Original Article

Artigo Original

Primary health care assessment by users with and without disabilities

Avaliação da atenção primária em saúde por usuários com e sem deficiência

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Keywords

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ABSTRACT

Purpose: To evaluate the core (First Contact, Longitudinality, Comprehensiveness, and Coordination of Services) and derivative (Family Orientation, Community Orientation) attributes of primary health care (PHC) from the perspective of users with and without disabilities. **Methods:** Observational, cross-sectional study using the Primary Care Assessment Tool (PCAT) with users with and without disabilities of five basic health units (BHU) in a municipality where 55% of the population depends on the Brazilian Unified Health System (SUS). Scores were assigned to the responses given to each of the PHC attributes evaluated. **Results:** Study participants were 93 (67 physically disabled and 26 without disabilities) PHC users. No statistically significant differences were observed for any attribute on the comparison between the populations. For both groups, the attributes Degree of Affiliation, First Contact - Utilization, Longitudinality, and Coordination of Services - Information System received satisfactory (above cutoff) scores, whereas the attributes First Contact - Accessibility, Coordination of Services - Care Integration, Comprehensiveness, Family Orientation, and Community Orientation received unsatisfactory (below cutoff) scores. Users reported that the health teams are able to satisfactorily identify mobility issues, but there are failures in the recognition of problems of hearing, voice/speech and vision, and in the orientation of services available and services provided. **Conclusion:** Users with and without disabilities evaluated the health care received similarly, indicating fragilities on the recognition of specific demands. Structural and work process changes should be conducted to ensure Accessibility, Comprehensiveness, and Family and Community Orientation, and thus increase the quality of PHC.

Descritores

Atenção Primária à Saúde
Pessoas com Deficiência
Acesso aos Serviços de Saúde
Integralidade em Saúde
Pesquisa sobre Serviços de Saúde
Sistema Único de Saúde

RESUMO

Objetivo: Avaliar atributos essenciais (acesso de primeiro contato, longitudinalidade, integralidade e coordenação da atenção) e derivados (orientação familiar e comunitária) da Atenção Primária em Saúde (APS) na percepção de usuários com e sem deficiência. **Método:** Estudo transversal observacional utilizando o questionário *Primary Care Assesment Tool* em usuários autodeclarados com e sem deficiência de cinco unidades básicas de saúde de um município no qual 55% da população depende do SUS. Foram atribuídos escores para as respostas dadas a cada atributo de atenção primária à saúde avaliado. **Resultados:** Participaram 93 usuários (67 com e 26 sem deficiência). Não houve diferença estatisticamente significante para nenhum dos atributos na comparação entre pessoas com e sem deficiência. Para o grupo como um todo, obtiveram-se escores acima do critério de corte: Grau de afiliação, Acesso de primeiro contato (utilização), Longitudinalidade e Coordenação da atenção (sistema de informação). Receberam pior avaliação: Acesso de primeiro contato (acessibilidade), Coordenação da atenção (integralidade do cuidado), Integralidade (serviços disponíveis e prestados) e Orientação familiar e comunitária. Os usuários reconhecem que as equipes identificam problemas de locomoção e movimentação, mas que existem falhas no reconhecimento de problemas para ouvir, falar e enxergar; e na orientação das pessoas que necessitam de auxílio e das que prestam cuidados. **Conclusão:** Os usuários com e sem deficiência avaliaram de forma semelhante a atenção que recebem e indicaram fragilidades no reconhecimento de demandas específicas. Há necessidade de mudanças (estruturais e do processo de trabalho) para assegurar acessibilidade, integralidade do cuidado e orientação familiar e comunitária e, assim, melhor qualificar a APS.

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INTRODUCTION

Primary Health Care (PHC) is an integral and strategic part of any health system. In Brazil, the development of services at this level of assistance was guided by different models, such as the Programmatic Actions in Health[1,2] and, more recently, the Family Health Strategy (FHS)[3], with the aim of reformulating the assistance model for the implementation of the Brazilian Unified Health System (SUS).

In the Primary Health Care National Policy[3], the essential principles for the development of PHC are indicated in the challenging perspective for universalization of health access and care for the population with equity, comprehensiveness, and participation of users, necessary to ensure the right to health.

Expansion of PHC also has the challenge to face the changes occurred in the demographic and morbimortality profile of the Brazilian population. In response to the increased prevalence of chronic non-communicable diseases, in which various types of disabilities are included, PHC is expected to act as coordinator of care and network health assistance provider[4].

In this sense, there is need to evaluate the development of PHC to respond to these specific demands. One of the initiatives aimed at this purpose refers to the use of the Primary Care Assessment Tool (PCAT), an instrument validated in the country and recommended by the Ministry of Health since 2010 as one of the strategies for assessment and improvement of PHC services[5].

