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Effectiveness of the Family Health Strategy in units with, and without, the *Mais Médicos* (More Doctors) Program in a municipality in the west of Paraná state, Brazil

Andreia Carrer [1]
Beatriz Rosana Gonçalves de Oliveira Toso [1]
Ana Teresa Bittencourt Guimarães [1]
Julia Reis Conterno [1]
Kamila Caroline Minosso [1]

Abstract *Two years after the* Mais Médicos *(More Doctors) Program, (Programa* Mais Médicos *– PMM) was put in place in Brazil, there is a need to study its feasibility. This study aims to evaluate the effectiveness of the primary healthcare service offered, from the point of view of the health professionals, comparing units which have, and which do not have, doctors from the* Mais Médicos *Program. It is a quantitative survey, using for data collection the instrument* Primary Care Assessment Tool – Brazil, Version for Health Professionals*, applied across the totality of the family health units in a medium sized municipality in the interior of the southern Brazilian State of Paraná, from November 2015 to February 2016. It covered 72 professionals, 47 of them allocated in Family Health Strategy (FHS) units and 25 in FHS units containing the Program. In both groups the scores for core attributes (6.93) and general attributes (7.10) were considered to be appropriate to the precepts of primary healthcare. However, the attributes* accessibility *(4.17), in both groups, and* coordination – information system *(6.57), in units with the* Mais Médicos *Program, did not reach the satisfactory level, indicating a need to alter the organization of the Family Health Strategy, whether the PMM program is implemented or not.*

Key words *Primary Healthcare, Primary health doctors, Nurses, Assessment of health services*

[1] Programa de Mestrado em Biociências e Saúde Centro de Ciências Biológicas e da Saúde, Universidade Estadual do Oeste do Paraná. R. Universitária 2069, Bairro Faculdade. 85814-110 Cascavel PR Brasil.
beatriz.oliveira@unioeste.br

Introduction

Primary healthcare has been indicated as an important strategy for reorganization and expansion of the effectiveness of the health system, with an outstanding effect in the world scenario as a means of reducing the inequities existing in the health sector[1]. It represents the first level of access for users of the health system, and is an essential element in the continued process of care, providing actions and services of prevention, promotion, protection and rehabilitation of health in such a way as to meet the real health problems of individuals, families and communities[2].

It is expected that, to be considered effective, a primary healthcare service should carry out an indissociable group of structuring attributes in the process of care, referred to as core attributes. These comprise: *first contact access, longitudinality, integrality* and *coordination of care*. When associated with the derived attributes *family and community orientation* and *cultural competence*, they serve to qualify actions in health. Thus the presence and extension of these attributes in the services offered by Primary Healthcare are intrinsically related to the quality of services and the effectiveness of health actions[2].

Thus, surveys of an evaluative nature in health, that show the degree of orientation for primary healthcare, or identify characteristics that are susceptible to change for improvement of the health actions, are important because they portray evidences that indicate their effectiveness and because they produce inputs for decisions of public policies. For these reasons, there is a constant need for evaluations of healthcare services[3].

The association between actions oriented to the attributes of primary healthcare and quality of services provided has been demonstrated in various studies[4-7]. Evaluations in industrialized countries and in developing countries show that, in areas where primary healthcare has a strong degree of orientation, better results in health conditions are found, with impacts in reduction of global mortality rates, infant mortality rates, and heart disease, and also advanced detection of cancer[8]. When the primary healthcare service operates in such a way as to achieve the presence of these attributes, it becomes capable of providing full integrated care to individuals, family and community, and, consequently, of taking actions that are effective and resolve problems.

In Brazil, the attempt to broaden the coverage and access to health services for the population has taken place through expansion of the Family Health Strategy (FHS). At present, it is estimated that primary care units with Family Health teams provide coverage of 59.7% of the population of the country[9]. However, structural and financial problems, and lack of human resources, among other factors, continue to be a block on expansion of healthcare.

In this context, the creation of public policies by the State is a strategy to improve the assistance offered in the primary healthcare system, and they translate into programs created with a view to qualification of the assistance in this scope of healthcare. Among these we highlight the *Mais Médicos* Program (PMM), created by Law 12871, of October 22, 2013, to provide infrastructure and human resources to populations that live in areas of difficult access or of greater economic and/or social vulnerability, among other objectives[10].

The PMM aims to minimize the lack of doctors in the country and reduce regional inequalities in health. It involves three strategic fronts: more vacancies and new courses in Medicine, with revised curricular guidelines; investments in construction of primary healthcare units; and provision of Brazilian and foreign doctors to primary healthcare units[11].

This program two years after its implementation, is present in approximately four thousand Brazilian municipalities, with a number of approximately 18,000 doctors[12]. However, since it was prepared and put in place, it is seen that there have been various criticisms arising from both health professionals and users. Since implementation is recent, there is a significant scarcity of surveys on this subject, principally in relation to the effectiveness of the care offered by the professionals and by the health teams registered in the program[12].

It would be expected that among primary healthcare units, those with the Family Health Strategy would be better evaluated, especially those with PMM doctors. This study, as a general objective, aimed to evaluate the effectiveness of the primary healthcare offered, as perceived by the health professionals, comparing units with and without doctors of the *Mais Médicos* Program.

