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RESEARCH

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## Furniture and sanitary facilities in family health units: accessibility for physical disability

Mobiliários e instalações sanitárias em unidades de saúde da família: acessibilidade física para pessoas com deficiência

Valores y servicios sanitarios en unidades de salud familiar: accesibilidad física para personas con discapacidad

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#### ABSTRACT

Objective: To investigate the physical accessibility of furniture, equipment and sanitary facilities in Family Health Units. Method: This is an exploratory descriptive research, population-based, carried out in the Family health units of João Pessoa, Paraíba, Brazil. We used a checklist based on the Brazilian Standard 9050. Results: From the 90 assessed buildings, 83.3% of branches and desks and 85.6% of outpatient seats are adequate, as recommended by law. However, only 24.4% of the drinking fountains are installed properly. None of the units presented texts containing guidelines and instructions written in braille; 60.0% do not have adequate sanitation, and 92.2% are not properly signed. Conclusion: There are still many barriers faced by people with disabilities for the use of primary care services to health. In this sense, specific interventions are necessary to this population group and evaluation of public policies, to accomplish all that is guaranteed by law.

**Descriptores:** Access to Health Services, Disabled people, Primary Health Care.

#### **RESUMO**

Objetivo: Investigar a acessibilidade física de mobiliários, equipamentos e instalações sanitárias em Unidades de Saúde de Família. Método: Trata-se de pesquisa descritiva exploratória, de base populacional, realizada nas Unidades de Saúde da Família do município de João Pessoa, Paraíba, Brasil. Utilizou-se um checklist fundamentado na Norma Brasileira 9050. Resultados: Dos 90 prédios avaliados, 83,3% dos balcões e das mesas de trabalho e 85,6% dos assentos ambulatoriais estão adequados, como preconizado pela legislação.

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Entretanto, apenas 24,4% dos bebedouros estão instalados adequadamente. Nenhuma das unidades apresentou textos contendo orientações e instruções escritas em *braille*; 60,0% não têm sanitários adequados, e 92,2% não estão devidamente sinalizados. **Conclusão:** Ainda são muitas as barreiras encontradas pelas pessoas com deficiência para o uso dos serviços de atenção básica à saúde. Nesse sentido, se faz necessário, intervenções específicas a esse grupo populacional e a avaliação das políticas públicas, para efetivar tudo o que é garantido por lei.

**Descritores:** Acesso aos Serviços de Saúde, Pessoas com Deficiência, Atenção Primária à Saúde.

#### **RESUMEN**

Objetivo: Investigar la accesibilidad física de los muebles, equipos e instalaciones sanitarias en las Unidades de Salud de la Familia. Método: Se trata de un estudio exploratorio descriptivo, una basada en la población, llevado a cabo en las unidades de salud del municipio John Familia Pessoa, Paraíba, Brasil. Se utilizó una lista de control basado en el estándar de Brasil 9050. Resultados: 90 edificios evaluados, el 83,3% de las oficinas y los escritorios y el 85,6% de los puestos de consulta externa son adecuados, según lo recomendado por la ley. Sin embargo, sólo el 24,4% de las fuentes de agua potable están instalados correctamente. Ninguna de las unidades presenta textos que contienen directrices e instrucciones escritas en Braille; 60.0% no cuenta con saneamiento adecuado, y el 92,2% no ha iniciado correctamente. Conclusión: Todavía hay muchas barreras que enfrentan las personas con discapacidad a la utilización de los servicios de atención primaria a la salud. En este sentido, es necesario, intervenciones específicas para este grupo de población y la evaluación de políticas públicas, para llevar a cabo todo lo que está garantizado por la ley.

**Descriptores:** Accesibilidad a los Servicios de Salud, Personas com discapacidad, Atención Primaria de Salud.

#### INTRODUCTION

Historically, people with disabilities (DP) were segregated and excluded from society. The look on this population varied according to culture with the historical period and the figures. In public health, assistance to DP was limited to the area of prevention of infectious diseases. The rehabilitation was understood to tertiary level of care, under the responsibility of charities. Commonly it was offered a very poor service: insufficient resources, services concentrated in areas of more economic importance, little resoluteness and inadequacy to sociocultural reality of population. 1-2

However, the mobilization of society according to the demands of this population is contributing to their human development, resulting in a breakthrough in the political process of social subjects. For this, the rulers assumed the civic responsibility and ethical obligation to develop public policies of protection designed to meet the needs of this social segment.<sup>3</sup> In this sense, we cannot allow any kind of prejudice, discrimination, social, cultural and personal barriers. We should provide access to services, cultural goods and products resulting from social, economic and technological advances of society.<sup>4</sup>

