Physical accessibility in primary healthcare: a step towards the embracement

Acessibilidade física na atenção primária à saúde: um passo para o acolhimento

Juliana Freitas Marques;
Aline Cruz Esmeraldo Áfio;
Luciana Vieira de Carvalho;
Sarah de Sá Leite;
Paulo César de Almeida;
Lorita Marlena Freitagliuca.

How to cite this article:

ABSTRACT

Objective: To assess the physical accessibility from the front desk of primary healthcare units.

Method: Descriptive and quantitative research to map the accessibility of the physical space in 157 health units, between August 2014 and May 2015, in the region of Baturité, Ceará, Brazil. The data were collected using a checklist instrument type, and absolute and relative frequencies, binomial and verisimilitude tests for statistical analysis, with statistical significance of p <0.05 were used.

Results: Of the analyzed items, stairs (24.8%), ramps (47.1%) and floors (75.8%) were inaccessible in most health units. Comparing urban and rural areas, circulation area (0.7x, p=0.293), counter (0.4x, p=0.010), seat (0.7x, p=0.758) and drinking fountain (0.7x, p=0.736) were more inaccessible in the urban area.

Conclusion: The access of persons with physical disabilities to primary care should be seen as a priority. There are physical, architectural and furniture barriers that compromise the full embracement of the user.

Keywords: Disabled persons. Primary health care. Health services accessibility.

RESUMO

Objetivo: Avaliar acessibilidade física da recepção de unidades de atenção primária à saúde.

Método: Pesquisa descritiva, quantitativa, para mapear a acessibilidade do espaço físico da área de recepção em 157 unidades de saúde, entre agosto de 2014 e maio de 2015, na região do maciço de Baturité, Ceará, Brasil. Os dados foram coletados com instrumento tipo check-list e para análise utilizou-se frequências absolutas, relativas, teste binomial e teste de verossimilhança, com significância estatística de p<0,05.

Resultados: Dos itens analisados, escadas (24,8%), rampas (47,1%) e piso (75,8%) foram inacessíveis na maioria das unidades de saúde. Comparando zona urbana com rural, as áreas de circulação (0,7x, p=0,293), barras (0,4x, p=0,010), assentos (0,7x, p=0,758) e bebedouros (0,7x, p=0,736) apresentaram maior inacessibilidade na zona urbana.

Conclusão: O acesso das pessoas com deficiência física na atenção primária deve ser visto como prioridade. Existem barreiras físicas, arquitetônicas e mobiliárias que comprometem o acolhimento integral do usuário.

Palavras-Chave: Pessoas com deficiência. Atenção primária de saúde. Acesso aos serviços de saúde.

RESUMEN

Objetivo: Evaluar la accesibilidad física de la recepción de las unidades de atención primaria de la salud.

Método: Investigación descriptiva y cuantitativa para mapear la accesibilidad del espacio físico de la zona de recepción en 157 unidades de salud, entre agosto 2014 y mayo 2015, en la región del cerrado de Baturité, Ceará, Brasil. Se recolectaron los datos a través del instrumento tipo check-list, y los mismos se analizaron mediante frecuencias absolutas, relativas, prueba binomial y la prueba de probabilidad, con significación estadística de p < 0,05.

Resultados: De los elementos analizados, escaleras (24,8%), rampas (47,1%) y piso (75,8%) la mayoría de las unidades de salud era inaccesible. Comparando las áreas urbanas con las rurales, las áreas de circulación (0,7x, p=0,293), las barras (0,4x, p=0,010), los asientos (0,7x, p=0,758) y los bebederos (0,7x, p=0,736) presentaron mayor inaccesibilidad en el área urbana.

Conclusión: El acceso de las personas con discapacidad física en la atención primaria debe ser percibido como una prioridad. Existen barreras físicas, arquitectónicas y mobiliarias que comprometen la acogida integral del usuario.

Palabras clave: Personas con discapacidad. AtenCIÓN primaria de salud. Accesibilidad a los servicios de salud.
INTRODUCTION

The difficulty of locomotion in urban spaces experienced by People with Disabilities (PwD) and reduced mobility includes the infrastructure conditions of public and private places, which are often inadequate, preventing the exercise of citizenship in its fullness and difficulty to move freely. When it comes to access to a healthcare service, the most important are the architectural barriers in public roads and buildings, which prevent or hinder the accessibility to the service(1).