The PCAT was developed by Starfield[6]. It is an instrument aimed at evaluating the core and derivative attributes from PHC, and it has been used in many countries, proving to be sensitive to its proposing objectives. Other instruments for evaluation of PHC have been described in the national and international literature; however, the authors of an article that compiled all the questionnaires available concluded that the PCAT is the most appropriate, because it allows assessment of health care focused on family and community[7], in agreement with the Primary Health Care National Policy[3].

In this evaluation process, it is fundamental to know the users' perception regarding the availability and quality of the services provided, enabling their improvement and reorientation. In this sense, several studies have addressed this issue from the perspective of different classes of users: adults, legal guardians for children, or the elderly. Other studies have established relationships between the perceptions of different populations[1,2,8-17].

However, there is only one study assessing the perception of individuals with disabilities about different attributes of PHC in the national literature[18]. Therefore, the importance of new studies addressing users with disabilities in PHC is evident due to the scarcity of research on these individuals; the history of development of specialized services for their care - closely associated with philanthropic and charitable initiatives; and the expectation and need for primary care services to identify and monitor these populations in their different health needs.

For these reasons, the objectives of this study are as follows: a) to evaluate the essential and derivative attributes of PHC based on the perception of its users, especially of those with disabilities, at Basic Health Units (BHU) in the west zone of the city of Sao Paulo which have a partnership with the University of Sao Paulo (USP) in teaching-service articulation projects and b) to learn some factors related to user perception regarding the PHC attributes.

METHODS

This is an observational, cross-sectional study conducted between August and December 2014. This study, which is an integral part of the research "Atenção Básica como ordenadora das redes de atenção à saúde Cegonha e de Cuidados à Pessoa com Deficiência*"* was approved by the Human Research Ethics Committees of the Secretaria Municipal de Saúde de São Paulo (32273014.8.0000.0065) and Faculdade de Medicina da Universidade de São Paulo (process no. 189/14), and was funded by FAPESP (Edital PPSUS 2014/50012-8) and Ministério da Saúde (MS) through the teaching-service integration project Programa de Educação pelo Trabalho na Saúde – PET Saúde/Redes de Atenção. This Program was a partnership between the Secretaria Municipal de Saúde de São Paulo and Universidade de São Paulo – USP (2013-2015) for the monitoring, by students, of health assistance activities specific to the daily services and research development focused on assessing and strengthening health care networks. The Program was funded by the MS by means of scholarships granted to students, preceptors, and tutors of USP.

Scenario of the research

The study was conducted in basic health units (BHU) located in the area of Technical Health Supervision of Butantã district of the Secretaria Municipal de Saúde de São Paulo. The Health Technical Supervision of the district was responsible for a population of approximately 428,217 inhabitants assisted at 14 BHUs. Five of these units were selected for this study within the partnership with the Universidade de São Paulo in teaching-service articulation projects, particularly the program PET – Saúde/Redes de Atenção. This partnership does not include the provision of human and material resources by USP, but is essential for health education because it offers practice scenarios for students to participate in activities planned for Primary Health Care (PHC) by the Secretaria Municipal da Saúde.

These BHUs presented different characteristics with respect to the assistance provided to individuals with disabilities and their families. Two of these BHUs operate exclusively within the Family Health Strategy (FHS) and three present mixed services, operating in the FHS and Traditional Care modalities. In addition to the services provided under the FHS, the BHUs also conduct other care activities, such as bodily practices and complementary approaches. Four units hold Family Health Support Centers (NASF) and one has a specific multidisciplinary team.

The development of activities under the FHS and the support by a multidisciplinary team comprised the inclusion criteria of this study.

Casuistics

Study participants were individuals with disabilities identified by the professionals of the multidisciplinary teams associated with the program PET – Saúde/Redes de Atenção. During the application of the questionnaires, a small part of this population declared not having any type of disability, being thus classified as non-disabled. The others described themselves as individuals with disabilities. Thus, the study sample was composed of individuals of different age ranges, residents of the area covered by the five participating BHUs, assisted by the health teams of these units. The participants were divided into two groups: G1 (individuals self-declared with disabilities) and G2 (individuals self-declared without disabilities). As established in the Primary Care Assessment Tool (PCAT), individuals under age and with severe mental disorders had the questionnaires completed by their caregivers. All participants signed an Informed Consent Form prior to study commencement.

Procedures

Data were collected through interviews with the application of the PCAT. This instrument assesses the following core attributes of PHC: First Contact - Accessibility, which includes accessibility to and use of the health services for each new problem or event; Longitudinality, which presupposes the existence of a regular source of care and its use over time; Comprehensiveness, which comprises an array of services available at and provided by PHC aimed at comprehensive care (including referrals to secondary, tertiary, and support services); and Coordination of Services, which requires some form of continuity, recognition of problems treated in other services, and the integration of this assistance in total patient care. The derivative attributes identified and assessed by the PCAT qualify the actions of the health services: Family Orientation, Community Orientation, and Cultural Competence or adaptation of health professionals to the cultural characteristics of a population[6].

