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Context and organization of primary health care in remote rural communities in Northern Minas Gerais State, Brazil

Contexto e organização da atenção primária à saúde em municípios rurais remotos no Norte de Minas Gerais, Brasil

Contexto y organización de la atención primaria en salud en municipios rurales remotos, Norte de Minas Gerais, Brasil

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Abstract

The study analyzes the structural characteristics of primary health care (PHC) in its contextual and organizational dimensions in remote rural municipalities (counties) in Northern Minas Gerais State, Brazil. This is a case study with a qualitative approach, using 21 semi-structured interviews with health system administrators and health care workers from the family health teams (EqSF), as well as secondary data. For the contextual dimension, the results show that socioeconomic factors in the remote rural municipalities condition the organization of PHC and leave the population vulnerable, especially in the rural areas of the remote municipalities. As for the organizational dimension, the principal characteristics are: coexistence of formal and informal assignment of the services' users, two modalities of first-contact services, namely basic health units (UBS) and 24-hour health centers; prioritization of response to the spontaneous demand; strong action by the Family Health Support Centers in the development of activities in promotion and prevention, expanded scope of practices by community health workers; partial guarantee of transportation for persons in treatment; partial computerization of the UBS with the implementation of the electronic patient record (e-SUS), telecardiology; and the More Doctors Program. The study found that remote rural municipalities are not a uniform unit, since the municipal (county) seat and the rural areas are unequal in terms of living conditions and lack specific organization, policies, and financing to guarantee access to PHC. With all the limitations, the observations show initiatives with major difficulties in maintenance and sustainability and sometimes without necessarily corresponding to the use of space and social life that define rural health itineraries.

Primary Health Care; Rural Health; Health Services Accessibility

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Introduction

Rural localities may exhibit considerable differences in service provision as a function of financial resources allocation, workforce composition, natural phenomena, and distance from regional reference centers [1]. In the United States, in rural areas, there is a lower proportion of users provided with health insurance, a major hurdle in countries without universal healthcare systems, and a higher incidence of smoking, obesity, physical inactivity, suicide, and severe mental illness [2]. These, among other factors, seem to make explicit the need of healthcare organization and delivery models to incorporate strategies to address the needs of people in rural settings [3], who share with urban vulnerable populations a set of access barriers and worse health outcomes [2].

The challenges to the organization and availability of health services in locations outside the urban centers, with low population density and small population size have become global. Countries like Australia, since the early 1990s, have implemented policies for these areas that seek to respond to diversified necessities, with securing access being one of the main issues faced [3,4]. The concentration of specialists in urban centers results in greater dependence of rural populations on primary health care (PHC) providers, who sometimes undertake an increased scope of practice without proper training and infrastructure [2].

In Brazil, the large territorial extension and inequalities in living conditions condition different exposures to health risks and diseases, which are more unfavorable to rural populations, whose cultural, social, and environmental particularities remain largely unknown [5]. The definition of urban and rural spaces, in Brazil, is guided by a conception of residual rurality and being a byproduct of the urban environment, a perspective that disregards the diversity of these backgrounds [6]. In 2014, the National Policy for the Integral Healthcare of the Rural, Forest, and Water Populations, aligned with a comprehensive and inclusive concept, sought to give visibility and highlight that, in this broad category that is conventionally referred to as "rural", there are populations with cultural and healthcare practices that require having their needs addressed by the Brazilian Unified National Health System (SUS) [7]. In 2017, Brazilian Institute of Geography and Statistics (IBGE) developed a rural-urban typology for the municipal territorial outline, adopting population density as the basic criterion [8]. However, the challenge of identifying particularities of intra-municipal rural spaces remains.

A number of studies highlight additional difficulties in the use of healthcare services by rural populations even when living in urban municipalities and those living in countryside municipalities [9,10]. The expansion of the Family Health Strategy (FHS) addresses part of the problem. According to the 2019 *Brazilian National Health Survey*, the proportion of residents with households registered in family health units is 62.6%, with 78.9% in rural and 59.8% in urban areas [11]. The extent of coverage, however, may conceal barriers to access, such as the concentration of teams at the headquarters of rural municipalities, in addition to geographical [9] barriers.