Methodology

This is an exploratory, descriptive and evaluatory study, made in 35 Family Health Strategy (FHS) teams allocated in 25 physical Family Health Unit

Ciência & Saúde Coletiva, 21(9):2849-2860, 2016

structures, in the urban and rural area of the municipality of Cascavel in the Brazilian State of Paraná. The Family Health Strategy in the municipality has a coverage of 30.68%, half the national figure, but expanding since 2012, now in a total of 10 rural units and 25 urban units. The population of the study comprised medical professionals, nurses and coordinators operating in the Family Health Units, totaling 72 subjects, of whom 33 were doctors (two participants were lost to medical leave during the study), of which nine are members of the PMM, 31 nurses, with a loss of four subjects, and eight coordinators. The data collection took place over the period November 2015 – February 2016.

Data were obtained by individual interview with the professionals, in the health units, after previous scheduling by telephone, with application of the *Primary Care Assessment Tool (PCA-Tool) – Brazil, Professional Version*. This is an instrument for evaluation of primary healthcare, validated in Brazil and published by the Health Ministry in 2010. Based on the model for evaluation of the quality of health services proposed by Donabedian, in 1966, it measures aspects of structure, process and results of the health services [3].

The instrument comprises 77 items divided into eight variables[13], as follows: *First Contact Access – Accessibility* (A) – 9 items. *Longitudinality* (B) – 13 items; *Coordination* in relation to *Integration of Care* (C) – 6 items; *Coordination* relating to *Information Systems* (D) – 3 items; *Integrality* relating to *Services Available* (E) – 22 items; *Integrality* relating to *Services Provided* (F) – 15 items. *Family Orientation* (G) – 3 items; and *Community Orientation* (H) – 6 items.

Primary contact access refers to users' access and use of the health services, both for a new health event and also for a new episode of the same event[2]. This attribute, in the *PCATool*, covers aspects relating to: waiting time for medical attention; availability of attention on spontaneous demand; whether the attention takes place on the same day that the user seeks it; ease of scheduling consultations; period for which the unit is open and available to users; access to the professionals by phone for orientation; orientations for care when the unit is closed; and access to return consultations[13].

The attribute *Longitudinality* is defined by Starfield[2] as the link relationship established between health professionals and users.

Coordination of care involves two components: one relating to the *integration* of care, in relation to the process of work; and the other in relation to the *information systems*, which deal with aspects of structure and process. The *coordination – integration of care* component deals with actions that portray the existence of constant identification of information about the users, and also the supply of this information to the health professionals, their receipt of it, and its use in the global care for the patient.

In addition to the other attributes, *integrality* is described by Starfield[2] as the capacity of the health team to serve the most diverse needs present in the individual, family and community, and comprises: *integrality – services available*, which portrays the existence and availability of basic services that should be offered by primary healthcare; and *integrality – services provided*, which refers to the care and orientations that are appropriate and should be carried out by the professionals of primary healthcare.

Associated with the core attributes are the derived attributes of family orientation, which according to Starfield[2], can be understood as the health professionals' capacity to identify the family both as a space for care and also as a location which potentializes, and is the origin of, health problems. It is analyzed in conjunction with community orientation, defined as existence of contacts between health team and community, in which the health professionals identify and recognize the needs of the community both for direct contact and through interpretation of the epidemiological data[2].

The *PCATool – Brazil, Health Professionals Version* instrument has a Likert scale of replies (4 = yes, certainly, 3 = yes, probably, 2 = probably not, 1 = certainly not), with addition of option 9 = don't know / don't remember. Based on these responses it is possible to calculate a score for each primary healthcare attribute (and its components) and also a Core Score and a General Score. The scores for each attribute (and for its components) are obtained by the arithmetic mean of the answers to its respective items. The Core Score is the arithmetic mean of the scores of the core attributes, and the General Score is the arithmetic mean of the scores of the core and derived attributes[13].

To transform these scores on a scale of zero to ten, this formula is used:

$$\frac{(\text{Score obtained} - 1) * 10}{3}$$

A score of 6.6 or higher was considered a high primary healthcare score. This amount was chosen because on the scale of 1 to 4 it corresponds

to score 3, equivalent to the option "yes, probably"[13].

The data obtained were tabulated and analyzed in the form of descriptive and inferential statistics, presented in tables and charts for comparison with the available literature on the subject. The variables analyzed were primarily evaluated as to the distribution pattern of the data using the Shapiro-Wilk test, and homogeneity of variances using the F test. The variables that were in accordance with these assumptions were analyzed using the t test for independent samples, and the others through the non-parametric Mann-Whitney-U test. In these tests, it was established whether the differences in scores on components of the *PCATool* – between the family health strategy units with PMM and those without PMM –were statistically significant. All the analysis was done assuming a significance level of 0.05, with the help of the *XLSTAT 2015* quantitative data analysis software[14].

The survey was submitted for approval to the Research Ethics Committee of the State University of the West of Paraná (Unioeste), and was approved by Opinion 1.219.464, CAAE: 47147245215.4.0000.0107. It received authorization from the Municipal Health Department of Cascavel. Participants signed the Informed Consent Form, giving their consent, upon agreeing to take part in the investigation.