The PCAT establishes five possible answers with respective scores for each item that comprise the attribute or its dimensions: "certainly yes" (4 points), "probably yes" (3 points), "probably no" (2 points), "certainly no" (1 point), and "do not know/cannot remember" (9 points). The score obtained in each item is transformed into a 0 to 10 scale calculated as [(score obtained – 1) × 10] / 3. Scores ≥ 6.6 are considered high and equivalent to scores ≥ 3 in the Likert scale[19].

The score for each attribute, or its dimensions, is calculated from the mean values of the responses to the items. For some items, the higher the score assigned, the lower its PHC orientation, and vice versa. In these cases, the items must have their scores reversed. Scores are only calculated when interviewees respond to more than 50% of the items. If the sum of the blank responses is less than 50%, they must be transformed from score 9 (do not know/cannot remember) to score 2 (probably no).

As for the attribute Degree of Affiliation, the score has its own scale, with scores from 1 to 4 not transformed into a 0 to 10 scale, where score 1 represents affiliation to four different services and score 4 shows affiliation to a single service in all questions.

The PHC Essential Score is calculated by the sum of the mean score of the dimensions that belong to the core attributes and the score of the Degree of Affiliation divided by the number of dimensions. The PHC General Score is measured by the sum of the mean score of the dimensions that belong to the core attributes and that of the dimensions that belong to the derivative attributes, plus the score of the Degree of Affiliation divided by the total number of dimensions[19].

The PCAT was complemented by a set of questions on the demographic characterization of users, presence and types of disability, and their recognition and monitoring in the service by professionals of the multidisciplinary teams (except physicians and nurses), by the socioeconomic classification of the families and schooling of the head of family of the Brazilian Association of Research Companies[20], and by the insertion of users in school, work, and/or community groups.

The tool was applied for three typical weeks, from 45 minutes to one hour, by students of the program PET Saúde/Redes, trained by the study researchers and monitored by preceptors/service professionals.

ANALYSIS OF THE DATA

Data were expressed in mean and standard deviation. The normality distribution of each variable was evaluated using the Shapiro-Wilk test. When normal distribution of variables was not observed, the Mann Whitney test was used for comparisons between two groups and the Kruskal Wallis test was applied for comparisons between three or more groups. A type I error rate ($\alpha = 0.05$) was considered in all inferential analyses. Data analyses were conducted using the SPSS 21 software (SPSS 21.0 for Windows).

RESULTS

Table 1 shows the sociodemographic profile of the 93 PHC users investigated. The sample was composed of 67 (72.04%) users with disability and 26 (27.95%) users without disability. Disability distribution among disabled users was as follows: 29.33% intellectual; 24%, physical; 13.33%, motor; 12%, multiple; 5.33%, hearing; 5.33%, physical associated with intellectual; 4%, physical associated with communication; 2.67%, visual; 1.34%, hearing and visual; and 2.67% others.

Most users were single women aged >18 years (minimum age = 2 years; maximum age = 80 years). The majority of the heads of family have completed High School, and most of the working adults and elderly are full-time employees. Of the users who did not work, most were retired. Of the underage users, more than 25% did not attend school and, of those who attended, most were enrolled in public schools. Regarding participation in community groups, almost half of the users were involved in some activity (Table 1).

Table 1. Characterization of the PHC users according to presence of disability, gender, age range, schooling, employment status, marital status, and social participation

		Users with disability (n = 67)	Users without disability (n = 26)	Total	Percentage
AGE (n = 93)					
Children	<18 years	10	5	*15*	*16.12*
Adults	18-59 years	37	15	*52*	*55.92*
Elderly	>60 years	20	6	*26*	*27.96*
GENDER (n = 93)					
Female		41	16	*57*	*61.29*
Male		26	10	*36*	*38.71*
MARITAL STATUS OF ADULTS AND ELDERLY (n = 78)					
Single		21	10	*31*	39.74
Married		18	6	*24*	30.77
Stable union		1	0	*1*	1.28
Divorced		3	2	*5*	6.41
Widowed		7	2	*9*	11.54
Not informed		6	2	*8*	10.26
SCHOOLING OF HEAD OF HOUSEHOLD (n = 93)					
Illiterate		11	1	*12*	12.90
Incomplete Elementary School		12	8	*20*	21.51
Elementary School		18	8	*26*	27.95
High School		21	9	*30*	32.26
College		4	0	*4*	4.30
Not informed		-	-	*1*	1.08
EMPLOYMENT SITUATION OF ADULTS AND ELDERLY (n = 33)					
Self-employed		7	1	*8*	24.24
Full-time employee		9	10	*19*	57.58
Informal		2	2	*4*	12.12
Other		1	1	*2*	6.06
SITUATION OF ADULTS AND ELDERLY NOT PERFORMING REMUNERATED ACTIVITIES (n = 45)					
Sick leave		0	1	*1*	2.22
Retiree		16	2	*18*	40.00
Continuous Cash Benefit		3	0	*3*	6.67
Unemployed		6	2	*8*	17.78
House wife/husband		9	1	*10*	22.22
Other		2	1	*3*	6.67
Not informed		0	2	*2*	4.44
PARTICIPATION OF ADULTS AND ELDERLY IN COMMUNITY GROUPS (n = 78)					
Religious Group		7	1	*8*	10.26
Cooperative		0	2	*2*	2.56
Associations		1	1	*2*	2.56
In more than one group		2	0	*2*	2.56
Other		18	3	*21*	26.92
In no groups		8	5	*13*	16.70
Not informed		20	10	*30*	38.46
SCHOOL STATUS OF CHILDREN (n = 15)					
Attending public school		5	2	*7*	46.67
Attending private school		1	0	*1*	6.66
Attending non-specified school		1	0	*1*	6.66
Not attending school		2	2	*4*	26.67
Not informed		1	0	*1*	13.34