Nevertheless, while the theme of inclusion is being highlighted and the number of DP is considerable, we still point to a weakness profile, dislocation and discontinuity of actions in the public and private spheres and low rate of the assistance coverage to the health of these individuals. According to the World Health Organization (WHO), only 2% of people with disabilities have access to rehabilitation. In developing countries, this number is 1 to 2 per 10,000 inhabitants.<sup>2</sup>

Thus, by incorporating the need for full biopsychosocial well-being in the concept of health, it is evident that being healthy is to have security against the risks to which individuals are exposed throughout life and try to correct them.<sup>5</sup> Therefore, the environment in which the client receives health care should have good conditions for physical installation and accommodation and comply with regulations and institutional norms. In addition, prizes to humanized care of the multidisciplinary team for all this set directly influences the quality of life of population.<sup>6</sup>

In this perspective, the Brazilian Standard (NBR) 9050 of the Brazilian Technical Standards Association (ABNT) regulated the right to accessibility for people with deficiency. Therefore, accessibility involves the possibilities for the individual to move safely, that much depends on the mobility as the physical environment. In health services, there are two dimensions to consider: the socio-organizational dimension, which refers to the characteristics of the supply of services; and the geographical dimension, which is related to the distance and displacement. This access allows people to use them according to their needs services, at all levels of atention. 8

However, problems are still encountered in relation to the good accessibility conditions. In the case of Family Health Units (USF), there are many institutional difficulties in adequate structures to DP, with unsatisfactory conditions that do not guarantee the free acess. However, primary care is an important field for the development of practices of health care for these people, particularly in what regards the social participation. I

For this purpose, they are indispensable discussions and reflections on the theme, with a view to the exercise of citizenship of these people, in order to understand the other, in all its dimensions, to help them to improve the quality of life. There are many difficulties faced by people with disabilities and/or sensory impairments with respect to accessibility; however, there are few studies about the reality in relation to the physical characteristics of the securities, equipment and sanitary facilities of health institutions.

Thus, considering the aspects discussed here, this study aimed to investigate the accessibility of furniture, equipment and sanitary facilities in Family Health Units for people with disabilities.

#### **METHOD**

This is an exploratory descriptive research with quantitative approach, carried out in the Family health units of João Pessoa, Paraíba, Brazil. This city has an estimated population of 780,738 inhabitants and has an area of 211,475 km². <sup>10</sup> The choice of location is justified by the fact that the first reference of the community access to information and health services.

The study population consisted of all the buildings that make up the FHUs in the city of João Pessoa-PB, so the

study is population-based. This city is divided into five health districts, with a total of 181 FHUs, from which 60 are individual, 11 with two teams, nine with three, and 18 with four, totaling 98 buildings. Therefore, the study sample consisted of 90 buildings that make up the FHUs. Eight were excluded due to the impossibility of physical access, as well as risks of damages to the researcher by the lack of security.

The survey was conducted from March to May 2014. Initially, previous contact with those responsible for each health district was made in order to release the study. Data were collected by the researcher through a check list based on instrument in the NBR 9050 of ABNT.8 Data were collected through systematic observation technique and measurements were performed using graduated tape measure in centimeters, to measure the height and the width of the architectural conditions in the internal areas of the FHUs.

To proceed with the data analysis, we used the SPSS (Statistical Package for Social Sciences) version 20.0. To achieve the goals, it was necessary to apply the statistical techniques of descriptive and exploratory data analysis.

For the execution of this research, the basic principles of bioethics were considered postulates in Resolution 466/12 of the National Council of Health.<sup>11</sup>

#### **RESULTS AND DISCUSSION**

As shown in Table 1, in 83.3% of FHUs, the counters and desks meet the height of 80 cm from the floor, as recommended by law. As for the depth of the seats (45cm) and its height (46cm), 85.6% are adequate; only 24.4% of the drinking fountains are installed at 90 cm from the floor; none of the FHUs has texts that contain guidelines, areas of operating instructions, objects or regulations equipment, rules of conduct and information written in braille. Ambulatory seats with free front space of 60 cm are present in 74.4% of the sites.

**Table 1 -** Distribution of Health Units Family according to the characteristics of the furniture. João Pessoa, PB, Brazil, in 2014

Cathegories			
Yes		No	
n	%	n	%
75	83,3	15	16,7
77	85,6	13	14,4
22	24,4	68	75,6
0	0,0	90	100,0
67	74,4	23	25,6
	n 75 77 22 0	n % 75 83,3 77 85,6 22 24,4 0 0,0	n         %         n           75         83,3         15           77         85,6         13           22         24,4         68           0         0,0         90

The literature on problems of access to health care faced by DP is largely based on data obtained from the patients. There are few studies that show results on characteristics of access to buildings. As a result, there is not national and international estimative of the proportion of installation architecturally of accessible equipment and furniture. Lack of access makes it difficult for these people to get involved in health prevention process. This may later result in increased cost or in more serious health problems.