Faced with the "diseconomy of scale" [3], arising not only from the long distances from urban centers and small dispersed populations, but also from social, demographic, and natural characteristics that characterize the diverse Brazilian territory, what would be the "suitable models" for PHC in remote rural municipalities? This paper aims to identify and analyze the structural characteristics of PHC, in its background and organizational aspects, at remote rural municipalities, based on adaptations to the model of Hogg et al. [12] and Paré-Plante et al. [13]. The objective is to identify critical elements, actions, and policies that contribute to the maintenance and sustainability of PHS in a rural environment.

Methodology

Study design and area

This is a qualitative study, consisting of a national survey with multiple case studies in 27 remote rural municipalities [14], categorized into spatially distinct homogeneous areas [8]. In this paper, results are analyzed from three remote rural municipalities that are part of the Northern Minas Gerais region, Brazil, including the Jequetinhonha Valley, one of the most important "opaque zones" that mirror the unequal process of formation of the territory of Minas Gerais [14]. In this area, 22 of the 323 Brazilian

remote rural municipalities are clustered. To define the intended sample for the study, first the remote rural municipality were characterized according to a set of socioeconomic, demographic, and health indicators, and then the criterion was to select 2 municipalities that presented similar characteristics in the area – Indaiabira and Rubelita – and 1 with unusual characteristics – Bonito de Minas. It is worth pointing out that, even in the case of a "unit", that is, a remote rural municipality, in the 3 cases there was a classification of the territory in two areas: the headquarters, identified as the center, and the "rural zone" of the municipality, which corresponds to the small and disperse population groupings located in regions far from the headquarters.

Study population and samples

The study population was composed of 21 interviewees: municipal (6), regional (2), and state (1) managers; and professionals of the family health teams (EqSF) (12), key players in the characterization of the PHC organization (Table 1). In the case of the professionals, the first step was the selection of a basic health unit (UBS) located in the municipalities' headquarters and another in the rural area, as indicated by the municipal manager. In each UBS, the physician and the nurse were interviewed.

Instruments and data collection

The results are derived from semi-structured interviews, complemented by secondary data from national information systems to characterize the PHC background. The interviews were based on multidimensional scripts for understanding the organization and provision of PHC services, composed of general and specific dimensions, according to the type of interviewee [14]. In this paper, we analyze the results of the structural characteristics of PHC, in its background and organizational dimensions [12].

The interviews were face-to-face, audio-recorded, transcribed in full, lasting 1:00 to 2:30 hours, conducted at their respective workplaces from July to October 2019.

Data analysis

The conceptual model proposed by Hogg et al. [12], which guided the analysis of the results, involves two PHC domains: structural and performance. The structural domain is composed of three dimensions: (a) the general characteristics of the health system (policies, organizations and interest groups, financing, governance); (b) background; and (c) organization of the practice, the last two (b and c) being the focus of this paper. The assumption is that differences in PHC performance (access, continuity, integration, technical quality, among others) are strongly related to dimensions such as vision, practice background, and organizational resources [12,13]. Thus, analyzing critical points and successful measures in the structural and contextual domain of PHC may contribute to understanding and improving its performance.

Based on the model by Hogg et al. [12] and contributions by Paré-Plante et al. [13], the following categories were included in the context of the pratices component: sociodemographic characterization of the population, of the territory, and configuration of the supply of healthcare services. These elements are related to structural characteristics of PHC and may have an important influence on service delivery and professional practices. The organizational aspect encompassed: territorialization and client assignment; types and organization of first contact services; interprofessional action and collaboration; technical, material, and human resources.