With respect to socioeconomic classification, 68.82% belong to class C; 22.59% to class B; 5.37% to class D; 2.15% to class A; and 1.07% to class E.

Assessment of the Basic Health Unit by its users

Table 2 presents the means of the scores obtained with the application of the PCAT to users with and without disabilities. No statistically significant difference was observed in the comparison between the groups for all attributes, dimensions, and general and essential scores.

When the scores were analyzed qualitatively (Table 2), the following attributes presented satisfactory (above cutoff) scores in both groups: Degree of Affiliation, First Contact - Utilization, Longitudinality, and Coordination of Services - Care Integration. The General and Essential Scores show that users in both groups assessed the BHUs positively.

As no statistically significant difference was observed in the comparison between the groups of individuals with and without disabilities, as previously shown, a comparison between the scores obtained by age range was performed including disabled and non-disabled users. Table 3 shows the means of the users' assessments by age range. Statistically significant difference was found only for the attribute First Contact - Accessibility, which was better evaluated by the parents and/or legal guardians of underage users. For this age range, a qualitative assessment (Table 3) shows that the attributes Degree of Affiliation, First Contact - Utilization, Longitudinality, and Coordination of Services - Information System were satisfactorily evaluated, as well as the Essential Score.

Tables 4 and 5 show the scores for the core and derivative attributes evaluated as unsatisfactory (below cutoff) by users.

In Table 4 (assessment by adults and elderly), it can be verified that the worst scores were given to the Accessibility dimension, with the following items receiving very low scores: not opening on weekends and at night, not providing telephone contact or access to any professional in those periods when users are ill.

As for the attribute Comprehensiveness - Services Available (Table 4), the unavailability of the following items significantly contributed to the unsatisfactory scores obtained in this dimension: splinting of sprained articulations and identification of visual and hearing impairments. Other items poorly assessed included lack of treatment/counseling about drug abuse, aging process, and family members with disabilities.

Concerning the attribute Comprehensiveness - Services Provided (Table 4), the lowest score was related to the lack of advice on firearms in the household, child safety in the car, and domestic accidents such as burns, exposure to hazardous substances, and falls.

With respect to the assessment by parents and/or legal guardians of underage users (Table 5), fewer items received below cutoff scores compared with the evaluation by adults and elderly. The item that received the lowest score from this population belonged to the Community Orientation dimension, in which users were dissatisfied with regard to surveys conducted on the community and themselves, on their health problems, and to motivating participation in Management and User Councils.

Table 2. Mean and standard deviation of the scores for PCAT attributes and dimensions of users with and without disabilities; *p* value

Attribute	Dimension	Users without disability Mean (SD)	Users with disability Mean (SD)	*p* value
Degree of Affiliation	---	3.13 (1.12)	3.30 (1.02)	0.953
First contact	Utilization	7.37 (2.83)	8 (2.56)	0.463
	Accessibility	3.35 (1.50)	3.67 (1.53)	0.745
Longitudinality		6.80 (2.08)	6.98 (2.42)	0.754
Coordination of services	Care integration	7.65 (2.48)	6.82 (2.76)	0.334
	Information system	6.72 (2.66)	6.47 (2.01)	0.773
Comprehensiveness	Services available	6.32 (1.84)	6.20 (1.88)	0.667
	Services provided	5.16 (2.70)	4.92 (2.43)	0.707
Family orientation		6.71 (3.26)	5.85 (3.24)	0.451
Community orientation		5.87 (2.70)	5.47 (2.57)	0.717
General score		6.24 (1.75)	6.39 (1.66)	0.622
Essential score		6.46 (1.69)	6.32 (1.52)	0.644