Deficiency is a public health problem. It is estimated that, worldwide, about one billion people live in this condition. <sup>12</sup> However, the health of the DP is gaining visibility worldwide and bringing them welfare. When individuals have limitations to perform their activities, additional interventions may be needed to ensure their access to health services, how to coordinate the professionals involved in care and create environments that are favorable and improve the conditions for mobilizing this population. <sup>13</sup>

As regards the securities and the equipment of the FHUs, 83.3% of counters and desks meet the height of 80 cm from the floor; 74.4% of outpatient seats have free front space of 60 cm, depth of 45 cm and height of 46 cm, and 85.6% are appropriate, as recommended by law. This result corroborates other studies. However, some FHUs do not have such requirement, and failure to comply with this specification compromises wheelchair user access, determining an inadequate postural support that can trigger disruptions of esteem and behaviour. 15

It is noteworthy that although the amount of people living with disability is significant, accessibility for these individuals, in health services, is not still satisfactory; it undermines the development of personal skills in order to promote health. In addition to the inadequacy of the environment, it is observed the unpreparedness of professionals to deal with the specifics of these people, which compromises the quality of life. However, the promotion of accessibility in the context of health practices act as a multiplying factor of social awareness about human diversity, which will expand the possibilities of constructing inclusive societies. <sup>16</sup>

Regarding drinking fountains, only 24.4% are installed at 90 cm from the floor. With respect to such features, it was found that the DP was inaccessible, contrary to the rule, which states that 50% of the troughs are accessible by deck to respect the minimum one, and they must be located in accessible routes. Furthermore, the inaccessibility of troughs also is a function of the location of Moorhen spout attached to the top of the trough when it should be the front side, preventing the use and handling glasses. Another important factor found in these results was that none of the FHU presented texts containing guidelines, areas of operating instructions, objects or equipment, regulations and standards of conduct and information written in braille.

One of the right components to health (defined as a state of physical, mental and social well-being, not merely the absence of disease or infirmity), is access to promotion interventions, prevention and healing. The DP should receive the same type, quality and standard, free health care and programs as everyone else. Barriers such as the inability to provide health information in simple text or sign language are violations of rights to equal treatment and oportunities.<sup>18</sup>

According to the reflection mentioned, barriers of communication access include factors or systems that limit the ability of a patient to make an appointment, to arrange to follow, to understand the goals of care or to adhere to a prescribed therapy. Such factors include a wide range of issues that require accommodations for people with visual or hearing impairment and other cognitive disabilities.<sup>19</sup>

According to that shown in Table 2, the study enabled us to verify the existence and characteristics of health facilities for people with disabilities. Thus, 60.0% of FHU do not have adequate toilets for DPs near the circulation; 92.2% are not properly signed by Access International Symbol (SIA), and 66.7% are not available for both sexes.

**Table 2 -** Distribution of Family Health Units according to the characteristics of sanitary installation. João Pessoa, PB, Brazil, 2014

ltem	Cathegories			
	Yes		No	
	n	%	n	%
Proper toilets for DP next the circulation	36	40,0	54	60,0
Toilets properly signed with SIA*	7	7,8	83	92,2
Toilets for both sexes	30	33,3	60	66,7

\*International symbol of access

Table 3 shows the following information relevant to installations of toilets: 50.0% have free space of 1.20 m/80 cm; 27.8% bars installed on the sidewall and bottom, from which 17.8% have required length of 80 cm and 16,7% height of 75 cm from the floor; only 22.2% have sanitary bowl at a height of 46 cm; the paper with 50 to 60 cm from the floor at 14.4%; as the discharge valve, 48.9% are at a height of 1 meter, and 46.7% work with light pressure.

**Table 3 -** Distribution of Family Health Units according to the characteristics of the installation of toilets. João Pessoa, PB, Brasil, 2014

	Cathegories			
Item	Item Yes		No	
	n	%	n	%
It has free space of 1.20 m/80 cm	45	50,0	45	50,0
Sidewall and bottom bars installed	25	27,8	65	72,2
Horizontal bars has a length of 80 cm	16	17,8	74	82,2
Horizontal bars has a height of 75 cm from the floor	15	16,7	75	83,3
Sanitary basin is at a height of 46 cm from the floor	20	22,2	70	77,8
Wastepaper 50 cm from the floor	13	14,4	77	85,6
Discharge valve is at a height of 1.00 m	44	48,9	46	51,1
Discharge valve works with light pressure	42	46,7	48	53,3

The toilets and changing rooms should be located in accessible routes near the main circulation, and be signed properly. However, in this research, most sanitary installations are not accessible to DP because they are located far from the largest area of movement and they do not have SIA.