For this analysis, the data was sorted based on the general reading of the transcribed material and the triangulation of the interviews and secondary data. The results were systematized in analytical tables, grouped and categorized. We then started to compare the speeches, in a dialectical confrontation of the subjects' ideas and standings, identifying convergences and divergences for the purpose of critical interpretation. The intention was not the judgment of each municipality, but the understanding of processes in the remote rural municipalities territories through representative scenarios.

Table 1

Study participants by function and management/activity level. Remote rural municipalities, Northern Minas Gerais State, Brazil, 2020.

Characteristics	Bonito de Minas (n = 8)	Indaiabira (n = 6)	Rubelita (n = 7)
Gender			
Female	7	5	4
Male	1	1	3
Age (years)			
20-29	1	2	1
30-39	6	1	2
40-49	1	2	3
50-59	-	-	1
to 60	-	1	-
Role			
EqSF nurse	2	2	2
EqSF physician	2	2	2
State managers	1 *	-	-
Regional manager	1	-	1 **
Municipal manager	1	1	1
PHC coordination	1	1	1
Educational background			
Nursing	3	4	3
Medicine	2	2	2
Other healthcare ***	2	-	1
Management	1	-	1
Time in the function			
Less than a year	5	3	3
Up to 5 years	2	2	3
More than 10 years	1	1	1
Labor relationship			
Under the public workers statute	3	2	2
Commissioned position	2	-	1
Fixed-term contract	2	3	4
Self-employed	1	1	-

PHC: primary health care; EqSF: family health teams.

Source: survey database

* State manager, reference for all municipalities;

** Regional manager of the Salinas micro-region, reference for Indaiabira and Rubelita.

*** Physical education; dentistry.

The study was approved by the Ethics Reaerch Committee of the Sergio Arouca National School of Public Health, Oswaldo Cruz Foundation (CAAE 92280918.3.0000.5240), and by approval opinion nº 2.832.559, with the consent of the municipalities.

Results

Background aspect of PHC practices

- **Sociodemographic description of the population and territory**

The state of Minas Gerais is home to 853 municipalities, 22 of which are remote rural municipalites [8]. The municipalities analyzed were small-sized, whose population, for the most part, lived in rural areas and were more vulnerable compared to the population that lived in the headquarters. Population density was low, and only Indaiabira had a medium Human Development Index-Municipality (HDI-M). The socioeconomic characterization revealed worse living conditions, taking national parameters as a reference. In general, they were municipalities that depended almost exclusively on government subsidies, especially the Brazilian Income Transfer Program, which in association with other indicators, presented in Table 2, showed a pattern of extreme vulnerability.

Table 2

Socioeconomic profile of the population. Remote rural municipalities, Northern Minas Gerais State, Brazil, 2020.

Territory description	Rubelita	Indaiabira	Bonito de Minas	Brazil
Population (inhabitants)	7,772	7,330	9,673	187,846.940
Population expectancy (inhabitants)	5,995	7,351	11,230	210,147.125
Rural population (%)	68.00	63.00	77.00	16.00
PBF beneficiary population (%)	42.00	29.00	35.00	20.00
Area (km^2)	1,112.5	1,012.01	3,914.31	8,510,295.914
Population density (inhabitants/km^2)	6.99	7.24	2.47	22.43
Gini coefficient	0.50	0.48	0.57	0.60
HDI-M	0.582 (low)	0.610 (average)	0.537 (low)	0.727
Per capita income (BRL)	248.99	286.93	195.65	793.87
Household income of less than ½ minimum wage (%)	67.69	63.64	78.22	34.67
Intergovernmental subsidies revenue (%)	97.36	96,61	96,66	NA
Population in households with a toilet and running water	56.00	64.00	38.00	87.00
opulation in households with electricity (%)	94.00	91.00	90.00	98.00
Population in households that have garbage collection (%)	92.00	91.00	91.00	97.00
Extremely poor (%)	24.00	14.00	36.00	6.62
Illiteracy rate (% of population aged 15 and over)	24.43	32.13	27.15	9.61
Environmental preservation area	-	-	Cochá and Gibão Environmental Protection Area & Rio Pandeiros Environmental Protection	2,229 protected areas (3,884,125km^2)

NA: not applicable.