Results

In the Family Health Strategy units, 47 subjects were interviewed, while in the FHS which had *Mais Médicos* Program doctors, 25 subjects were interviewed – making a total of 72 interviewees. The profile of the medical professionals and nurses that comprised the study can be described by: age range – from 25 to 63; how recently qualified – from one to 35 years; whether specialized in public health and related areas – 25 subjects; formal employment link via public competition – 53 (eight with employment contract under the PMM, and three under the Provab Program (*Program to Value Basic Healthcare Professionals – Programa de Valorização do Profissional da Atenção Básica*); all had a working week of 40 hours. The doctors in the PMM program identified themselves as having qualified in Brazil, Cuba, Bolivia, Russia and Venezuela.

Table 1 shows the attributed scores for primary healthcare for the FHS group and for the FHS-PMM group. We highlight the score for *accessibility* (4.20) which did not reach the threshold level for being considered effective. Both the core score (6.9) and the general score (7.1) for primary healthcare were satisfactory.

Table 2 shows the results of the attributes separated into 'FHS' and 'FHS-PMM'. It is seen that the attribute *accessibility* which showed itself not to be oriented to primary healthcare, had no significant difference between the types of unit (FHS = 4.1; FHS-PMM = 4.3). In the attribute *Coordination – Information System*, the score in the FHS was 6.6, that is to say at the cutoff point for being considered oriented to primary healthcare, whereas in the units with the PMM the value was 6.5, not representing orientation to a primary healthcare. There were no significant differences between the core and general scores, nor in the other attributes ($p > 0.05$).

Figures 1 and 2 show the average scores of the primary healthcare attributes, and the core and general scores evaluated.

Table 1. Scores for Attributes in Primary Health Care. Cascavel, 2016.

Variable	Number	Minimum	Maximum	Average	SD
Accessibility	72	1.85	7.77	**4.17**	1.30
Longitudinality	72	4.10	12.82	7.10	1.45
Integrated care	72	3.33	10.00	7.40	1.32
Coordination – information system	72	2.50	15.00	**6.57**	2.14
Integrality – services available	72	5.30	11.66	8.12	1.17
Integrality – service provided	72	5.55	12.59	8.25	1.29
Family orientation	72	3.57	11.19	7.56	1.61
Community orientation	72	3.81	13.49	7.59	2.07
Core score	72	4.31	10.25	6.93	0.98
General score	72	4.29	10.63	7.10	1.03

Source: Researcher's database.

Ciência & Saúde Coletiva, 21(9):2849-2860, 2016

Table 2. Comparison of scores for attributes of Primary Health Care in Family Health Units (n = 45) and Family Health Units with the 'Mais Médicos' program (n = 27). Cascavel, 2016.

Variable	Type of Unit	Minimum	Maximum	Average	SD	p
Accessibility	FHS	1.85	7.77	**4.10**	1.33	0.555
	FHS -PMM	2.22	6.66	**4.29**	1.27	
Longitudinality	FHS	4.10	12.82	7.12	1.47	0.859
	FHS -PMM	4.10	10.25	7.06	1.46	
Integrated care	FHS	3.33	10.00	7.30	1.32	0.417
	FHS -PMM	3.81	10.00	7.56	1.34	
Coordination – information system	FHS	2.50	12.50	6.60	1.96	0.886
	FHS -PMM	3.33	15.00	**6.52**	2.44	
Integrality – services available	FHS	5.30	10.60	8.03	1.12	0.395
	FHS -PMM	5.30	11.66	8.28	1.26	
Integrality – service provided	FHS	5.55	12.59	8.17	1.38	0.523
	FHS -PMM	5.55	10.74	8.38	1.14	
Family orientation	FHS	4.52	11.19	7.70	1.51	0.346
	FHS -PMM	3.57	11.19	7.33	1.75	
Community orientation	FHS	3.81	13.49	7.68	2.20	0.658
	FHS -PMM	4.12	10.63	7.45	1.87	
Core score	FHS	4.87	10.25	6.89	0.92	0.633
	FHS -PMM	4.31	10.13	7.01	1.08	
General score	FHS	5.05	10.63	7.09	1.00	0.935
	FHS -PMM	4.29	10.32	7.11	1.09	

Source: Researcher's database.

Figure 1 shows a low average for the item *access at first contact* (4.1 ± 1.3), both in the FHS-PMM, units and also in FHS units. Units that contained PMM professionals showed lower scores (4.1 ± 1.3) than the FHS unit (4.3 ± 1.3), although the difference was not statistically significant (p = 0.555).

It can also be observed that both the FHS and the FHS-PMM units presented an average above the threshold established by the literature (7.1 ± 1.4) for the attribute *longitudinality*. Comparing the average scores obtained in both the FHS categories, the FHS units had a higher average score (7.1 ± 1.4) than the FHS-PMM units (7.0 ± 1.4), although the differences were not statistically significant (p = 0.859).

On *coordination,* in Figure 1, the average obtained in our study (7.4 ± 1.3) did not produce significant differences between the FHS and FHS-PMM units (p = 0.417). The other component of the *coordination* attribute – *information systems* – showed an average with low orientation of the services to primary healthcare (6.5 ± 2.1). However, when making the comparison between the units it was found that the lower average was obtained (6.5 ± 2.4) in the FHS-PMM units, whereas the score in the FHS units (6.6 ± 1.9), was exactly the threshold cutoff score.

