Assessment of primary health care features: the professionals' perspective

Avaliação de atributos da Atenção Primária à Saúde: a perspectiva dos profissionais

Evaluación de atributos de la Atención Primaria de Salud: perspectiva de los profesionales

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Abstract

Objective: To assess primary health care features from the perspective of professionals in a Brazilian municipality with 100% of Family Health Strategy coverage.

Methods: Analytical observational study, with a cross-sectional design, involving 83 primary healthcare professionals. It applied the *Primary Care Assessment Tool*, professional version, which assesses the orientation of primary health care to essential and derivative features in a scale from 0 to 10.

Results: The overall score was 7.23, which was considered a perception of high performance. Comparison of groups of professionals with perception of low and high performance showed a difference in the averages obtained for essential features (p=0.042), reinforcing the fragility in first-contact accessibility, which had a low performance (3.70). The score for derivative features showed better performance (8.27), with an emphasis on family centeredness and community orientation.

Conclusion: The assessment indicated a positive perception regarding primary health care, with the possibility of improving all features, especially accessibility, to meet the quality objectives of public health policies.

Resumo

Objetivo: Avaliar os atributos da Atenção Primária à Saúde, na perspectiva dos profissionais, em município com 100% de cobertura da Estratégia de Saúde da Família.

Métodos: Estudo observacional analítico, delineamento transversal, com 83 profissionais da Atenção Primária à Saúde. Utilizou-se o *Primary Care Assessment Tool*, versão profissionais, que avalia numa escala de zero a dez, a orientação da atenção primária para atributos essenciais e derivados.

Resultados: O escore geral, considerado de alto desempenho, foi de 7,23. Quando comparados os grupos de profissionais com percepção de baixo e alto desempenho, observa-se diferença nas médias dos Atributos Essenciais (p=0,042), reforçando fragilidade no atributo acesso de primeiro contato, com baixo desempenho (3,70). O Escore de Atributos Derivados teve maior desempenho (8,27), destacando a orientação familiar e comunitária.

Conclusão: A avaliação indica percepção positiva da Atenção Primária à Saúde, com possibilidade de melhorias em todos os atributos, em especial o acesso, atendendo aos objetivos de qualidade das políticas públicas em saúde.

Resumen

Objetivo: Evaluar los atributos de la Atención Primaria de Salud, bajo la perspectiva de los profesionales, en un municipio con el 100 % de cobertura de la Estrategia Salud de la Familia.

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Conflicts of interest: nothing to declare.

Métodos: Estudio observacional analítico, de diseño transversal, con 83 profesionales de la Atención Primaria de Salud. Se utilizó la *Primary Care Assessment Tool*, versión profesionales, que evalúa en una escala de cero a diez la orientación de la atención primaria en atributos esenciales y derivados.

Resultados: La puntuación general, considerada de alto desempeño, fue de 7,23. Al comparar los grupos de profesionales con percepción de bajo y alto desempeño, se observa una diferencia en los promedios de los Atributos Esenciales (p=0,042), lo que refuerza la debilidad del atributo acceso de primer contacto, con bajo desempeño (3,70). La puntuación de Atributos Derivados tuvo un mayor desempeño (8,27), donde se destacó la orientación familiar y comunitaria.

Conclusión: La evaluación indica una percepción positiva de la Atención Primaria de Salud, con posibilidad de mejora en todos los atributos, en especial el acceso, y de este modo se cumplen los objetivos de calidad de las políticas públicas de salud.

Introduction

Brazil has oriented its public health system through the primary health care (PHC), which demands the adoption of processes to assess the performance of these services, aiming at making public health policies effective, expanding its network, and improving the PHC care quality.

In Brazil, PHC has brought, along with the Family Health Program, currently known as Family Health Strategy (FHS), the perspective of consolidating the prioritization of expanded actions of health promotion, prevention, and recovery taking into account the population's needs, seeking to redesign the health-disease process and forms of intervention.[1]

In the development of the PHC legal framework in Brazil, family health is still considered a priority strategy. It is fundamental to overcome the restricted idea of primary care and seek a guarantee of funding compatible with its extended concept.[2]

In the evaluative perspective of PHC, the proposition of fulfillment of features, classified as essential and derivative, was established. The essential features are: first-contact accessibility (accessibility and use of the service at each new need); longitudinality (health care over time, with the development of a bond between the service and the population); comprehensiveness (possibility of access to the available services and adequate and timely identification of problems); and coordination of care (continuity of care and health actions). The derivative features are: family centeredness (knowing family questions related to the health-disease process); community orientation (understanding the community's needs and planning and evaluating the services); and cultural competence (knowing cultural specificities).[3]