Mann Whitney test at 5% significance level ($p<0.05$)
Captions: PCAT = Primary Care Assessment Tool; SD = standard deviation

Table 3. Mean and standard deviation of the scores for PCAT attributes and dimensions of users according to age range; *p* value

Attribute	Dimension	Users in general	Users <18 years	Users 19-59 years	Users >60 years	p value
			Mean (SD)			
Degree of affiliation		3.36	3.46 (0.74)	3.15 (1.15)	3.48 (0.77)	0.696
First contact	Utilization	7.78	7.46 (2.32)	7.58 (2.89)	8.31 (2.00)	0.251
	Accessibility	4.60	6.55 (2.38)	3.50 (1.67)	3.76 (1.18)	<0.001
Longitudinality		7.13	7.17 (2.23)	6.59 (2.52)	7.64 (1.64)	0.298
Coordination of services	Care integration	6.32	5.23 (3.67)	7.15 (2.77)	6.60 (2.58)	0.625
	Information system	6.60	6.50 (2.78)	6.28 (2.34)	7.04 (1.81)	0.313
Comprehensiveness	Services available	6.42	6.89 (1.90)	6.31 (1.74)	6.08 (2.11)	0.313
	Services provided	5.57	6.23 (3.74)	4.56 (2.39)	5.94 (2.48)	0.052
Family orientation		6.37	6.82 (3.94)	5.98 (3.42)	6.31 (2.91)	0.559
Community orientation		5.88	6.07 (2.12)	5.27 (2.71)	6.22 (2.27)	0.278
General score		6.50	6.80 (1.39)	6.18 (2.01)	6.53 (1.19)	0.736
Essential score		6.66	6.91 (1.23)	6.31 (1.92)	6.76 (1.27)	0.720

Kruskal Wallis test at 5% significance level ($p<0.05$)
Captions: PCAT = Primary Care Assessment Tool; SD = standard deviation

Table 4. Description of the PCAT attributes that received unsatisfactory (below cutoff) scores in the assessment by adults and elderly users

ATTRIBUTE	DIMENSION	QUESTIONS	Mean score
FIRST CONTACT	ACCESSIBILITY	C1- Is the BHU you use open on Saturdays or Sundays?	0.61
		C2 - Is the BHU you use is open on at least a few working days a week until 8 pm?	1.71
		C4 - Can you get quick advice on the phone when the BHU is open?	2.9
		C5 - Is there a phone number you can call when you become ill when your BHU is closed?	1.17
		C6 - When the BHU is closed on Saturdays and Sundays and you become ill, will somebody on this service assist you on the same day?	0.95
		C7 - When the BHU is closed on Saturdays and Sundays and you become ill, will somebody on this service assist you on the same da?	0.74
		C8 - Is it easy to schedule a checkup at the BHU you use??	6.36
		C9 - When you arrive at your BHU, do you have to wait more than 30 minutes for a consultation with a physician or nurse (excluding time spent on admission and screening)?	4.07
		C10 - Do you have to wait long or speak with many people to schedule a consultation at your BHU?	6.54
		C11 - Is it difficult to be assisted at your BHU when you believe it is necessary?	5.71
		C12 - Do you have to miss work or school when you need to go to your BHU?	6.15
COORDINATION OF SERVICES	CARE INTEGRATION	E4 – Has your physician/nurse described to you the different BHUs where you could be assisted with your health problem?	5.56
		E5 - Have your physician/nurse or someone working in the BHU assisted you with scheduling this consultation?	6.51
		E6 – Has your physician/nurse written any information to the specialist regarding the reason for this consultation?	6.59
		E9 – Did your physician/nurse seem interested in the quality of care you were given (asked whether you were well or poorly assisted by this specialist or specialist service)?	6.11

Captions: PCAT = Primary Care Assessment Tool; BHU = Basic Health Unit

Table 4. Continued...

