of medication stock rooms in 956 (79%) health units, which could hinder the solution of problems related to the treatment prescribed by the professionals present in the units.

**Figure 2:** Number of pharmacies and medication stock rooms in the primary health care units in the state of Goiás, 2012

Source: Data from the PMAQ-AB - Goiás - first cycle, 2012

The number of medical and dental offices point to other environments that are relevant to improve accessibility. In 1,064 (88%) units there were one to three medical offices, in 123 (10%) there were more than four, and no medical office was found in 29 (2%) primary health care units. As regards the number of dental offices, 920 (76%) units had one to three; 9 had more than four (0.7%); and 287 (23.3%) health facilities had no dental office.

This result depicts the reality of primary health care services in the state of Goiás where, in some situations, no oral health service is provided and in others, when it is available, there is no privacy and secrecy as environments are not individualized and serve three users simultaneously, in the same environment.

Regarding the procedure rooms destined to provide care to users and described in Table 1, 852 (70%) of the health units had wound dressing rooms; 592 (48.6%) had procedure rooms; and 893 (73.4%) had vaccination rooms. The lack of some environments in most units like nebulization rooms; meeting rooms; equipment sterilization and safeguarding rooms; and observation rooms damages services leading to complaints and situations that could be prevented with the due planning of services.

**Table 1:** Procedure rooms in primary health care units in the state of Goiás, 2012

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (n=1216)</th>
<th>%</th>
<th>Frequency (n=1216)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wound Dressing Room</td>
<td>852</td>
<td>70.0%</td>
<td>364</td>
<td>30.0%</td>
</tr>
<tr>
<td>Procedure Room</td>
<td>592</td>
<td>48.6%</td>
<td>624</td>
<td>51.4%</td>
</tr>
<tr>
<td>Nebulization Room</td>
<td>440</td>
<td>36.1%</td>
<td>776</td>
<td>63.9%</td>
</tr>
<tr>
<td>Vaccination Room</td>
<td>893</td>
<td>73.4%</td>
<td>323</td>
<td>26.6%</td>
</tr>
<tr>
<td>Equipment Sterilization and Safeguarding Room</td>
<td>500</td>
<td>41.2%</td>
<td>716</td>
<td>58.8%</td>
</tr>
<tr>
<td>Observation Room</td>
<td>261</td>
<td>21.5%</td>
<td>955</td>
<td>78.5%</td>
</tr>
<tr>
<td>Meeting Room</td>
<td>404</td>
<td>33.3%</td>
<td>812</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Source: Data from the PMAQ-AB - Goiás - first cycle, 2012.
The environments shown in the figures and in Table 1 above are directly related to services to the public, whereas other environments that support these services, such as male, female and handicap restrooms, are important factors for health services accessibility.

It was observed that the health units had more individual male restrooms than female restrooms. Other relevant information that hinders accessibility regards the lack of restrooms adapted for handicapped subjects in 1,032 (85%) environments (Table 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (n=1216)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men’s bathroom for users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>296</td>
<td>24.3</td>
</tr>
<tr>
<td>Yes</td>
<td>920</td>
<td>75.7</td>
</tr>
<tr>
<td>Women’s bathroom for users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>364</td>
<td>30.0</td>
</tr>
<tr>
<td>Yes</td>
<td>852</td>
<td>70.0</td>
</tr>
<tr>
<td>Bathroom adapted for handicapped individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1034</td>
<td>85.0</td>
</tr>
<tr>
<td>Yes</td>
<td>182</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Source: Data from the PMAQ-A8 - Goiás - first cycle, 2012.

Still in this approach to supporting services, the space to accommodate contaminated garbage generated in health units should be properly located to avoid becoming a contamination focus. However, most of the health facilities, 749 (61.5%), did not have such a place and only 467 (38.5%) did.

Accessibility to health services and the environment conditions that favor it are also related to the days of the week when the unit is open, service shifts and working hours, as these interfere in the user’s availability to seek these services. Hence, it was observed that 1,046 (86%) units were open five days a week and 170 (14%) facilities were open more than five days. As regards service shifts, 98 (8%) of the units provided one-shift care; 1,070 (88%) provided two-shift services; whereas 48 (4%) provided three-shift services.

In relation to working hours, some units stopped working by 1 pm, others between 2 pm and 6 pm, and a small share worked up to 7 pm. Finally, 40.2% of the units were open during lunch time.