Sources: United Nations Development Programme. Atlas do Desenvolvimento Humano no Brasil. http://www.atlasbrasil.org.br/ (accessed on 20/Aug/2020); Brazilian Institute of Geography and Statistics. Estimativas da população, 2019. https://www.ibge.gov.br/estatisticas/sociais/populacao/9103-estimativas-de-populacao.html?edicao=25272&t=resultados (accessed on 20/Aug/2020); Brazilian of Social Development. Mapas Estratégicos para políticas de cidadania, 2019. https://aplicacoes.mds.gov.br/sagi/mops/ (accessed on 20/Aug/2020); Brazilian of Social Development. Painel do Bolsa Família e Cadastro Único no seu município, 2019. https://aplicacoes.mds.gov.br/sagirmps/bolsafamilia/ (accessed on 20/Aug/2020); National Treasury Secretariat, Ministry of Finance. Portal Meu Município, 2019. https://meumunicipio.org.br/ (acessed on 20/Aug/2020).

Another common feature was the availability of treated and running water and basic sanitation at the headquarters, but not in all rural areas, according to managers and professionals. It was mentioned that federal policies from 2002-2016 provided improvements in living conditions and health in rural areas.

Drought was mentioned as a recurring problem, but without severe water shortages. In the rainy season, road conditions worsened, making traffic in and out of the municipality difficult. There was insufficient/inexistent public transportation routes/times, particularly severe in rural areas, as well as difficulty/absence of telephone/internet network, with implications for the organization of PHC.

- **Configuration of healthcare services supply**

The municipalities only presented PHC services, with potential 100% coverage by the FHS, however, individual enrollment to the EqSF was lower. In general, the UBS were located in the headquarters and in rural areas, except for Bonito de Minas, although the National Register of Health Establishments (CNES) indicated a rural unit (Table 3). The rural area had "support points", simplified spaces that allowed the care of remote populations. The infrastructure of the UBS was considered suitable by the interviewees, as they had undergone renovations with funds from Requalifica UBS (UBS Requalification Program).

The three municipalities had Family Health Support Centers (NASF) and Health Academy Program with social workers, physical therapists, speech therapists, pharmacists, nutritionists, and psychologists, with a strong role in preventive and health promotion activities, in articulation with the School Health Program, the Health Academy Program, and Brazilian Income Transfer Program.

Minas Gerais is divided into 13 health macro-regions, with the cases belonging to the Northern Macro-region. For highly complex treatments, such as some types of cancer, the reference center was Belo Horizonte (≥ 600km). Most of the specialized services were concentrated in the region's main municipality (up to 50km). In some cases, specialized care was provided at the headquarters of the macro-region, Montes Claros (> 200km) (Table 3). There was a consensus among the interviewees as to the restriction of the offer of specialized services, one of the alternatives being the Intermunicipal Health Consortia, funded by the municipalities.

Table 3 presents the characteristics of the Northern Health Macro-region, resources and equipment in healthcare, based on the state and the Central Macro-region, in which the metropolitan region of Belo Horizonte is located. Most of the hospitals, beds, and high complexity equipment in the Northern Macroregion belonged to the private network.

Organizational aspect of PHC practices

- **Territorialization and customer allocation**

The EqSF worked based on enrolled territories, although the flows established by the users were diversified and redefined by the availability of transportation, opening hours, location, and attendance of professionals, especially physicians, in the UBS.

Despite the formal enrollment, teams served users from other areas, including border municipalities. Such flexibility was not seen as a point of conflict, because this organizational dynamic was shared in the region and there was a certain informal agreement that the user should seek and be served by the most accessible service.