ATTRIBUTE	DIMENSION	QUESTIONS	Mean score
COMPREHENSIVENESS	SERVICES AVAILABLE	G2 - Verify if your family can participate in any program of social assistance or social benefits	5.4
		G3 - Nutrition supplementation program (milk, food, etc.)	5.31
		G6 - Dental treatment	6.2
		G8 - Counseling or treatment for drug abuse (lawful or illicit; e.g., alcohol, cocaine, sleeping pills, etc.)	6.15
		G9 - Counseling on mental health problems	6.06
		G12 - Identification (some type of assessment) of hearing disorders	4.84
		G13 - Identification (some type of assessment) of visual disorders	4.51
		G14 - Splinting (e.g., for a sprained ankle)	4.74
		G15 - Removal of warts	3.9
		G17 - Advice on quitting smoking	6.48
		G19 - Removal of ingrown toenail	4.37
		G20 - Counseling about the changes that occur with aging (e.g., decreased memory, risk of falling)	5.82
		G22 - Counseling about what to do if someone in your family becomes disabled and cannot make decisions about health (e.g., organ donation if someone in your family is unable to decide, for example, in a coma)	5.26
	SERVICES PROVIDED	H2 - Safety at home, such as storing medicines safely	5.39
		H3 - Advice on using seat belts or child safety seats when driving/riding in a car	2.47
		H4 - Ways to cope with family conflicts that may occasionally arise	3.42
		H8 - Possible exposure to hazardous substances (e.g., ant/rat poison, bleach) at home, at work, or in the neighborhood	3.74
		H9 - Ask whether there are firearms in the household and guide how to safely store them	1.87
		H10 - How to prevent burns	2.97
		H11 - How to prevent falls	4.38
		H-12 - For women only: how to prevent osteoporosis or brittle bones	5
		H-13 - For women only: caring for common menstruation or menopause problems	5.49
FAMILY ORIENTATION		I1 – Does your physician/nurse ask you about your ideas and opinions (what you think) when planning treatment and care for yourself or a member of your family?	5.11
		I2 – Has your physician/nurse ever asked you about common diseases or problems that may occur in your family (e.g., cancer, alcoholism, depression)?	6.28
COMMUNITY ORIENTATION		J3 - Does your BHU hear community opinions and ideas on how to improve its assistance?	6.44
		J4 - Does the BHU you use survey patients to find out if its services meet their users' needs?	3.47
		J5 - Does your BHU survey the community to identify health problems that it should know about?	4.7
		J6 - Does your BHU invite you and your family to participate in the Local Health Council (Management Council/User Council)?	3.88

Captions: PCAT = Primary Care Assessment Tool; BHU = Basic Health Unit

Other important items which were evaluated as unsatisfactory by these users in other dimensions were First Contact - Accessibility (waiting time for consultation and availability of counseling on the phone) and Comprehensiveness - Services Provided (existence of a nutrition supplementation program; identification of visual impairments).

Regarding monitoring by PHC professionals, except physicians and nurses, on the health condition of users (Table 6), some items received unsatisfactory scores.

In relation to adults and elderly, there was greater recognition, by the multidisciplinary team, of problems that affect the users' appearance, such as lack of any part of the body, mobility impairment, and problems with moving any part of the body than of psychiatric problems and vision, hearing or speech impairments. In addition, the multidisciplinary team presented difficulties in recognizing the need for guidance to caregivers or the users themselves, who need assistance with daily activities. For the parents and/or legal guardians of underage users, the teams show greater recognition

Table 5. Description of the PCAT attributes that received unsatisfactory (below cutoff) scores in the assessment by parents and/or legal guardians of underage users

ATTRIBUTE	DIMENSION	QUESTIONS	Mean score
FIRST CONTACT	ACCESSIBILITY	C2 - Do you have to wait long or speak with many people to schedule a consultation at your BHU?	6
		C4 - When you arrive at your BHU, do you have to wait more than 30 minutes for a consultation with a physician or nurse for your child (excluding time spent on admission and screening)?	4.22
		C6 - Can you get quick advice on the phone when the BHU is open?	4.22
COORDINATION OF SERVICES	CARE INTEGRATION	E2 – Have the BHU or a physician/nurse referred your child to a consultation with a specialist or specialized assistance?	6.19
		E4 - Had your child's physician/nurse been informed about the results of this consultation?	5.24
		E5 – After this appointment with the specialist or specialized service, did your physician/nurse talk to you about what happened during this consultation?	3.33
		E6 – Was your physician/nurse interested in the quality of care provided to your child at the specialist or specialized service?	5.24
COMPREHENSIVENESS	SERVICES AVAILABLE	G4 - Nutrition supplementation program (milk, food, etc.)	3.85
		G8 - Counseling and requesting of HIV test	6.41
		G9 - Identification (some type of assessment) of hearing disorders	4.36
	SERVICES PROVIDED	H2 - Safety at home, such as storing medicines safely	5.48
		H3 - Changes in the growth and development of the child, that is, what you should expect at each age, for example, when the child begins to walk, urine control, etc.	6.43
		H5 - Ways to keep your child safe, such as preventing falls or keeping the child away from the stove	5
FAMILY ORIENTATION		I2 – Has your physician/nurse ever asked you about common diseases or problems that occur in your child's family (e.g., cancer, alcoholism, depression)?	6.19
COMMUNITY ORIENTATION		J3 - Does the BHU survey the community to identify health problems that your child should know about?	4.52
		J4 - Does the BHU invite family members to participate in the Local Health Council (Management Council/User Council)?	2.86

Captions: PCAT = Primary Care Assessment Tool; BHU = Basic Health Unit

Table 6. Mean scores, according to age range, regarding the monitoring of users' disabilities by Primary Health Care professionals, except physicians and nurses