Still regarding conditions that favor accessibility, outdoor and indoor signs are relevant information when intended to guide users in the facility, reducing complaints and situations of conflict. Hence, regarding outdoor signs in the health units, it is worth mentioning that 1,100 (90.4%) units lacked an external totem, 809 (66.5%) units used banners as signs, but these were not adequate to identify the health unit, and 575 (47.3%) used other forms of signing.
Regarding information disseminated to users inside the primary health care unit, 610 (50.2%) displayed the unit working hours, whereas 678 (55.8%) health units missed a list describing the services provided.

Concerning conditions that favor accessibility for deaf, blind or illiterate individuals, 1,209 (99.4%) environments missed international symbols; 1,124 (92.4%) had no figures, drawings or colors; 1,214 (99.8%) had no raised characters; 1,214 (99.8%) missed hearing resources; and 1,215 (99.9%) missed professionals for screening.

Still regarding handicapped individuals, there were difficulties related to health services accessibility considering the condition of sidewalks, carpets, floors, ramps, doors and corridors (Table 3).

Table 3. Accessibility for handicapped individuals in primary health care units in the state of Goiás, 2012

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (n=1216)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewalk in good condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>479</td>
<td>39.4</td>
</tr>
<tr>
<td>No</td>
<td>737</td>
<td>60.6</td>
</tr>
<tr>
<td>Carpet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>234</td>
<td>19.2</td>
</tr>
<tr>
<td>No</td>
<td>982</td>
<td>80.8</td>
</tr>
<tr>
<td>Non-slip floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>280</td>
<td>23.0</td>
</tr>
<tr>
<td>No</td>
<td>936</td>
<td>77.0</td>
</tr>
<tr>
<td>Flat floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>640</td>
<td>52.6</td>
</tr>
<tr>
<td>No</td>
<td>576</td>
<td>47.4</td>
</tr>
<tr>
<td>Ramp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>531</td>
<td>43.7</td>
</tr>
<tr>
<td>No</td>
<td>685</td>
<td>56.3</td>
</tr>
<tr>
<td>Handrail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>68</td>
<td>5.6</td>
</tr>
<tr>
<td>No</td>
<td>1148</td>
<td>94.4</td>
</tr>
<tr>
<td>Adapted door and corridors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>375</td>
<td>30.8</td>
</tr>
<tr>
<td>No</td>
<td>841</td>
<td>69.2</td>
</tr>
</tbody>
</table>

Source: Data from the PMAQ-AB - Goiás - first cycle, 2012.

Most of the data found reflects the lack of accessibility for handicapped individuals, except regarding the existence of flat floor, which in most units, 640 (52.6%), were in good conditions.

DISCUSSION

Two categories were adopted to analyze accessibility conditions. The first one emphasizes environments that improve accessibility, among which screening rooms are missing in 68.5% of the units thus damaging prompt decision-making by professionals. The inexistence of this environment in health units jeopardizes services as professionals miss a proper site to prioritize services according to the individual and priority needs of each user, leading to delay or improper services.

In this sense, the National Policy on Humanization defines screening as the “capacity of screening the demands and needs as a basic assumption of contract among the health unit, users and their socio-familiar network”. The same policy also affirms that screening is a way of organizing health work processes, facilitating the solution of problems and maximizing the creation of creative and individual alternatives in each context.

Still in relation to environments that favor accessibility, most (79%) of the units had not specific room to stock medications, whereas other health units had no pharmacy. These are important sites in terms of
pharmaceutical care, as the supply of medication means providing continuity to the treatment defined by health professionals and reaffirms the principle of comprehensiveness set forth in the 1988 Federal Constitution. In the absence of these environments and with the lack of financial resources of most users, treatment cannot be efficient, which negatively affects primary health care services\(^{18}\).

The proper infrastructure to store and distribute medications contributes to reduce errors related to the distribution of these drugs and favors the proper development of the therapy prescribed by professionals\(^{19}\). Hence, the pharmacy is in charge of providing continuity to care and ensuring the quality of this service through the safe and rational use of medications, adjusting it to individual and collective health in health care and disease prevention\(^{18}\).

The physical structure handbook of primary health care units prescribes that medical offices should occupy at least 9 m\(^2\), with washbasin with taps that can be turned off without using hands; paper towel holder; liquid soap dispenser; office-type table with drawers; three chairs; clinical exam table or gynecological exam table; chrome plated swivel seat; 2-step stair; double folding screen; spotlight with flexible rod; showcase cabinet; bin with cover and foot pedal; telephone set; and, computer\(^{20}\).

