

Responsiveness of Primary Healthcare Services in Municipalities from the Central Region of Brazil

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Abstract

Background: The family health strategy is a high-priority state policy in the coordination of health care networks. Given its central importance, its services need to be evaluated, especially to monitor how well users' demands are met. This study aims to evaluate the responsiveness of family health services in municipalities in and around to the greater Brasília area.

Methods: Create a responsiveness index for the family health service based on responses provided by users from eight municipalities about dimensions concerning respect for persons (respect for dignity, confidentiality of information, professional communication, and autonomy) and client orientation (quality of amenities, prompt attention, access to social support, and choice of provider).

Results: The information obtained from the indices demonstrated that the service was most responsive in meeting users' expectations in the dimensions of dignity, confidentiality, communication, and autonomy, while it fell short in the quality of amenities, access to social support, and choice of provider.

Conclusion: The findings indicate that the services provided under the family health strategy are more responsive when it comes to respect for persons, but the dimensions relating to client orientation need to be improved, especially promptness of attention.

Keywords: Family Health; Primary Care; Public Health; Practice Management; Managed Care

Abbreviations

WHO: World Health Organization; SUS: National Health System (Sistema Único de Saúde); FHS: Family Health Strategy; RIDE-DF: Integrated Development Region of the Federal District and Surrounding Areas (Região Integrada de Desenvolvimento do Distrito Federal e do Entorno); Fiocruz: Oswaldo Cruz Foundation (Fundação Oswaldo Cruz); SIAB: Government's Primary Care Information System (Sistema de Informação da Atenção Básica,); FEPECS: Teaching and Research Foundation of the Federal District (Fundação de Ensino e Pesquisa do Distrito Federal)

Introduction

The World Health Organization (WHO) defined primary health care as the building block for health systems, which drives improvements in the health of populations at a lower cost. This view has gained strength with the success stories of countries that based their health care systems on primary care, and improved health indicators in conjunction with lower health expenditures [1-3].

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In Brazil, primary care is the cornerstone of the national health system (Sistema Único de Saúde, SUS), which has included the principles of the public health reform since the universal right to health was made an integral part of the Brazilian Constitution in 1988. The adoption of a primary-care based model converted the old biomedical, hospital-centered, and essentially cure-oriented system into a comprehensive, integrated health care system. The Family Health Strategy (FHS) represents the set of policies that guided this change aiming to provide longitudinal care for individuals, comprehensive care, and care in the family and community setting [4]. Currently, SUS administrators follow the FHS as the state policy that coordinates health care networks [5].

In this system, the evaluation of primary health care services constitutes a crucial tool for monitoring how well the services respond to user demands. User views have increasing importance in policy-making. Understanding user perceptions may increase the utilization of primary health care services [6]. Moreover, evaluating the service from the perspective of the public has the advantage of providing inputs for the reorganization and monitoring of services, while fostering social control and involvement of users in shared decision-making processes aiming to resolve everyday issues [7]. In this sense, the WHO has introduced the concept of responsiveness, rather than satisfaction [8], in its health care evaluation research, which has to do with how well a health system recognizes and responds to user expectations concerning different aspects of their care [9]. Responsiveness measures non-medical aspects and individual perceptions of a health system [8].

Primary care services differ from each other as a result of different social, historical, economic and cultural factors [10]. Features such as gate keeping or waiting times could influence the perception of primary care responsiveness. Consequently, indicators of responsiveness should allow for a comparison of systems and for the identification of ways to improve the quality and outcomes of the services provided [10].

Data on user perception of the responsiveness of FHS services in Brazil remains scant. Thus, this study aims to evaluate the responsiveness of the services provided by family health teams in municipalities from the area surrounding the Brazilian capital city, known as the Integrated Development Region of the Federal District and Surrounding Areas (Região Integrada de Desenvolvimento do Distrito Federal e do Entorno, RIDE-DF). In summary, users of the system in this region evaluate well the human aspects of responsiveness, while giving lower scores to infrastructure items.

Materials and Methods

This study involved constructing and evaluating a responsiveness index for the services provided under the family health strategy. The study was conducted in some municipalities from the RIDE-DF region, which covers areas from the states of Minas Gerais and Goiás that are adjacent to the Federal District (greater Brasília). This region was created through statutory law #94 of February 19, 1998 and is regulated by decree #7469 of May 2011 to improve and expand on essential services and promoting economic activity in the region.