ATTRIBUTE	QUESTIONS	Users ≤ 18 years	Users > 18 years
Degree of affiliation	Are there any health professionals, other than physicians or nurses, in the BHU where you are assisted for that is also responsible for your health care?	2.63	2.10
First contact - Utilization	When you need the professional that best knows your health history, does the doctor or nurse always refer you?	3.7	5.25
	Is it easy to schedule a consultation with the professional that knows your health history best in the service you use?	8.15	5.73
	Is it difficult for you to be quickly assisted by the professional in your service that knows your health history best when you believe it is necessary?	2.59	6.15
Longitudinality	When you visit the service where you are cared by the professional that knows your health story best, is it always this professional that assists of you?	9.26	6.46
	Is the professional who knows your health story best aware of your most important problems?	9.26	6.98
Comprehensiveness - Services available	If you have mobility problems, does anyone at this BHU recognize this need?	10	8
	If you have problems using of your hands or arms to perform day-to-day tasks, does anyone at this BHU recognize this need?	–	5.88
	If you have speech/voice problems, does anyone at this BHU recognize this need?	10	5
	If you have psychiatric problems, does anyone at this BHU recognize this need?	9.17	4.58
	If you have intellectual problems, does anyone at this BHU recognize this need?	6.67	6.67
	If you have a hearing impairment, does anyone at this BHU recognize this need?	–	3.33
	If you have vision problems, does anyone at this BHU recognize this need?	10	5.25
	If you have problems related to the lack of any part of your body, does anyone at this BHU recognize this need?	–	9.05
	If you have problems moving any part of your body, does anyone at this BHU recognize this need?	10	8.13
	If necessary, does your caregiver receive guidance from the BHU to provide care?	6.67	4.44
	If so, do you receive orientation from the BHU to provide this care?	5	3.86

Note: Some items could not be calculated for underage users because of the small number of participants in this age range and the impossibility of calculating the responses when interviewees answered less than 50% of the questions
Captions: BHU = Basic Health Unit

of problems related to mobility, speech, vision, moving any part of the body, and psychiatric disorders, and less recognition, but still on the average, of intellectual problems.

DISCUSSION

With regard to the sociodemographic profile of Primary Health Care (PHC) users, it is worth noting that, in Brazil, there is greater presence of women who seek, more frequently than men, health care services, and who are prevented from conducting daily life activities due to health reasons[21]. This study showed that the greater participation of women[11,16,17], as well as of adults and elderly[9], is similar to that reported in other studies.

Another characteristic of the study participants is that they belong to class C, in accordance with the income profile of the population living in the peripheral areas of the health region investigated[22]. Low income, also mentioned by participants of other studies[11,23], coupled with low insertion in the work market and low professional qualification of the disabled participants, suggests the social vulnerability of the interviewees. Accordingly, studies have shown that disabled individuals (DI) are under-represented in the work market, occupy subordinate positions, and receive lower salaries compared with those of other workers[24-26]. The present study also highlights the low access of disabled users to Continuous Cash Benefit, which may be due to lack of information about the criteria for requesting it.

The study also reveals that the participation of PHC users in community groups is small, being more frequently indicated in the BHUs to which the interviewees are linked, which suggests a lack of partnerships between the health services and sectors of the society to foster social participation of DIs, as reported in another study[18].

As for perception about the different PHC attributes, no statistically significant difference was observed in the comparison between users with and without disabilities. The absence of differences was also verified in a study that evaluated PHC from the perspective of parents and/or legal guardians of children and adolescents with and without physical disabilities[18].

Degree of Affiliation received satisfactory scores in the assessment by general users (with and without disability) regarding the care provided by physicians and nurses. Overall, users seemed to recognize services or professionals as a reference in health care[11,18].

Similarly, the attribute First Contact: Utilization was evaluated as satisfactorily by the interviewees, which corroborates the results found in other studies[16,17,27].

The attribute First Contact: Accessibility, which marks the availability of PHC to users with receptive and humanized admission, was one of the attributes that received the lowest scores, as observed in other studies[9,16,17]. These results are due, in particular, to the very low scores obtained on items such as "not opening on weekends", "not opening on weekdays after 8 pm", and "not providing contact on the phone in these periods"[16,28-30], which expresses structural issues that lead users to have poor accessibility to health service. With regard to individuals with disabilities, this attribute obtained an even lower score compared with those by individuals without disabilities, although with no statistically significant difference. These data suggest that, in the case DIs, the difficulties faced in accessing health services are even clearer, emphasizing the iniquities to which these individuals are subject[23].

As observed in other studies, the attribute Longitudinality was rated satisfactorily by users in general[16], and underage[27] and elderly[13] users. The high mean score received by this attribute is fundamental for appropriate treatment, limiting unnecessary referrals to services of greater complexity[24], which suggests the use of PHC as a usual source to assist with all health problems, welcoming the user holistically for years[15].