In the item *integrality – services available* the score was above the average cutoff (8.1 ± 1.1), thus indicating that the FHS units have activities and basic health services that make it possible to carry out qualitative action for the population, as shown by Figure 1. There was no significant statistical difference between the FHS units (8.0 ± 1.1) and the FHS-PMM units (8.2 ± 1.2), with p = 0.395, thus showing that both the units maintained the same basic services intended to be made available by primary healthcare.

In the item *integrality – services provided,* the average was 8.2 ± 1.2 in the units evaluated. There were no significant differences (p = 0.523): for FHS the score was 8.3 ± 1.1; and for FHS-PMM, 7.7 ± 1.5 – as shown by Figure 1, thus showing that the work of the FHS health professionals has been carried out with the precepts of integrality.

Bringing together the core attributes gives the Primary Healthcare core score for the group of units as a whole, equivalent to 6.9 ± 0.9, which is above the 6.6 cutoff point, showing that the services are adequately oriented to primary healthcare, as per Figure 2. Separated, the core score of the FHS units was 6.8 ± 0.9, and of the FHS-PMM units, 7.0 ± 1.0, with no statistically significant difference (p = 0.633).

On possible distinctions in the attribute *family orientation* between the two types of unit, the average score in the FHS group was 7.7 ± 1.5 higher than for the FHS-PMM group (7.3 ± 1.7), but again the difference was not statistically different (p = 0.346) (Figure 1). The FHS group of units showed a strong orientation to this attribute (7.5 ± 1.6), i.e. they were affected from the point of view of primary healthcare with the focus on the family.

The units as a whole provided a reasonable score in *community orientation* (7.5 ± 2.0), with 7.6 ± 2.2 in the FHS units, higher than 7.4 ± 1.8 for the FHS–PMM units (Figure 1). However the differences were not statistically significant (p = 0.658).

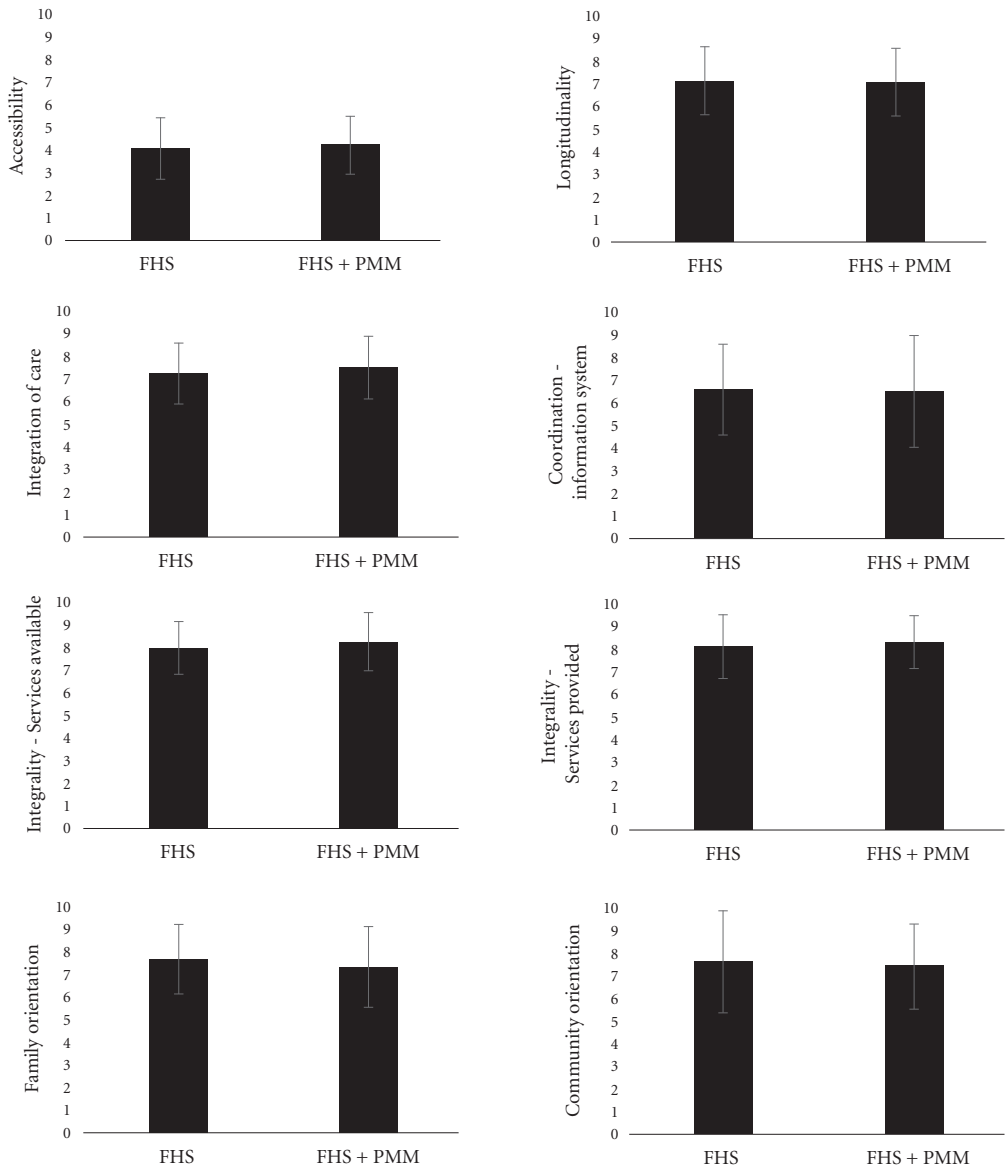

Figure 1. Representation of Average scores, ± Standard Deviation, in Primary Healthcare attributes, in Family Health Strategy (FHS) units operating with and without doctors of the *Mais Médicos* Program. Cascavel, Paraná State, Brazil, 2016.