The municipalities from the RIDE-DF region selected for inclusion in this study are representative of the health regions that make up the RIDE-DF region, have a population of over 50,000, and hold municipal health conferences every two years. According to the terms of decree #7508 of June 28, 2011, health regions are unbroken geographical areas made up of adjoining municipalities with shared cultural, economic, and social identities, communication networks, and transportation infrastructure, formed to integrate the organization, planning, and execution of health actions and services. The municipalities selected for this study were: four from the Entorno Sul region (south of Brasília), all from the state of Goiás (Cidade Ocidental, Novo Gama, Santo Antônio do Descoberto, and Valparaíso); two from the Entorno Norte region (north of Brasília), both Goiás (Formosa and Planaltina); Pirenópolis, in Goiás state, from the Pirineus region; and Buritit, Minas Gerais state, from the Unaí region.

A questionnaire adapted to the family health service that had already been validated and administered to outpatients at a unit of Fundação Oswaldo Cruz (Fiocruz) was used. In its first part, it addresses elements of respect for persons, namely respect for dignity,

confidentiality of information, autonomy, and communication. The second part includes dimensions that have to do with client orientation, namely prompt attention, access to social support, quality of amenities, and choice of provider [11]. A responsiveness index was calculated for each dimensions.

The questionnaires were administered by researchers at primary care centers to users registered with the family health system that had used its services within the previous three months.

The calculation of the sample size was based on the number of people registered with the urban family health teams at these municipalities, based on data from the government’s Primary Care Information System (Sistema de Informação da Atenção Básica, SIAB) from March 2013 (Table 1). The sample design involved two stages. First, using simple random sampling, each member of the population had a known, non-zero probability of being selected, calculated using a 95% confidence level, an error margin of plus or minus 5 percentage points, and maximum variation. In the second stage, it was held the proportional allocation by municipalities (Table 1). The calculation of the sample size was not based on the experience of previous studies.

Municipal Department of Health	No. of People Registered	N	%	No. of Questionnaires Administered
Novo Gama	42909	47	12.21%	49
Cidade Ocidental	38248	42	10.88%	45
Formosa	51853	57	14.76%	59
Planaltina-GO	68641	75	19.53%	80
Pirenópolis	18362	20	5.23%	21
Valparaíso	71740	79	20.41%	81
Santo Antônio do Descoberto	45000	49	12.81%	51
Buritis	14671	16	4.17%	17
Total	351424	385	100.00%	403

Table 1: Distribution of sample by municipal department of health in the RIDE-DF region, 2013.

The responsiveness index was prepared using the model proposed by Andrade., *et al.* (2010), with variation varying between 0 and 1, where the maximum positive value (ideal standard to be reached) for a given dimension is 1. The scale used to interpret the index values was: excellent (0.901 to 1); very good (0.801 to 0.900); good (0.701 to 0.800); fair (0.601 to 0.700); poor (0.401 to 0.600); very poor (0.201 to 0.400); extremely poor (0.000 to 0.200).

The last part of the questionnaire was designed to characterize the subjects taking part in the study. Statistical Package for the Social Sciences (SPSS) version 18 was used to systematize the data.

This study was submitted to and approved by the ethics committee of Fundação de Ensino e Pesquisa do Distrito Federal (FEPECS) (opinion #001/2012). All the individuals who took part in the study did so voluntary after signing an informed consent form.

Results

Characteristics of family health strategy users

The majority of family health service users were female (92.0%), young adults (34.7%), with one or two children (51.4%). Approximately 42% of the interviewees had not completed nine years of schooling, and over 53% stated they were catholic. Additionally, 59.3% of

the respondents were housewives, retirees, recipients of some kind of pension, or unemployed, and 53.3% earned less than 1000 Brazilian Reais per month (Table 2).