It is important to highlight the polysemy of the word access, understood from the user’s ability to seek and obtain healthcare, to the availability of healthcare resources taking into account their capacity to produce services. Accessibility is a characteristic of health resources and populations in the process of seeking and obtaining healthcare. Thus, it is understood that accessibility is the universe around and the interface between availability and access to health services(2).

The Primary Healthcare (PHC) is the main gateway to the health system and access is given at the reception, where the embrace is held, directing the user to assistance as needed. Health professionals assigned to the reception embrace full time, and the space must be able to receive all users, including those with disabilities(3).

In these units, the embrace is especially important. When arriving at the service, the individual is in a situation of vulnerability and the way the person is received influences the relationship that will be established with the service team. It is important to emphasize the health environment as a fundamental element of the embrace, referring to the physical space understood as a social, professional environment, and of interpersonal relationships, which must be built collectively in order to provide welcoming, resolutive and human attention(4).

The embrace has a positive quality associated with humanization, through the guarantee of equity and in meeting the health needs of the population. With regard to the disabled person, the humanization in the primary care services is something that must be resolutive through the establishment of structures including the participation of the users in the health units. These are not only spectators and can take more effective postures, by proposing viable alternatives to the problems identified(5-6).

Regarding the physical structure, there is a non-compliance with the embrace requirements for PwDs and with reduced mobility due to the lack of accessibility within the health units, which reflects in the invisibility of this population group, especially in the exclusion of people with disabilities to actions promotion, prevention and maintenance of health(7).

Equitable access should be a constant concern in healthcare, as a principle of justice based on the premise that one must be treated according to their need(8). Therefore, as an access requirement, it must guarantee the user quality when using the service. However, non-compliance with accessibility regulations and the willingness of professionals interfere directly with the access and embrace of the population(9).

With regard to professional practices, fostering involvement in order to increase accessibility, bonding and accountability to the community should be applied to improve the care process and the relationship with users through comprehensive and universal care(10).

We know little about the physical accessibility conditions of primary care units, especially in less developed regions, which makes it difficult to evaluate and plan actions to guarantee access and the embrace of disabled people in health services. From the above, it is questioned: are the reception areas of primary healthcare units accessible to users with physical disabilities or reduced mobility?

Aiming to contribute to the construction of inclusive health services, the study aims to evaluate the physical accessibility of the reception of primary healthcare units and their relationship with the embrace.

METHOD

Descriptive research, with a quantitative design to map the architectural structures of Primary Healthcare Units (PHCU) located in 16 municipalities that make up the Batu-rité region, located in the State of Ceará, Brazil. The region has a total of 216 PHCU located in urban and rural areas. The study sample was 157 units, of which 92 were located in the urban area and 65 in the rural area of the cities surveyed. 59 PHCU that were undergoing architectural reform were excluded.

The data collection took place from August 2014 to May 2015 by members of the research project Person with Disabilities: Nursing Care Research. All were trained to know the standard and its applicability with the correct measurement of field measurements. Manuals tapes, video cameras and a check-list-type instrument nominated Register of Physical Accessibility to Health Units were used, based on the Brazilian Standard 9050 (NBR9050) of the Brazilian Association of Technical Standards (ABNT)(11), a document that standardizes measures of buildings, furniture and urban spaces. The instrument was previously tested before being applied.

The instrument includes identifying the data of the health unit and topics on physical structure and furniture...
Physical accessibility in primary health care: a step towards the embracement of its sectors. For this study, which addresses the physical accessibility of the reception area, two specific topics and their corresponding items were considered: 1) Access to the interior of the building with a staircase with a handrail; ramp; doors of 80cm; doors of the type comes and goes with vertical display; sliding doors with recessed rails; regular, stable, firm and non-slip floor; minimum circulation area of 1.20m; free circulation of obstacles; and 2) Furniture composed of counters and work tables with height of 75 to 85cm of the floor; seats with depth of 45cm, 46cm of the floor, support straps or arms; suspended water cooler with a lower height of 73cm and height of the spout at 90cm from the floor; suspended telephone with lower height of 73cm and height of the operative part to 1.20m of the floor; switch systems, controls and drives between 80cm and 1.20m of the floor.