In face of the above, PHC, because of its history of strengthening its own role as an orderer of health care, needs to be permanently inserted into health evaluation processes, which makes it possible for it to contribute to possible changes in the system and related institutions.[4] The instrument Primary Care Assessment Tool (PCATool) stands out in the health evaluation context. It was designed in the United States and validated in other countries,[5,6] including Brazil,[7] and has been used worldwide to evaluate PHC features from the perspective of users and health professionals.[8] The application of the instrument has been increasing in Brazil because of a partnership with the Brazilian Institute of Geography and Statistics,[9] and other countries have encouraged the expansion of its use as well.[10,11]

By understanding that evaluating PHC allows these services to become effective and consolidated, the objective of the present study was to assess PHC features from the professionals' perspective in a municipality with 100% of FHS coverage.

Methods

Analytical observational study, with a cross-sectional design, guided by a Strengthening the Reporting of Observational Studies in Epidemiology checklist. It was carried out in a municipality in the state of Minas Gerais, Brazil, with an estimated population of 21,932 people, a Human Development Index of 0.710, a per capita income of R$ 13,044.44, a life expectancy of 77.4 years, and an under-one infant mortality rate of 11.8‰.

In this municipality, the healthcare network is structured as having a pediatrics outpatient clinic, a type-I psychosocial care center, an emergency center, a medium-sized philanthropic hospital, and eight Family Health Units. The FHS has family health teams and oral health teams. This is the only PHC model adopted in the municipality, which has 7,263 enrolled families and a 100% coverage of its

population, both urban and rural, which justifies its choice for the evaluation of PHC features.

A nonprobability sampling was carried out to select the participants. The groups of participants that were considered eligible were: all the professionals directly involved in PHC; family health teams (nurses, physicians, dentists, nursing aides, nursing technicians, dental assistants, community health workers, and receptionists) who had been working for at least six months as a member of a family health team and at least three months as a member of the current team; and professionals who worked at the Municipal Health Secretariat (health secretary, health director, PHC coordinator, and oral health coordinator) who had been working for at least three months as a member of the current team. These professionals were included because it is understood that they have a systemic view of health services. Professionals who were away from work for over 30 days were not eligible. Of the 92 active professionals, 83 were considered eligible, and these made up the study population. Four participants were part of the Municipal Health Secretariat and 79 worked as members of family health teams.

The data collection instruments were a questionnaire for characterization of the examined health professionals and the PCATool, professionals' version, which is structured as 77 items grouped into eight PHC features: first-contact accessibility (A), with nine items; longitudinality (B), with 13 items; coordination – care integration (C), with six items; coordination – information system (D), with three items; comprehensiveness – available services (E), with 22 items; comprehensiveness – received services (F), with 15 items; family centeredness (G), with three items; and community orientation (H), with six items. The features from A to F are classified as essential, and the features G and H are considered derivative.[8]

The values obtained for each feature were standardized by converting them into a scale ranging from 0 to 10, according to the instructions in the PCATool manual[8]. In this scale, the cutoff was 6.6. Values higher than that were considered "high performance", and values lower than that were classified as "low performance".[12] The sum of all scores was defined as overall feature score.[8]

Data collection was carried out in July and August 2017, at the workplace of the participants, on days and at times that were previously scheduled. Data were inserted into a Microsoft Office Excel spreadsheet, with double typing and validation. The IBM software SPSS version 20.0 was used to organize the databank and run statistical analysis.

Characterization of the professionals was performed by applying descriptive statistics. The student's t-test was used to compare the means of the groups with high and low performance, with an adopted level of significance of 5% (α=0.05). The Shapiro-Wilk test showed that the study variables followed a normal distribution. Internal consistency of the overall score was expressed by Cronbach's alpha, whose value was 0.864.

The present study was conducted according to ethical standards established in the Brazilian National Health Council Resolution no. 466/2012, and its proposal was approved by a research ethics committee as per Presentation Certificate for Ethical Evaluation no. 68443917.2.0000.5393.

Results

Characterization of the participants showed an average age of 33.04 years, with a minimum age of 19 years and a maximum age of 62 years. Women prevailed in the sample (86.7%, n=72). Community health workers were the predominant professional category, with 53.0% (n=44) of the participants, followed by nurses (12%, n=10), physicians, dentists, and dental assistants, each contributing with 8.4% (n=7), nursing aides and techniques, with 8.4% (n=7), and others, with 1.2% (n=1). Regarding level of education, 59.0% (n=59) of the participants had high school and 18.1% (n=15) had a graduate degree. The average time since graduation of the professionals who had an undergraduate degree was 7.9 years, with average times of 7.1 years working in the health sector, 5.2 years working in the FHS, and 3.7 years at the current job.