Characteristics of users	N	%
Age		
18 - 29	140	34.7
30 - 41	116	28.8
42 - 59	111	27.5
60 +	36	9.0
Sex		
Female	370	92.0
Male	33	8.0
Education		
Illiterate and incomplete primary school	170	42.2
Complete primary school	38	9.4
Incomplete/complete high school	160	39.7
Incomplete/complete undergraduate degree	35	8.7
Religion		
Catholic	214	53.0
Protestant	156	38.7
Spiritualist	12	3.0
Israelite	1	0.3
No religion	19	4.7
Atheist	1	0.3
Occupation		
Formal/informal worker/employee	150	37.2
Student	14	3.5
Housewives/retirees/pension recipients/unemployed	239	59.3
Family Income (Brazilian Reais)		
< 1000	215	53.3
1001 - 2000	125	31.0
2001 - 3000	40	10.0
> 3000	23	5.7
Number of Children		
0	34	8.4
1 - 2	207	51.4
3 - 4	107	26.6
5 or more	55	13.6

Table 2: Sociodemographic characteristics of family health strategy users, RIDE- DF, 2013.

Responsiveness of the family health strategy services

To evaluate the responsiveness of the health service, an index was calculated for each of the dimensions suggested by the WHO (Table 3). Dimensions with high indices included confidentiality (excellent), respect for dignity (very good), communication (very good), and autonomy (good). On the other hand, dimensions with the worst index scores included quality of amenities (regular), prompt attention (regular), access to social support (regular), and choice of provider (poor).

Domains	Dimensions	SRI
Respect for persons	Dignity	0.941
	Confidentiality	0.866
	Communication	0.862
	Autonomy	0.728
Client orientation	Quality of Amenities	0.678
	Prompt Attention	0.673
	Access to Social Support	0.616
	Choice of Provider	0.054

Table 3: SRI of FHS unities, RIDE-DF 2013.

In summary, dimensions associated with respect for persons were better evaluated, whereas dimensions in the client orientation domain were evaluated negatively.

Comparison of service responsiveness among RIDE-DF municipalities

To highlight potential differences among municipalities, we made a comparative analysis of the indices per dimension per municipality (Table 4). The highest indices for prompt attention (“good”) were in the municipalities of Buritis (0.771) and Santo Antônio do Descoberto (0.748). The lowest index for this dimension was in Pirenópolis, which also had the lowest indices for communication (0.503) and autonomy (0.661), classified as poor and fair, respectively. The quality of amenities was rated as fair and poor in most of municipalities. Regarding access to social support (classified as poor and very poor) and choice of provider (classified as poor and extremely poor), the indices calculated were low in all the municipalities. It is worth noting that in all the municipalities, dignity was evaluated as excellent.

	Novo Gama	Cidade Ocidental	Formosa	Planaltina-GO	Pirenópolis	Valparaíso	Santo Antônio do Descoberto	Buritis
Dignity	0.949	0.941	0.949	0.955	0.942	0.956	0.947	0.978
Confidentiality	0.758	0.836	0.854	0.818	0.681	0.806	0.807	0.824
Communication	0.714	0.762	0.738	0.678	0.503	0.701	0.727	0.765
Autonomy	0.711	0.721	0.740	0.676	0.661	0.779	0.744	0.720
Quality of Amenities	0.565	0.641	0.627	0.549	0.640	0.705	0.579	0.567
Prompt Attention	0.639	0.626	0.617	0.693	0.553	0.594	0.748	0.771
Access to Social Support	0.395	0.413	0.357	0.342	0.463	0.347	0.491	0.434
Choice of Provider	0.035	0.122	0.056	0.016	0.410	0.012	0.000	0.000

Table 4: SRI of FHS unities in different RIDE-DF municipalities, 2013.

In summary, even as we assess each municipality, dimensions associated with respect for users were better evaluated than those associated with customer orientation.

Discussion

According to our results, the responsiveness of family health teams in municipalities from the area surrounding the Brazilian capital city partially meet user expectations. Users evaluated the system well on the dimensions of confidentiality, dignity, communication, and autonomy. On the other hand, infrastructure and administrative dimensions including quality of amenities, access to social support, and choice of provider received lower scores.

Young adult women with limited schooling and low income represented the majority of people using the services provided by family health teams. The low income and educational level of this sample probably reflects the efforts of the government to expand family health care into the poorest areas of the municipalities studied [7,12]. Also, in line with our results, previous studies found that most users of the system in Brazil are female. Women seek these services more often and have historically been responsible for their family's health [7,11,13]. Moreover, primary care services and activities have traditionally targeted maternal and infant health, such as the federal programs for women's health, antenatal care, gynecological and breast cancer prevention, and children's health [7]. More recently, the Stork Network (Rede Cegonha), was instituted to provide networked care, to ensure women the right to family planning and humane care during pregnancy, delivery, and the post-partum period and to ensure children the right to a safe birth, growth, and healthy development.