The managers recognized the fluidity of the users' therapeutic itinerary, but needed to balance the enrollment by team, in order not to cause an overload in the assistance, to maintain the parameters required for federal funding, and the teams' health responsibility for longitudinal follow-up. Defining the location of a new team implied in difficulties facing territories with sparse population and the need of large displacements for professionals and users.

The attraction of investment resources (Federal, State, Parliamentary Amendment) and political party issues influenced the decision to build UBS, without the guarantee of funding and, sometimes, in unsuitable locations from the point of view of care flows, aggravating the problems for maintenance and operation.

Table 3

Characteristics of the Northern Health Macro-region, healthcare resources and equipment. Remote rural municipalities, Northern Minas Gerais State, Brazil, 2020.

Healthcare macro-region/State	Population	%	Per capita income	% population covered by healthcare insurance
State of Minas Gerais	21,168,791	100.00	749.69	24.01
Center Macro-region	6,658,769	31.46	962.30	21.90
North Macro-region	1,684,710	7.96	410.53	6.63

Healthcare macro-region/State	Management sphere (n)				Total	%
	Federal	State	Municipal	Private		
Hospitals available for SUS by macro-regions/Management sphere, December/2019						
State of Minas Gerais	7	20	109	565	701	100.00
Center Macro-region	2	12	16	129	159	22.70
North Macro-region	-	1	18	25	44	6.30
Available hospital beds for SUS by macro-regions/Management sphere, December/2019						
State of Minas Gerais	1,288	2,560	4,756	22,513	31,117	100.00
Center Macro-region	426	1,202	1,315	5,164	8,107	26.10
North Macro-region	-	159	789	1,148	2,096	6.70
Magnetic resonance imaging equipment available for SUS by macro-regions/ Management sphere, December/2019						
State of Minas Gerais	3	1	1	41	46	100.00
Center Macro-region	1	1	-	10	12	26.10
North Macro-region	-	-	-	1	1	2.20
Computed tomography equipment available for SUS by macro-regions/ Management sphere, December/2019						
State of Minas Gerais	6	3	9	131	149	100.00
Center Macro-region	2	2	4	34	42	28.20
North Macro-region	-	-	1	4	5	3.40

Municipality headquarters (urban area)	Distance between the headquarters (urban area) and the micro-regions, macro-regions and Capital		
	Micro-region (Januária *)/(Taiobeiras **)/(Salinas ***)	Macro-region (Montes Claros)	Capital (Belo Horizonte)
Bonito de Minas *	48km (00:48min)	217km (03h:00)	643km (09h:00)
Indaiabira **	42km (00:38min)	304km (04h:30)	728km (10h:00)
Rubelita ***	30km (00:30min)	247km (03h:40)	626km (08h:40)

Countryside Municipalities (rural area) #	Distance between the interior (rural area) and the headquarters, micro-regions, macro-regions and Capital ##			
	Municipality Headquarters (urban area) ###	Micro-region (Januária *)/(Taiobeiras **)/ (Salinas ***)	Municipality headquarters (Montes Claros)	Capital (Belo Horizonte)
Bonito de Minas *	150km (03h:30)	198km (04h:18)	367km (06h:30)	793km (12h:30)
Indaiabira **	30km (01h:30)	72km (02h:08)	334km (05h:40)	757km (11h:30)
Rubelita ***	17km (01h:00)	47km (01h:30)	277km (04h:40)	643km (09h:40)

(continues)

Table 3 (continued)