Table 1. Comparison of the variables age and working time, according to performance classification in the overall score

Variables	n	Average	Standard deviation	p value*
Age (in years)	83	33.04	8.99	0.101
Time working in the health sector (in months)	83	84.72	76.10	0.617
Time working at the current job (in months)	83	44.86	44.57	0.555
Time working in the FHS (in months)	83	62.42	51.77	0.175

*Student's t-test, considering statistical significance for p values<0.05

Comparison of the performance classification of the groups indicated no difference between the averages for the variables age, time working in the health sector, at the current job, and in the FHS, as shown in Table 1. The overall score was 7.23, which is consistent with a high performance. The score obtained for each feature is shown in Figure 1. The features that had the highest score were family centeredness (8.65) and community orientation (7.98), which make up the derivative features score, which was 8.27. Essential features showed a lower score of 6.89 because of the score obtained for first-contact accessibility, whose performance was markedly low (3.76), whereas all the other features had scores higher than the cutoff, which was 6.6.

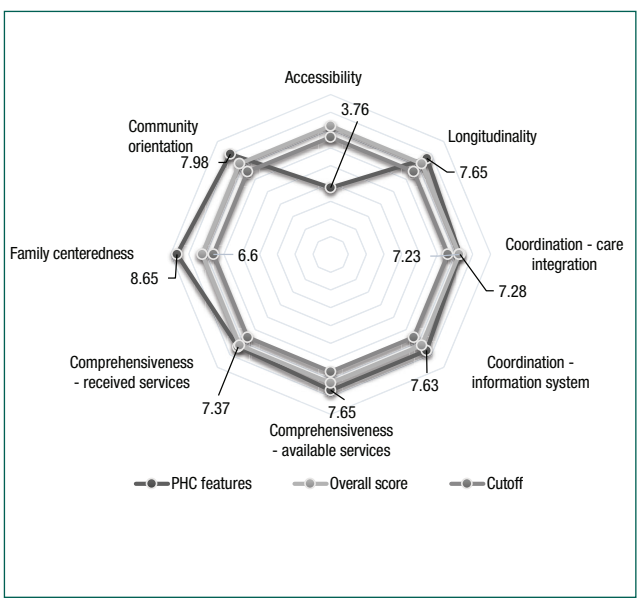

Figure 1. Score obtained for primary health care features

Examination of the nine items of the first-contact accessibility feature, the only one whose score was lower than the cutoff, indicated that three items showed positive evaluations, with a higher frequency of "definitely" answers. The remaining items had negative evaluations, with a higher frequency of "definitely not" answers.

The items that had a positive evaluation were related to the possibility of receiving care on the same day, getting guidance by phone, and scheduling appointments easily. The items that showed a negative evaluation were related to the days and times the health services were open, with the impossibility of receiving routine or emergency care, whether face-to-face or by phone, on weekends or at night.

The item about waiting time showed the most pronounced answer distribution and, taking into account answer value inversion, it can be considered that the item had a negative assessment, since 67.47% of the participants chose the options "probably yes" and "definitely" for the statement about a waiting time longer than 30 minutes to receive medical or nursing care.

Comparison of the low and high performance groups indicated evidence of difference between the averages calculated for the essential features score (p=0.042). In the high performance group, the value was 7.06, whereas in the low performance group the result was 5.64. There was no evidence of difference between the averages obtained for the groups in the other features and scores, as shown in Table 2.

The feature family centeredness showed the highest score in both groups (high and low performance) and was the only one to reach a score higher than the cutoff in the group with low performance.

In the group with high performance, the only feature with a score lower than the cutoff was first-contact accessibility. All the other features had a score higher than the cutoff.