Sources: Investigator's database.

Ciência & Saúde Coletiva, 21(9):2849-2860, 2016

The general score for the derived and core attributes, for primary healthcare in this study was 7.1 ± 1.0 for the group of primary healthcare units, which is above the 6.6 threshold, indicating the orientation of these services to primary healthcare. The general score for the FHS units was 7.0 ± 1.0 and for the FHS-PMM units was 7.1 ± 1.0 (Figure 2), the difference not being statistically significant (p = 0.935).

Discussion

The results of this study show that the Family Health Strategy (FHS) units have in general shown a strong degree of orientation toward, and the core and derived attributes appropriate to, primary healthcare, both in units without PMM professionals and those with permanent doctors from the program, in the opinion of health professionals. This finding is important in that it de-mystifies the ideation that the PMM doctors do not have adequate training to operate in Brazil, especially the foreign ones, reportedly due to supposed problems of communication due to a language barrier. If this was so, it would be expected that the attributes were not similar in both type of unit – which they were.

Since the primary healthcare attributes are intrinsically related to the quality of services, it is seen that the FHS of the municipality has commonly offered effective health action that resolves problems, although the isolated analysis of each attribute showed the need for improvements in care, specifically in relation to the attributes of accessibility and coordination.

As a structural element of a health system, access requires the establishments to be situated closer to the population, and also to pay attention to the degree of tolerance to appointments that are not scheduled. Access is important, from the point of view of the population served. If the primary healthcare unit is in locations closer to the population, it should be the preferred entry point for users of the health system. It is hoped, thus, that its services should be accessible and its health actions effective in response to individuals' needs[15].

The FHS aims to be a model for reorganization of primary healthcare in Brazil, presenting itself as an important strategy in the advance of accessibility to health services, in that it orders that there should be teams of health professionals, through the Family Health Units situated in locations closer to the population and community, minimizing barriers of geography, organization, culture and gender in relation to care; and it also widens the access to the technological benefits with more guarantee of reference and less waste, as it promotes primary healthcare as an ordering factor in the Primary Care Networks (RAS)[16-17].

However, even with the advances achieved by the FHS it is seen, in this care model, that primary healthcare has found it difficult to strengthen its function as entry point to the health system. It is perceived that, instead of seeking out the Family Health Unit as priority, the population frequently goes to the emergency services, either because they are close, or accessible at the time when care is required, or provide an immediate resolution to a health problem, or due to the lack of doctors to attend in the health units referred

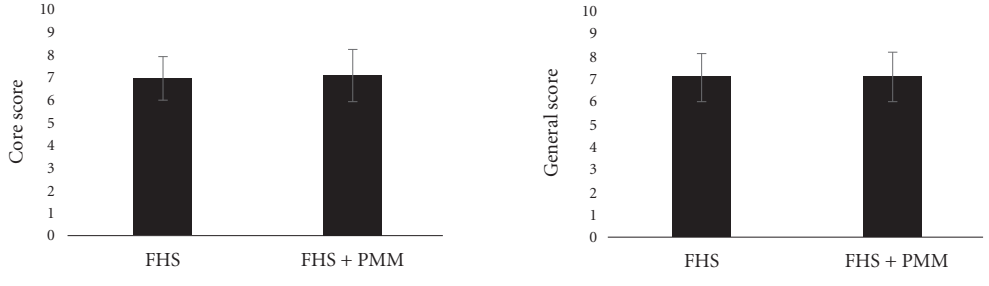

Figure 2. Representation of Averages, ± Standard Deviation, of *Core* and *General* scores in Family Health Strategy (FHS) units operating with and without doctors of the *Mais Médicos* Program. Cascavel, Paraná State, Brazil, 2016.

Sources: Investigator's database.

to by users[18], an aspect which it would be possible to improve as from implementation of the PMM.

Access to the FHS means, as well as an entry door to the system, capacity for resolution of a user's health problem, which is also one of the objectives of the PMM – that is to say, provide doctors to the locations where they don't currently exist. In this case, this assumption was not confirmed, since in the units with PMM doctors the index for the attribute *access* was lower in a situation that is already adverse, since one does not expect access problems for the user in FHS units, since a major feature of this model is changes in the work process of the health teams, precisely to deal with the principles of primary healthcare in its daily work routine[19-21].

When the attribute *access* shows weak orientation to primary healthcare, as in our study, a need is demonstrated for reformulation of the work process and the process of welcoming the user, changes in the organizational practices of the units, to bring the level of access for users to the desired level for primary healthcare.

On this subject, welcoming and acceptance strategies such as establishing flow patterns of users in the primary healthcare unit, adoption of models for care, individual care agenda management and evaluation of risk and vulnerability, which require recognition by all the members of the team, have been indicated as important technological tools, used as a way of making accessibility viable for the user and responding to what we hear from the health professionals[22].