The attribute Coordination of Services: Care Integration has received different scores in assessments reported by other authors. In the present study, this attribute obtained satisfactory scores in the evaluation by users in general and by adults and elderly, whereas it has received relatively adequate scores in a current research[27] and unsatisfactory[17] scores in a previous study. The attribute Coordination of Services: Information System has also obtained mean score above cutoff in this study when evaluated by adults, the elderly, and users in general, corroborating the finding of another study[2]. Coordination should occur along the therapeutic process and ensure continuity of care at different times, which indicates the appropriate use of information and services by users[17].

In this study, the attribute Comprehensiveness: Services Available obtained unsatisfactory scores. Similarly, other studies have also reported the following as little available services: removal of warts[13,16], treatment/counseling about drug abuse, splinting of sprained articulations, identification of hearing and visual impairments, counseling about the aging process, and guidance on the care for disabled family members[16].

It is worth noting that adult and elderly users with disabilities considered that the BHUs do not recognize a large part of their specific demands, especially those not manifested in their physical appearance, such as hearing, visual and speech/voice impairments, psychiatric problems, use of the upper limbs in daily activities, or the need for guidance to caregivers. If the multidisciplinary team cannot recognize these conditions, the health service is not aware of the difficulties that DIs undergo in daily life, making it impossible to fulfill the role of PHC as a network health assistance provider, also for this populationl[3,4].

The lowest mean score obtained by the attribute Comprehensiveness - Services Provided has also been observed in other studies, and it was associated with lack of counseling about child safety in the car, exposure to hazardous substances, and domestic accidents such burns[16,23], falls, and firearms in the household[16].

With respect to the derivative attributes, Community Orientation obtained below cutoff scores in the assessment by users in general, corroborating the results of other studies[1,9,16,18,28]. PHC users, as observed in other studies, were dissatisfied with the services with regard to surveys conducted on the community and themselves, on their health problems[1,28], and to service performance and motivating participation in the Management Councils of the BHUs[28].

The attribute Family Orientation also received unsatisfactory scores in the evaluation by users in general, specially by adults

aged 19 to 59 years, corroborating results obtained in other studies[1,9,11,16,18,28,29]. This finding suggests fragility of the service with regard to work based on the social and family reality of the users and the participation of individuals and their families in the process of care, indicating a need to improve care oriented from the assumptions of the family health strategy (FHS).

It should be noted that the general score, although below average, did not deviate significantly from the reference value, mainly because of the good scores obtained in the assessment by underage users, whereas the value close to (but above) the cutoff of the essential score was due to the positive evaluation of the services by elderly and underage users. This suggests the need for a more in-depth study on the activities and actions conducted by the BHUs, and how much they contemplate the needs and demands of the diversity of their users.

Thus, it should be emphasized that the attributes and dimensions with the highest scores were Degree of Affiliation, First Contact: Utilization, Longitudinality, and Coordination of Services: Information System. Furthermore, no statistically significant differences were observed regarding the perception of users with and without disabilities.

These data suggest that the care provided in the services partially fulfills the expectations and needs for assistance, indicating, on the one hand, that the BHUs are a reference for these users and respond to their demands and needs and, on the other hand, that both the general and essential scores show that there is a large margin for improvement of the assistance provided by the BHUs surveyed, considering that the maximum possible score was not reached, that is, some attributes can be improved. In this sense, it is worth noting that the dimension First Contact - Accessibility obtained the lowest scores in the evaluation by users, especially with regard to structural issues, indicating a need to rethink, from the standpoint of service management, strategies to be adopted in order to ensure full access for all users to PHC and the health system, as well as to assistance to different demands.

It is also worth mentioning the fact that services present difficulties in recognizing specific issues associated with disability, especially for adults and the elderly, a significant part of the population who may face lifelong problems related to the reduction of their functional capacity with repercussions for their health and autonomy conditions for their own care or of others.

Among the limitations of this study, the authors highlight the different levels of availability of the BHUs to accommodate researchers and students, the length of the questionnaire, and the time required for its application, which prevented the authors from selecting a larger study sample and, consequently, conducting a more comprehensive analysis of factors associated the perceptions of users about the health assistance received.

CONCLUSION

The perception of users, especially those with disabilities, with respect to Primary Health Care (PHC) indicates that underage users assessed the core and derivative attributes of this service as more satisfactory, followed by the elderly. They correspond to the age groups that need the most attention and care and who are included in specific programs, which may favor access to the system and continuity of assistance at this level of care. When comparing users with and without disabilities, no statistically significant differences were observed.

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Author contributions

MHMA, FCO, AS, and DRMA participated in the study design, analysis of data, and writing of the manuscript; RCT, SP, SK, and AMO participated in the analysis of data and writing of the manuscript.