Discussion

The overall score, essential features score, and derivative features score pointed to a positive evaluation of PHC in the municipality where the study was carried out, which reinforces the affinity between FHS, which is the model adopted in that municipality, and PHC principles.[12]

Table 2. Average score (95% CI) of the features as per the professionals' experience, according to performance classification

PHC features	Overall		Low performance		High performance		p value*
	n	Average (95% CI)	n	Average (95% CI)	n	Average (95% CI)	
First-contact accessibility	83	3.76 (3.61; 3.91)	10	3.07 (2.64; 3.51)	73	3.86 (3.70; 4.01)	0.816
Longitudinality	83	7.65 (7.38; 7.92)	10	6.21 (5.30; 7.11)	73	7.85 (7.59; 8.11)	0.738
Coordination – care integration	83	7.28 (7.03; 7.53)	10	5.83 (5.18; 6.49)	73	7.48 (7.24; 7.72)	0.607
Coordination – information system	83	7.63 (7.22; 8.04)	10	5.44 (3.71; 7.18)	73	7.93 (7.57; 8.29)	0.183
Comprehensiveness – available services	83	7.65 (7.48; 7.82)	10	6.92 (6.46; 7.39)	73	7.75 (7.57; 7.92)	0.582
Comprehensiveness – received services	83	7.37 (7.09; 7.64)	10	6.33 (5.50; 7.17)	73	7.51 (7.22; 7.79)	0.701
Essential features score	83	6.89 (6.73; 7.05)	10	5.64 (5.39; 5.88)	73	7.06 (6.92; 7.20)	0.042**
Family centeredness	83	8.65 (8.33; 8.96)	10	7.89 (7.01; 8.76)	73	8.75 (8.41; 9.09)	0.675
Community orientation	82	7.98 (7.67; 8.29)	9	6.30 (5.15; 7.45)	73	8.19 (7.90; 8.48)	0.888
Derivative features score	83	8.27 (8.01; 8.53)	10	6.78 (5.61; 7.94)	73	8.47 (8.24; 8.70)	0.116
Overall score	83	7.23 (7.07; 7.40)	10	5.92 (5.66; 6.19)	73	7.41 (7.28; 7.55)	0.068

*t-test for two independent samples; ** considering statistical significance for p values<0.05

The overall score of 7.23 was higher than that calculated in studies carried out with professionals in Lajeado, state of Rio Grande do Sul, Brazil, which reported a score of 7.12[13], and in Chapecó, state of Santa Catarina, Brazil, with a score of 7.09.[14] However, it was lower than the value found in a study performed in Serra, state of Espírito Santo, Brazil, whose score was 8.19.[15]

Essential features scores lower than derivative features scores have also been found in other studies.[13–16] The impact of the low performance of the feature first-contact accessibility stood out in the essential features. This weakness was emphasized in a systematic review on PHC performance, according to features of the PCATool, and the low performance of this feature was found in most of the studies analyzed.[17]

In a South African study that involved professionals, managers, and users, these three groups classified accessibility as poor. Despite the difference in the scores of the groups, the result reinforced the need to pay close attention to this feature.[18]

Accessibility has also proven a low-performance feature in Brazil from the perspective of users, reaching an average score of 4.24. The values calculated for the five regions were also low, with the Northeast Region showing the lowest score (3.98). The Southeast Region had a score of 4.27.[19]

In more specific contexts, such as the assessment of health care provided to children[20] and of breastfeeding care,[21] first-contact accessibility also showed a poorer performance, reinforcing the idea that this feature is an important obstacle for PHC at the national level from the perspective of both professionals and users.

Still regarding the accessibility feature, the low performance assessments observed in the present study were mostly related to the time of operation of the health services. These findings corroborated the results reported in other studies,[16,22] because the items assessed in PCATool do not correspond to the reality of the PHC model applied in Brazil. This brings up the importance to reflect on the need to adapt the instrument to the Brazilian scenario or change the conformation and functioning of PHC services.

In face of the impossibility of changing working hours and days, the possible changes would concentrate on the establishment of other options of communication between professionals and users, for instance the use of resources for remote care, such as phone or the internet.[23]

Reflecting on the importance of social determinants such as birth conditions and early childhood, education, work, social circumstances of elderly people, and a series of elements of community resilience[24] brings up the need to reinforce the orientation of actions and services toward the access of users, especially those who experience greater socioeconomic vulnerability, young people, and people without established health conditions.[19]

It is understood that the PHC work process flow must guarantee access and, when there are failures in this step, all the other assessed features are compromised. Access restriction goes against the doctrinal principle of universality and precludes the delivery of health care to the covered population, and consequently is construed as the most complex weakness to be worked on the system.