An international comparison of health care service responsiveness indicated that Brazil had higher responsiveness than South Africa, and lower responsiveness than European countries, where most dimensions are well evaluated [6,14,15]. Overall, in the present study, the dimensions associated with respect and humane treatment received better scores. In contrast, those included in the domain Customer Orientation, which reflects infrastructure and administrative aspects, received lower scores. A study of hospital services conducted by Fiocruz found similar results with prompt attention evaluated as poor and the amenities as fair, while confidentiality, dignity, and communication were rated excellent [11]. These findings suggest that while Brazilian primary health professionals have the skills needed to care for patients, current funding does not suffice to maintain the facilities and procedures at a good level.

The dignity dimension reflects user perception of respect, care, and non-discriminative treatment. It received the highest scores. Users also gave good scores to confidentiality, which reflects professional discretion. The responsiveness index for communication was also high, indicating that users had easy access to information, and a communication channel with the team. Finally, users also positively evaluated autonomy, showing they feel able to make decisions regarding treatment course and to ask questions. Primary health care workers are more sensitive to user demands [16,17]. The daily tasks involved in the provision of health care require the establishment of relationships between professionals and users, increasing the access and proximity to the patient's reality [7,10,18]. Home visits by family health teams further strengthen these relationships [7,19]. The good indices obtained regarding dignity, confidentiality, communication and autonomy suggest that bonding has indeed taken place in the region evaluated, and health workers have an increased awareness of their clients' circumstances.

The municipality of Pirenópolis represented an exception where the autonomy and communication dimensions were poorly evaluated. Previous work suggests that when health workers make decisions on behalf of users, the latter feel dissatisfied and with little autonomy [16,20,21]. In this sense, Pirenópolis should be a priority for investments in the training of health workers.

Still regarding the positive evaluations, there is a possibility that gratitude bias may have affected responses. Lower income individuals often feel gratitude for having any attention at all, which could cloud their ability to judge the services. Additionally, members of lower income households tend to have proportionally lower expectations regarding the quality of health services they receive [7,11]. The low

educational level of the population group studied also hampers their collective capacity to call for more and better health services [22]. People with less schooling tend to make fewer judgments of value and be less demanding of the health services they receive, expressing a higher level of satisfaction [7]. Finally, as mentioned, the users developed bonds with the health workers, and may have felt that a negative evaluation would harm professionals.

The quality of amenities earned a negative evaluation because comfort and cleanliness of the family health clinics failed to meet the user expectations. Prompt attention, i.e. the time required for scheduling elective appointments and exams, as well as for receiving emergency care and exam results earned a negative evaluation. This dimension constitutes a real challenge in the provision of effective, comprehensive public care [7,21]. Access to social support also received a poor evaluation from users suggesting they did not receive support from churches, social services or community centers. Also, our data indicates discontinuities in the supply of medications and the lack of encouragement regarding the presence of relatives during health visits. Finally, the dimension choice of provider earned the lowest index, showing that users have little say in the choice of doctor or nurse who will provide care. The fair and poor indices obtained regarding quality of amenities, prompt attention, access to social support and choice of provider suggest that services do not have the financial capacity to respond to the growing demand for primary health care services. This situation stems from underfunding by the federal government, whose public health budget has shrunk drastically since 1980, hitting primary care the hardest [12]. Moreover, our results may reflect the lack of inter-sector coordination and planning, as well as the incapacity of the health sector alone to address the social determinants of health and disease. In addition to providing funds, the federal government must coordinate inter-sector actions to improve quality of life [12,23,24].

In European Countries, all responsiveness domains positively affected overall satisfaction with the health-care system, with the sole exception of confidentiality [25]. User perception of the responsiveness of FHS in Brazil indicates the services are more responsive regarding respect for people supporting the idea that a strong relationship between users and providers have a positive impact on this domain.

Despite the limitations mentioned above, the responsiveness index provides a useful tool for the evaluation of health services, which can point to the correct actions that should be implemented for the improvement of the participative management of health.

Conclusion

The responsiveness indices of primary health care from eight municipalities in the RIDE-DF region show that the strengths of the services provided are confidentiality, dignity, communication, and autonomy, while the weaknesses are the quality of the amenities, prompt attention, access to social support, and choice of provider. These results provide a clear target for future investments.

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