Although there is not a significant difference between the units, we highlight the importance of public policies such as the PMM, which can be considered a means of amplifying access to users in the health services, since it aims to make good the lack of human resources in the medical area in primary healthcare units, which is still a constant phenomenon, principally in areas that are more distant from major centers and to which access is geographically difficult[10].

However, in spite of the limitations of access, in relation to the attribute *longitudinality* it can be said that the units of the study have performed in a way that qualifies their services for primary healthcare. The link established between the health teams and the FHS user gives the professional greater knowledge of demands which emerge only when there is an effective link, and help in the process of care in all its stages – in prevention, promotion, treatment and the various cycles of life, as well as in greater participation and support by users[2].

For longitudinality to be exercised, the professionals need to be open to these link relationships which, based on neutral trust, sometimes permeated with affection and subjectivities, tend to eliminate a totalitarian approach to knowledge, interventionist practices, and other more centralized healthcare attitudes, in favor of a horizontal therapeutic project. It is thus a new stance to be exercised by professionals, that goes beyond the biomedical models and institutes a more human way of looking at the population – which on a daily basis reflects what might be called a renewed apprenticeship[7].

Ilha et al.[23] point out that relationship of link between professional and user in the family health system is a requirement to be complied with, and leads to a greater approximation of dialogue – a process of self-education in sensitivity and solidarity to live the experiences through a widened vision. Subsequent meetings are based on an appropriate acceptance and mutual trust, which bring professionals and users together, and also strengthen primary healthcare as a principal entry point since when users recognize it as the principal source of care, it will be the first place or service that they seek out. Summing up, the attributes *first contact access* and *longitudinality* should go side by side[2,24], which does not yet happen in the reality as studied.

The intention of the PMM is to strengthen the *longitudinality* attribute, by proposing that professionals remain fixed in locations where at present it's difficult to make them do so. However, since the program specifies a finite period for this professional availability, the longer term may turn out to be a difficulty in orientation of this attribute to primary healthcare, in establishing a link between users and professionals. Thus, it is necessary to strengthen the link with the service, that is to say, with all the professionals of the unit, not only with the doctor.

The attribute *coordination of care* is based on evaluating whether the care provided enables it to be continued in its various aspects, whether by the professionals, or by the medical records, or by both, as well as identifying the capacity for recognition by the professionals by the problems and needs of the users in a continuous and process-related way[2,3].

However, some situations have been established as principal obstacles for establishing the *coordination* in primary healthcare, such as the absence of records of counter-referral, which means lack of information about treatment, diagnosis and orientations for care. Associated with

Ciência & Saúde Coletiva, 21(9):2849-2860, 2016

this is the inefficiency of the registration of data in health records, and the lack of communication between the team, and absence of interdisciplinary work in primary healthcare. Since information is the essence of coordination, information about individuals needs and the services provided needs to be fluidly available to ensure that all those involved in the process of care have access to and can understand this information[2,17].

We note also that actions to strengthen coordination require efforts from the professionals and the health team in developing the capacity to identify, organize and integrate responses so the group of needs are identified in their users, thus making it possible for care to be continuous, as a primary factor for coordination, identifying problems raised in other services and integrating these actions into the global care for the patient[2]. In this case, possible explanation would be that the presence of foreign doctors in the PMM, where the index was lower, could have been influenced in terms of *coordination* by the fact of their not having deep knowledge of the structure and process of the Brazilian health service.

The following aspects have also been seen to be important strategies to be developed by health professionals in strengthening the attributed *coordination*[25]: adoption of a care protocol organized under the logic of care; knowledge by the professionals on flows of attendance in the care networks; interdisciplinary work with discussion of tracer cases; making of consistent record on the services provided to users, and appropriate use of referral and counter-referral letters.

However, these strategies represent more than only the organization of the work process of the health teams. Management also needs to incorporate care tools and devices. The main difficulties found for coordination of care, both in strengthening primary healthcare and in coordination between levels of care, have been: articulation between service providers and professionals; limited supply of specialized service; absence of cooperation between peers; absence of recognition of professionals, and obstacles to strengthening of primary healthcare as the entry door to the system[26].

Some actions and strategies developed by health teams enable greater agility and equity in the care provided to individuals, and also greater availability of information and fluid communication between the professionals of various care points. These include: support for implementation of electronic case records and computerized systems, incentive for management of a waiting list, de-fragmentation of the services, and greater establishment of practices of regulation between the care points[27] – these being measures that need to be amplified and implemented in the municipality that was studied.

Further, also: to give priority to the user's healthcare, organizing the services based on his/her needs and expectations in health plans, would make it possible to guide us on our path toward achieving coordination. This is an attribute that is fundamental for the functioning of the others, since without coordination, longitudinality loses its potential, integrality becomes abstract, and the first contact becomes a purely administrative function, without links between the professional end users[2,27].

The availability of services, relating to the attribute *integrality*, is an essential factor for the performance not only of primary healthcare but of all levels of care since the user's need becomes the central focus of care. However, to restrict longitudinality to the availability of services would be the equivalent to not offering an integral care. The meaning of integrality goes beyond the question of guaranteeing care to the users between the care points that become necessary; it demands that in their work practices professionals should understand it in its totality, providing adequate welcome and acceptance, a care that has dignity, is humanized and based on a relationship of a link[28].

Integrality thus presupposes the guarantee to users of an integral care, both from the point of view of the biopsychosocial character of the health-illness process, and also in actions of promotion, prevention, cure and rehabilitation that are appropriate to the context of primary healthcare and which require efforts by professionals to make it effective[29].