These items were evaluated by the check-list with the following response options: Accessible (A), when the structure was accessible; Inaccessible (I), inaccessible structure; It did not have (NP), there was not the structure to be evaluated and it did not apply (NA), there was no need to have the structure in place.

The collected data were grouped into a spreadsheet in the Microsoft Excel® program, and double typing was performed to avoid possible errors. The Statistical Package for the Social Sciences (SPSS), in version 20.0, was used for statistical analysis. Tables were created for absolute and relative frequencies, binomial test results, likelihood test, and odds ratio. The level of statistical significance was set at 5% (p<0.05).

The research was approved by the Research Ethics Committee of the Universidade da Integração Internacional da Lusofonia Afro-Brasileira (UNILAB) with the number 652.134/2014. International principles of ethics in research with human beings were respected, and the authorization of the Secretaries of Health of the municipalities to access the PHCU was requested.

■ RESULTS

Table 1 presents the physical accessibility data, with a quantitative of 14 items, referring to the reception area, which were divided into two topics: access to the interior of the building and furniture.

Table 1 - Distribution of the number of Primary Healthcare Units according to physical accessibility items of the reception area, Baturité, Ceará-Brazil, 2014

<table>
<thead>
<tr>
<th>Variables</th>
<th>Accessible</th>
<th>Inaccessible</th>
<th>p</th>
<th>NP/NA(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
<td></td>
<td>n (%)</td>
</tr>
<tr>
<td>Access to the interior of the building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stairs</td>
<td>3 (1.9)</td>
<td>39 (24.8)</td>
<td>&lt;0.001</td>
<td>115 (73.2)</td>
</tr>
<tr>
<td>Access ramps</td>
<td>41 (26.1)</td>
<td>74 (47.1)</td>
<td>0.003</td>
<td>42 (26.8)</td>
</tr>
<tr>
<td>Doors with a width of 80cm</td>
<td>138 (87.9)</td>
<td>19 (12.1)</td>
<td>&lt;0.001</td>
<td>-</td>
</tr>
<tr>
<td>Doors with a vertical display</td>
<td>3 (1.9)</td>
<td>1 (6.0)</td>
<td>0.625</td>
<td>153 (97.5)</td>
</tr>
<tr>
<td>Doors run on lowered rails</td>
<td>4 (2.5)</td>
<td>2 (1.3)</td>
<td>0.687</td>
<td>151 (96.2)</td>
</tr>
<tr>
<td>Floor</td>
<td>38 (24.2)</td>
<td>119 (75.8)</td>
<td>&lt;0.001</td>
<td>-</td>
</tr>
<tr>
<td>Minimum circulation area 1.20</td>
<td>111 (70.7)</td>
<td>46 (29.3)</td>
<td>&lt;0.001</td>
<td>-</td>
</tr>
<tr>
<td>Obstacle free circulation</td>
<td>95 (60.5)</td>
<td>62 (39.5)</td>
<td>0.010</td>
<td>-</td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balcony</td>
<td>47 (29.9)</td>
<td>104 (66.2)</td>
<td>&lt;0.001</td>
<td>6 (3.8)</td>
</tr>
<tr>
<td>Seats</td>
<td>3 (1.9)</td>
<td>152 (96.8)</td>
<td>&lt;0.001</td>
<td>2 (1.3)</td>
</tr>
<tr>
<td>Drinking fountains</td>
<td>9 (5.7)</td>
<td>29 (18.5)</td>
<td>0.002</td>
<td>119 (75.8)</td>
</tr>
<tr>
<td>Public telephones</td>
<td>1 (0.6)</td>
<td>19 (12.1)</td>
<td>&lt;0.001</td>
<td>137 (87.3)</td>
</tr>
<tr>
<td>Controls and drives</td>
<td>-</td>
<td>4 (2.5)</td>
<td>0.125</td>
<td>153 (97.5)</td>
</tr>
</tbody>
</table>

Source: Research data, 2014.

p of the binomial test;

(1)Does not have (NP), Does not apply (NA).
Access to the interior of the building registered stairs (24.8%, p <0.0001), ramps (47.1%, p=0.003) and floors (75.8%, p<0.0001) inaccessible. Accessible doors (87.9%, p=<0.0001). In the circulation area, width was adequate (70.7%, p<0.0001), and absence of obstacles (60.5%, p=0.010). Furniture showed a counter (66.2%, p<0.0001), seats (96.8%, p<0.0001), drinking fountains (18.5%, p=0.002), public telephones (12.1%; p<0.0001) inaccessible (p<0.05).