The legislation sets standards that meet basic human needs. But this seems contradictory, faced with a society where inclusion and discursive practice on the DP take different directions. In this sense, to provide better access, structural and organizational perspective, planning is essential. So to ensure the technical feasibility and match the need with the availability of resources, observing the legal parameters, the nurse should participate in the proposal and the planning of the physical area in health services, as the vision of the professional specialized in buildings, engineers and architects, is not enough to recognize the care needs and activities that should be developed by the health team.<sup>20</sup>

A study in Chile showed that 54% of participants identified the main public buildings and environmental barriers, and 22% perceive as barriers the health professionals.<sup>21</sup> Law requires the equal access for people with disabilities but it is also the responsibility of professionals prioritize the accessibility of service and patient needs.<sup>22</sup>

Also according to the sanitary facilities, in relation to the facilities of toilets, 50.0% have a free space of 1.20 m by 80 cm; 27.8%, installed bars on the side wall and bottom; and only 22.2% have sanitary bowl at a height of 46 cm. In the US, a survey of people who have mobility difficulties obtained different results. Respondents showed no concerns about accessibility to the bathroom, which for so long had been inaccessible, but has been renovated to improve access. Fortunately, there are very simple solutions to eliminate these barriers, such as the installation of accessible equipment and planning to promote further personal involvement as appropriate.<sup>23</sup>

According to Table 4, 75.6% of sinks have no spine, which facilitates the mobility of persons with disabilities; however, only 18.9% are at a height of 80 cm from the floor, as recommended by the NBR 9050, and 1.1% have mono tap command. This finding corroborates other study.<sup>24</sup>

**Table 4 -** Distribution of Family Health Units according to the installation characteristics of the sinks. João Pessoa, PB, Brasil, 2014

ltem	Cathegories			
	Yes		No	
	N	%	n	%
Washbasins hall without column	68	75,6	22	24,4
They are a height of 80 cm from the floor	17	18,9	73	81,1
The faucet is mono command	1	1,1	89	98,9

On furniture available for FHUs, barriers or difficulties are more evident than the facilities. The use of wheelchairs imposes limits on the execution of tasks by hindering the approach of objects and scope of elements above and below the range of action of a person sitting. This kind of situation creates fear of future in people with disabilities, because it emphasizes the imminence of exclusion and inhibits their efforts in the pursuit of social recognition. The barriers are considered factors that hinder the participation and development of people because they have a direct impact on both the performance of activities of daily life and social performance. The physical environment, technology, public attitudes towards disability and systems are important aspects to ensure acessibility.<sup>12</sup>

Due to the complexity and importance of accessibility for DP, which involves different sectors such as education, culture, recreation and sports, it is necessary to strengthen the capacity of health management systems to integrate the needs of these people in primary health. <sup>18 21</sup>

One study showed that most DP has low education and income and depends exclusively on the resources provided by the government, such as public health services. However, it is necessary to invest in training programs for these people to improve their education, to have a more autonomous life, to perform work activities adapted to their limitations, to seek their rights as citizens and, consequently, to improve the quality of life and health.

As a result of this process, it is clear that DPs increasingly are seeking health services. And as primary care, theoretically, it is the gateway to the public health system, possibly this is the first instance where these people receive care. However, there is still a difficulty in relation to obtaining such access, which shows that these sectors have not worked properly to meet all popultion.<sup>25</sup>

#### CONCLUSION

Investing in these units of necessary infrastructure, according to the entire population needs, is a challenge, because we need to understand that in order to promote accessibility, it is essential that health facilities are provided with physical access and environmental adaptations appropriate to DPs such as products, instruments or adapted equipment to improve the functionality of these people and to promote their personal, full or assisted living.

In this sense, specific interventions targeted to this population and the evaluation of existing policies to effect all that is guaranteed by law would be a way to minimize the difficulties resulting from disabilities and promoting comprehensive health care. Thus, it is necessary to see these people as full citizens, reduce prejudice and discrimination and promote public and institutional policies that support physical, clinical and psychosocial needs of these individuals.

This study is a first step to improve the management and planning of health services for people with disabilities. However, some limitations were related to the absence in interventional studies of literature in Brazil aimed at accessibility of this population. This requires the development of more research in this area, to increase knowledge about the influence of the environment and factors that interfere with free access to these people.

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