Longitudinality proved the component with the highest score among the essential features, a

fact that can be consolidated with an increase in the working time in the teams, which was 44.86 months in the present study, on average. It is understood that working time favors the development of emotional bonds between users and teams, intensifying relationships, and making the continuity of the contacts possible.[25] This feature has also received a good evaluation in other studies,[17] including when the users' perspective was considered, in municipalities with up to 100 thousand people.[26] However, this result must be interpreted with caution, because there may be a relatively positive classification by professionals, which, in some situations, differs from the healthcare reality if a more comprehensive evaluative view is applied.[18]

The feature coordination, split into care integration and information system, was evaluated as showing a high performance. The examined municipality uses its own information system, which records general user data, their health history, and their history of use of services of the municipal health network. This may have been a factor that contributed to the feature's having a high score, since a more structured system adds to making information available in different care points, as observed in Curitiba, state of Paraná, Brazil.[16]

The results for the feature coordination pointed to an adequate structuring of the teams' internal work. In contrast, obstacles were found regarding the need to coordinate with other services. The difficulty of coordinating actions with other services has been described in other studies that reported a low performance in this feature. Failures in the communication with other services have been described, with problems in the process of reference and counter-reference,[27,28] with possible losses in care comprehensiveness.[28]

Coordination between health services structured as part of a network having PHC as the preferential gateway, with an organized work process and a proper capacity study, makes it possible to improve the quality of health care.[29] Consequently, the effectiveness of the network necessarily involves communication with other services.[14,27,29]

Conceptualizing individuals by using a holistic approach, with a proper orientation toward comprehensive health,[13] is one of the characteristics of FHS in the identification of people's biological, psychological, and social problems and is part of the search for an extended concept of health.[28] Complementarily, comprehensiveness can be reached by means of the potential of family health care, this being a point of convergence of intersectorality.[29]

However, PHC still needs to consolidate itself as the gateway to the several possible demands of the population it provides services for, including the perception of health needs where it is inserted. It is necessary to identify whether the difficulties to fully reach comprehensiveness are related to structural and organizational problems, management issues, or questions characteristic of the professionals.[21]

Analysis of the location (considering whether it is urban or rural, its population, and the number of enrolled families) did not allow to establish a relationship between the findings and the surveyed characteristics. Consequently, the hypothesis left was that the work process is a possible factor to explain the score higher than the cutoff calculated for these features.

Going beyond the essentiality of the features discussed so far, it is necessary to identify health questions that surpass the strict user-professional relationship. Both family centeredness and community orientation allow care to be expanded by evaluating, for instance, home visits, an activity carried out by all the teams, especially by community health workers.

The interactions and conflicts that happen in the family environment influence people's health-disease process, and the healthcare professionals' approach in this context contributes to developing autonomy.[30] The expansion of the team's view into the community, going beyond the individual and the family, is necessary to include other features, such as comprehensiveness and longitudinality.

The positive evaluation by professionals regarding family centeredness and community orientation corroborated a study carried out with other professionals and managers, but diverged from the users' perception. According to professionals and man-

agers, searching for information and contact with family members is a routine activity, whereas the users' view is that there is a lack of interest in the teams about the life conditions of users and their relatives.[22]

This divergence in perception can happen, among other reasons, because of the different expectations professionals and users have, as illustrated by the valorization of healing actions to the detriment of those oriented toward health promotion and prevention.[31] This discrepancy points to the need for teams and managers to review processes related to derivative features.

The main limitation of the present study was the impossibility of comparing data with information obtained in other possible PHC facilities, since the municipality has family health teams only.

The progress provided by the present study is related to the increment in knowledge it brings, making it possible to discuss evaluative processes in PHC from the perspective of professionals more deeply, with the main purpose of boosting changes in the work process. Additionally, the present study reinforces the role FHS plays in the PHC organizational process, although it needs improvement in some aspects, such as accessibility.

The present study also adds to the understanding of potentialities and weaknesses of PHC and can contribute to the implementation of improvement cycles to complement other processes designed by the Brazilian Ministry of Health.

Conclusion

The positive assessments provided by FHS professionals reinforced its historical role as a driver of PHC in the national context. Even with an overall positive assessment, there were items in each feature that pointed to possible failures in the services and suggested the need to adjust the teams' work processes taking into account the relationships between the features. Consequently, the absence of one of them or the presence of failures in it interferes with the reach or completeness of the others. Although PHC has similar characteristics in different regions, the assessment based on a validated instrument allows a reflection closer to the reality of each location and makes PHC services consolidate themselves as a means to put public policies into practice in Brazil. The possible impacts brought to professionals and managers by the present study allow to re-evaluate the teams' work process and, consequently, the benefits for the community by reinforcing the role PHC plays in the development of the Brazilian Unified Health System.

Contributions

Machado GA, Dias BM, Silva JJ, Bernardes A, and Gabriel CS contributed to the study conception, data analysis and interpretation, manuscript writing, relevant critical review of the intellectual content, and approval of the final version to be published.

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