Table 2 shows the physical accessibility data in relation to rural and urban areas.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rural (%)</th>
<th>Urban (%)</th>
<th>RC (IC 95%)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to the interior of the building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stairs</td>
<td>5.3</td>
<td>8.7</td>
<td>1.7 (0.1–20.5)</td>
<td>0.664</td>
</tr>
<tr>
<td>Access Ramps</td>
<td>18.5</td>
<td>58.0</td>
<td>6.1 (2.6 – 14.1)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Doors with a width of 80cm</td>
<td>85.9</td>
<td>90.8</td>
<td>1.6 (0.5 – 4.5)</td>
<td>0.354</td>
</tr>
<tr>
<td>Doors with vertical display</td>
<td>—</td>
<td>100.0</td>
<td>—</td>
<td>0.034</td>
</tr>
<tr>
<td>Doors run on lowered rails</td>
<td>—</td>
<td>100.0</td>
<td>—</td>
<td>0.006</td>
</tr>
<tr>
<td>Floors</td>
<td>16.3</td>
<td>35.4</td>
<td>2.8 (1.3 – 5.9)</td>
<td>0.006</td>
</tr>
<tr>
<td>Minimum circulation area</td>
<td>73.9</td>
<td>66.2</td>
<td>0.7 (0.3 – 1.4)</td>
<td>0.293</td>
</tr>
<tr>
<td>Obstacle free circulation</td>
<td>64.1</td>
<td>55.4</td>
<td>0.7 (0.4 – 1.3)</td>
<td>0.270</td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balcony</td>
<td>39.5</td>
<td>20.0</td>
<td>0.4 (0.2 – 0.8)</td>
<td>0.010</td>
</tr>
<tr>
<td>Seats</td>
<td>2.2</td>
<td>1.5</td>
<td>0.7 (0.1 – 7.8)</td>
<td>0.758</td>
</tr>
<tr>
<td>Drinking fountains</td>
<td>28.6</td>
<td>22.6</td>
<td>0.7 (0.1 – 4.6)</td>
<td>0.736</td>
</tr>
<tr>
<td>Public telephones</td>
<td>—</td>
<td>8.3</td>
<td>0.6 (0.4 – 0.9)</td>
<td>0.304</td>
</tr>
</tbody>
</table>

Source: Research data, 2014.

p of the likelihood ratio test; *the likelihood ratio cannot be calculated.

DISCUSSION

Several barriers limit the care to health users, including professional attitudes and communication failures, to physical access to health services¹⁰. Considering the physical space as an important reception tool in primary healthcare units, the architectural barriers imposed on people with disabilities are formed by any obstacle related to urban constructions or buildings¹¹.

The barriers prevent the exercise of the most basic of the rights of any citizen, to move freely. The presence of stairs, high steps, inadequate ramps, not accessible furniture is part of the numerous examples of architectural barriers. And it is a difficulty experienced in the daily life of healthcare spaces, with buildings adapted and inadequate to the users’ needs¹¹.

In this study, the prevalence of the proportion of inaccessible items in the reception of PHC units is worrisome, since most do not meet the standards required by NBR 9050, which provides for the promotion of accessibility in environments, providing conditions of autonomy and security for the population⁹.

The difficulty of access to the interior of the buildings is observed with the presence of inaccessible stairs and access ramps. Taking into account the health equity of people with some kind of disabilities, it is essential, from the point of view of inclusive embrace, that the access to health services be appropriate for all users¹². People with disabilities or reduced mobility are exposed to embarrassing situations when they are transported in wheelchairs or in the arms of health workers or family members, so that they can undergo examinations; besides the embarrassment, there
is risk of fall and personal injury. These occurrences compromise the embrace, which presupposes physical and emotional comfort.