To serve families on the basis of these attributes requires from professionals a knowledge about their dynamics, social context and the role of each member of the families, to enable planning and systematization of actions that are directed to them based on identification needs both by the user and by the health team, so that based on a relationship of link and mutual correspondence they can experience situations of empowerment[30].

It is in this contact that families begin to recognize the health team, not as part of the state apparatus which one seeks out only in emergency situations, but as integral elements of a network made up of values such as trust, respect and commitment to users, on which they can support themselves.

In this aspect the FHS, as can be seen in this study, has represented itself as an important strategy for healthcare coverage and in terms of approximation of users to the primary healthcare services[30].

The derived attribute *community orientation* identified whether the health actions offered by the FHS were also focused on the community, since the multi-causality of the health-illness process, and also the prospect of an amplified concept of health, bring out the perception of the diversity of conditioning and determining factors that involve the production of care. Thus the actions in health based on this logic require that the primary health teams should act in such a way as to meet the health needs of the population in prevention and promotion both individually, and in collective terms in their territories[16].

However, health actions based on promotion and prevention to improve quality of life are effective only when they include a multi-territorial view, in which the existence of other agents that are influential in this dynamic of the area of coverage of a health unit is recognized. Thus, through an inter-sectorial work between health team and these agents – community leaders, NGOs, social movements, and other institutions – jointly with social actors, the breadth of achievement of results will be obtained which is truly able to change the social and epidemiological profile of a territory[31].

The assumption that there could be differences between the units due to the fact of there being foreign doctors working, sometimes with difficulties of communication, was not confirmed by this study, due to the similar values between the attributes in both the types of health units.

In this context, the FHS is seen to be an important advance in access to health services, since it inserts health teams and units at locations closer to the population, breaking physical, cultural and social barriers that sometimes in the past limited the user from exercising his/her right to health. This has been confirmed by this present study, which identified that health actions and services, in relation to the core and derived attributes of primary healthcare are being effective, without significant differences between the units that have, and the units that don't have, PMM doctors. However, the two groups (with and without PMM) also showed similar values for the attribute *accessibility* and *coordination*, but not all the aspects of primary healthcare: this suggests the need for improvements in the service, both in the structural aspects and in the organization of the health system of the municipality, to ensure care that has quality and is oriented to the precepts of primary healthcare.

Conclusion

Efforts have been made over the years in the various levels and spheres of health management in Brazil to strengthen primary healthcare, aiming to widen users' access, reinforcing it as a principal port of entry into the system, and to strengthen it as a coordinator of care and an ordering function within the care networks, so as to provide health action and resolution of problems to the whole population. This study, in that it found no differences of perception about the effectiveness of their operation between health professionals in units with and without PMM doctors, shows that the efforts on programs aiming to improve primary healthcare in the country have met with success, and should continue to exist and be strengthened.

We also note the importance of production of further knowledge about the continuity of public programs and policies through evaluation of the health services, since through this knowledge it becomes possible to identify, in daily practices, the processes that need reaffirmation or reformulation to strengthen primary healthcare, with the participation and commitment of health professionals, and managers and the population in the quest for better health conditions.

It is, also, suggested that studies of this nature should be widened to all the actors involved in the process of evaluation, that is to say professionals and users: one of the limitations of this study was that it involved only professionals. Also, it should be reproduced in other Brazilian municipalities, to widen evaluation studies in general.

Collaborations

A Carrer worked in the research, methodology, conception and final drafting; BRGO Toso worked in the research, methodology, conception and final drafting; ATB Guimarães worked on the methodology and final drafting; JR Conterno worked on the research; and KC Minosso worked on the research.