Of the 1,216 primary health care units surveyed, 2% had no medical office and, in those that had, the environments missed the basic conditions set forth by the Ministry of Health to be considered as medical offices. The lack of adaptation of those environments shows these units need greater investments to provide effective and fair services that provide users with privacy.

A study\(^{21}\) performed with family primary health units in Fortaleza showed that all units shared characteristics similar to the primary health care units in this survey, with a short number of medical offices for the amount of professionals, and equipment incompliant with an ergonomic structure. Regarding the procedure rooms analyzed, some health units shared the same environment to perform some procedures like nebulization, wound dressing, equipment sterilization and safeguarding, and observation. This situation can harm the service to user as it considerably increases the risk of infection since clean materials are not separated from contaminated materials.

Still regarding the essential structures or spaces existing in the health units to meet the population’s needs with quality, many environments have no expurgation process to clean instruments used in several procedures like wound dressing, showing these units are not compliant with the standards set forth by the Ministry of Health\(^{20}\).

The lack of handicap restrooms in 85% of the health units showed the need for changes to offer these users environments that provide worthy accessibility with well-being and satisfaction.

A study\(^{22}\) comprising seven Brazilian states found that 77.4% of the restrooms in the studied primary health care units did not have doors that could ensure the access of wheelchairs, while in 75.8% of them users could not maneuver the wheelchair to get in it. This result corroborates the study carried out with primary health care units in the state of Goiás, showing the need for investments to promote social inclusion of all users seeking the services.

Data from other study developed in Pernambuco\(^{1}\) reaffirm the importance of these findings for the state of Goiás, where 97% of the primary health care units visited had no adapted restrooms.

Indoor and outdoor signs of the primary health care units are part of the conditions that favor accessibility. This study observed that most of the units missed proper signs, thus hindering the communication between users and the service.

Another study\(^{23}\) developed in six primary health care units in Fortaleza pointed out that users suffer more with the lack of communication, as in those units signs and
information are very precarious and many times isolated, impairing relationships among workers, and between workers and users.

The primary health care units in the state of Goiás should review signs as regards accessibility to deaf, blind or illiterate individuals. Only seven health units all over the state display international symbols. Raised characters and hearing resources were found in only two units.

As regards accessibility to handicapped individuals, older people and other users to health units, floors must have a flat, firm, stable and non-sliding surface in any circumstances, and should not let wheeled devices grab. For the primary health care units in the state of Goiás, 52.6% had a flat floor, whereas the presence of non-slide flooring and sidewalks in good conditions were not so frequent, i.e., most of the health facilities do not comply with the requirements of the Ministry of Health and, this way, present architectural barriers that increase the risk of accidents and considerably hinder accessibility of individuals.

A study developed in Rio Grande do Norte found that accessibility of handicapped people to several environments is an extremely relevant guarantee to be achieved. For primary health care units in the state of Goiás this achievement should also be pursued by managers and the community as, according to the National Policy on Handicapped Individual Health, states and municipalities must ensure the principle of comprehensiveness and actions oriented to meet the needs of that population regarding health, education, labor, and affective and social relationships.

The idea of comprehensiveness prescribed by the Unified Health System rises expectations that managers and health professionals should recognize users as right-holders with basic needs that must be met. However, the inaccessibility of people to primary health care units compromises the proposal of comprehensiveness as the core component of health care and, this way, also compromises the nurturing of subjects.

CONCLUSION

The accessibility of users to primary health care services has arisen interest of the Ministry of Health given the importance of this approach to evaluate the quality of services. The investigation on how accessibility of users to primary health care takes place, based on the external evaluation of primary health care units in the state of Goiás participating in the National Program to Improve Access to and Quality of Primary Health Care pointed out the factors that hinder basic health services accessibility.

In relation to environments that improve accessibility, most of the primary health care units had no screening room, medications stock room, procedure room or handicap restroom, considerably hindering accessibility to health services.

When analyzing the indoor signs of the primary health care units, non-slip flooring, ramps, handrails, sidewalks in good conditions, adapted doors and corridors, one could say that most of the health units were incompliant with the standards prescribed by the Ministry of Health.

Therefore, the results of this study show that the inaccessibility to primary health care units in the state of Goiás hurts the principle of comprehensiveness, hindering care and damaging those who need health care services.

In the light of management, this analysis aims at guiding or shifting the governmental priorities enabling proper investments to strengthen primary health care.

Further studies should be developed to evaluate primary health care accessibility in the state of Goiás to check the improvements implemented after the investments made by the Ministry of Health in municipalities, based on the PMAQ-AB first cycle to improve environments and conditions that favor accessibility.
REFERENCES


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