A study that interviewed users of the public health system with disabilities or mobility restrictions indicates that 63.9% of the interviewees reported architectural barriers such as ramps and sidewalks from the way of their residences to the places where they received care(13).

Although items such as entrance doors to the building and internal circulation area are accessible in most of the PHC units surveyed, attention should be paid to the set of items analyzed, since only with the suppression of all the barriers, users will have their health rights respected.

It is therefore up to users, managers and health professionals to detect physical limitations, as well as to discuss alternatives for overcoming them. The joint action of these actors guarantees greater social pressure towards change and the abolition of accessibility barriers(12). Sharing accessible environments contributes to social integration as it encourages interaction and learning to live with the different.

The fact that health professionals are not prepared to meet the PwD is pointed out as one of the main challenges faced by the disabled when trying to access health services. However, physical inaccessibility is the major challenge, since the hostile physical facilities of the services prevent the inclusion of the population in the healthcare network(14).

It should be noted that users, workers and managers have the co-responsibility for the organization and functioning of the health services through participation and social control. Only by sharing knowledge, commitments and responsibilities will it be possible to establish a new practice that invites the ethical-political rethinking of inclusion in health services. In work organizations so individualized and with constant changes in social relations, perhaps this is the great challenge in humanization of health services(6,13).

Evaluation of the furniture present in the physical space of the reception of the health units points to inaccessibility of the service desk, seats and chairs, drinking fountains and public telephones. Thus, a patient cannot position his/her wheelchair near the interview table to establish a proper physical distance and interaction; the tone of voice must be high compromising the secrecy of the information. The embrace requires visual contact at the same level between the interlocutors, and the possibility of affective touch that reinforces the technical guidelines of health.

It should be noted that inaccessibility in relation to physical structure does not occur only in PHCU. In a study carried out in England, people with disabilities have difficulty accessing not only primary services, but also accessing surgeries due to the lack of physical accessibility in the surgical centers(16).

Comparing areas of different population densities, such as urban and rural, in both, health units presented significance of non-accessible items. However, the main access to the building that includes stairs, ramps and entrance door has greater barrier in the rural area.

Most rural health services are in deprived areas, with an uneven distribution of resources and inclusive policies. People living in unequal places have less access to health services. Measures should be considered to alleviate unequal accessibility in services in more remote and isolated areas(17). Healthcare professionals from the units evaluated recurred reported attending people with disabilities at home; when necessary, the team moved to the residence. This is a palliative intervention since it keeps this person in social isolation. The embrace presupposes being with others and enjoying physical and human environments.

It is recommended that accessible physical facilities be proactively allocated to support the most vulnerable and disadvantaged segments of the population, whether in urban or rural areas, in order to include PwDs in primary healthcare. In addition, there is a need for a change in the training of health professionals related to the access and embrace of people with disabilities in health services, so as to reduce not only physical barriers, but also social prejudice(18).

**CONCLUSION**

The results show that access to the interior of the building of the health units occurs by inaccessible stairs, ramps and floors. Partially accessible doors in relation to width and absence of physical obstacles. Furniture with counter, seats, water fountains and inaccessible public telephones. Stairs, access ramp, door width, floor and telephones had a higher chance of being inaccessible in the countryside than in the urban area. On the other hand, area of minimum circulation, absence of obstacle, counter, seat and drinking fountains with higher chance of inaccessible items in the urban zone than in the rural area.

In this scenario, the access of PwDs to primary healthcare units is a challenge, since there are still physical, architectural and furniture barriers. The lack of inclusion in health services implies a reduction in care, contributing to the decrease of educational activities of promotion, prevention and maintenance of health for this population segment. Certainly, there is no physical ambience for the embrace.

Limitations are recognized when evaluating municipalities of a single State in the Northeast. New research is suggested to provide a broader discussion and generate favorable changes in universal healthcare. As contributions, it is expected to sensitize managers, health professionals and
the population in order to support collective reflections and seek practical alternatives to stimulate the breakdown of attitudinal barriers in society.

REFERENCES