References

1. Brasil. Ministério da Saúde (MS). *Melhoria contínua da qualidade na atenção primária à saúde*. Brasília: MS; 2010.
2. Starfield B. *Atenção primária*: *equilíbrio entre necessidades de saúde, serviços e tecnologia*. Brasília: UNESCO/MS; 2002.
3. Brasil. Ministério da Saúde (MS). *Manual do instrumento de avaliação da atenção primária à saúde. Primary Care Assesment Tool PCATool – Brasil*. Brasília: MS; 2010.
4. Turci MA, Costa MFL, Macinko J. Influência de fatores estruturais e organizacionais no desempenho da atenção primária à saúde em Belo Horizonte, Minas Gerais, Brasil, na avaliação de gestores e enfermeiros. *Cad Saude Publica* 2015; 31(9):1941-1952.
5. Silva SS, Baitelo TC, Fracolli LA. Avaliação da atenção primária à saúde: a visão de usuários e profissionais sobre a estratégia de saúde da família. *Rev Lat Am Enfermagem* 2015; 23(5):979-987.
6. Araújo RL, Mendonça AVM, Sousa MF. Percepção dos usuários e profissionais de saúde no Distrito Federal: os atributos da atenção primária. *Saude Debate* 2015; 39(105):387-399.
7. Silva AS, Nogueira DA, Paraizo CMS, Fracolli LA. Avaliação da atenção primária à saúde: visão dos profissionais de saúde. *Rev Esc Enferm USP* 2014; 48(Esp):126-132.
8. Harzheim E, Lima KM, Hauser L. *Reforma da atenção primária a saúde na cidade do Rio de Janeiro: avaliação dos primeiros três anos de clínica da família. Pesquisa avaliativa sobre aspectos de implantação, estrutura, processo e resultados das clínicas da família na cidade do Rio Janeiro*. Porto Alegre: OPAS; 2013.
9. Brasil. Ministério da Saúde (MS). Portal da Saúde. *Mais Médicos.* [acessado 2016 fev 2]. Disponível em: http://portalsaude.saude.gov.br/index.php/cidadao/acoes-e-programas/mais-medicos/mais-sobre-mais-medicos/5953-comofunciona-o-programa
10. Brasil. Ministério da Saúde. Lei nº 12.871, de 22 de outubro de 2013. Institui o Programa Mais Médicos, altera as Leis nº 8.745 de 9 de dezembro de 1993 e nº 6.932 de 7 de julho de 1981 e dá outras providências. *Diário Oficial da União* 2013; 23 out.
11. Santos LMP, Costa AM, Girarde SN. Programa Mais Médicos: uma ação efetiva para reduzir iniquidades em saúde. *Cien Saude Colet* 2015; 20(11):3547-3552.
12. Brasil. Ministério da Saúde (MS). Portal da Saúde. *Histórico de cobertura da saúde da família.* [acessado 2016 fev 15]. Disponível em: http://dab.saude.gov.br/portaldab/historico_cobertura_sf.php
13. Hauser L, Castro RCL, Vigo A, Trindade TG, Gonçalves MR, Stein AT, Duncan BB, Harzheim E. Tradução, adaptação, validade e medidas de fidedignidade do instrumento de avaliação da atenção primária à saúde (PCATool) no Brasil: versão profissionais de saúde. *Rev Bras Med Fam Comun* 2013; 8(29):244-255.
14. Addinsoft. *XLSTAT for Windows*, versão 2015. [acessado 2016 jan 15]. Disponível em: https://www.xlstat.com/es/
15. Oliveira MAC, Pereira IC. Atributos essenciais da atenção primária e a estratégia saúde da família. *Rev Bras Enferm* 2014; 66(n. spe):158-164.

16. Brasil. Ministério da Saúde (MS). Secretaria de Atenção Básica. *Política nacional de atenção básica.* Brasília: MS; 2012. Séries Pacto pela Saúde.
17. Mendes EV. *As redes de atenção à saúde*. Brasília: MS/OPAS; 2011.
18. Freire AB, Fernandes DL, Moro JS, Kneipp MM, Cardoso CM, Lima SBS. Serviços de urgência e emergência: quais os motivos que levam o usuário aos pronto-atendimentos? *Rev Saude* 2015; 41(1):195-200.
19. Reichert APS, Leôncio ABA, Toso BRGO, Santos NCCB, Vaz EMC, Collet N. Orientação familiar e comunitária na atenção primária à saúde da criança. *Cien Saude Colet*, 2016; 21(1):119-127.
20. Vaz EMC, Magalhães RKBP, Toso BRGO, Reichert APS, Collet N. Longitudinalidade do cuidado à criança na estratégia saúde da família. *Rev Gaúcha Enferm*. 2015; 36(4):49-54.
21. Silva RMM, Silva-Sobrinho RA, Neves ET, Toso BRGO, Viera CS. Desafios à coordenação na atenção primária à saúde da criança. *Cien Saude Colet*, 2015; 20(4):1217-1224.
22. Brasil. Ministério da Saúde (MS). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. *Cadernos de atenção básica*. Brasília: MS; 2013.
23. Ilha S, Dias MV, Backes DS, Backes MTS. Vínculo profissional-usuário em uma equipe da estratégia saúde da família. *Cienc Cuid Saude* 2014; 13(3):556-562.
24. Cunha EM, Giovanella L. Longitudinalidade/continuidade do cuidado: identificando dimensões e variáveis para a avaliação da atenção primária no contexto do sistema público de saúde brasileiro. *Cien Saude Colet* 2011; 16(Supl. 1):1029-1042.
25. Mendes EV. *A construção social da atenção primária à saúde*. Brasília: Conselho Nacional de Secretários de Saúde – CONASS; 2015.
26. Almeida PF, Giovanella L, Nunan BA. Coordenação dos cuidados em saúde pela atenção primária à saúde e suas implicações para a satisfação dos usuários. *Saude Debate* 2012; 36(94):375-391.
27. Mendes EV. As redes de atenção à saúde. *Cien Saude Colet* 2010; 15(5):2297-2305.
28. Freitas CASL, Fernandes AT, Chagas MIO, Soares CHA, Silva MJ, Brito MCC. O principio da integralidade na perspectiva dos coordenadores de um sistema de saúde no interior do Ceará. *Cad Saude Colet* 2010; 18(4):494-499.
29. Souza MC, Araújo TM, Reis WMR, Souza JN, Vileva ABA, Franco TB. Integralidade na atenção à saúde: um olhar da equipe de saúde da família sobre a fisioterapia. *Mundo Saude* 2012; 36(3):452-460.
30. Chapadeiro CA, Andrade HYSO, Araújo MRN. *A família como foco da atenção primária à saúde*. Belo Horizonte: NESCON/UFMG; 2011.
31. Pereira MPB, Barcellos C. O território no programa de saúde da família. *Hygeia* 2006; 2(2):47-55.

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