Healthcare resources	Bonito de Minas	Indaiabira	Rubelita
Potential PHC coverage (%)	100.00	100.00	100.00
Population enrolled and linked to PHC teams (%)	83.67	92.42	89.76
PHC teams (n)	5	4	4
Population covered by healthcare insurance (%)	0,36	0,29	1.15
Total of physicians (n) §	8	7	7
General practioner (n)	1	3	3
FHS Physician (n)	6	4	4
Pediatrician	1	-	-
ACS (n)	26	19	22
Nurses (n)	10	8	9
Social Workers (n)	1	1	1
Physiotherapists (n)	1	2	2
Speech therapists (n)	1	-	1
Pharmacists (n)	1	3	2
Nutritionists (n)	1	2	1
Dentists (n)	6	6	6
Psychologists (n)	3	1	2
Nursing Aides (n)	2	5	6
Nursing technicians (n)	27	11	3
Healthcare equipment	**Bonito de Minas**	**Indaiabira**	**Rubelita**
Healthcare center/Basic unit of health	3	4	3
UBS in rural areas	1	3	2
UBS in headquarters	2	1	1
Community healthcare clinic in rural areas	-	2	1
Family Health Support Core Team (NASF)	1	1	1
Psychosocial Care Center	1	-	-
Basic Support Mobile Unit (SAMU)	1	-	-
Health Surveillance Unit	1	1	1
Mobile Ground Unit	-	1	-
Isolated Clinic	-	1	-
Regional Laboratory of Prosthodontics (LRPD)	-	1	-
Pharmacy	1	1	1
Academy of Health Program	1	1	1

ACS: community health workers; FHS: family health strategy; PHC: primary health care; UBS: basic health care.

Sources: Brazilian Institute of Geography and Statistics. Estimativas da população, 2019. https://www.ibge.gov.br/estatisticas/sociais/populacao/9103-estimativas-de-populacao.html?edicao=25272&t=resultados) (accessed on 20/Aug/2020); United Nations Development Programme. Atlas do Desenvolvimento Humano no Brasil. http://www.atlasbrasil.org.br/ (accessed on 20/Aug/2020); Brazilian Regulatory of Private Health Insurance and Plans. https://www.gov.br/ans/pt-br (accessed on 20/Aug/2020); Brazilian Health Informatics Department. Sistema de Cadastro Nacional de Estabelecimentos de Saúde. http://cnes.datasus.gov.br/ (accessed on 20/Aug/2020); Department of Roads and Highways of the State of Minas Gerais. http://www.der.mg.gov.br/ (accessed on 20/Aug/2020); Healthcare Information System for Primary Care. Registration Panel – 1st quarter 2020. https://sisab.saude.gov.br/ (accessed on 20/Aug/2020).

* Januária is the municipal seat of the health region of Bonito de Minas;

** Taiobeiras is the municipal seat of the health region of Indaiabira;

*** Salinas is the municipal seat of the health region of Rubelita;

Unpaved;

Survey database, based on information from managers, professionals and users;

Usual Ways of Displacement of the users from the interior to the UBS at the headquarters: on foot; school transportation; on horseback; private transportation; motorcycle and retired workers' bus.

§ In the municipalities of Indaiabira and Rubelita, there is a duplication of medical professionals in the SCNES – it is the situation in which the same professional is registered in more than one function, in the same municipality. Some doctors are registered as "General Practitioner", due to their work in the healthcare centers, and they are also registered as "FHS Physician", due to their work in the UBS.

- **Types and organization of first contact services**

For managers, the implementation of the FHS has been changing the pattern of service of first contact and regular consultation, especially by offering and providing services closer to the people. Historically, the population sought care in hospitals with emergency care at the headquarters of the health care region and in health centers, PHC units that include low complexity emergency care services operating 24 hours a day, in the municipalities themselves.

In all three cases, managers and professionals considered that most of the population sought the first medical attention in the UBS. Different interviewees pointed out that the fulfillment of 8 hours/day for professionals, especially physicians, was almost non-existent, being more common in the UBS at the headquarters. In the rural area, physicians agreed on different work dynamics with the management: continuous shifts, weekly days off, on call at the headquarters, and/or a work process focused exclusively on individual consultations.

Linked to the rural UBS, there were support points, which served as support for the teams' actions, where vaccination, diversified programs, preventive tests collection, and oral health care, among others, were carried out, and where the community health workers (ACS) played an important role in organizing access. The logic, in the face of intermittent access, was to provide spontaneous medical care, by complaint and without longitudinal follow-up. Care was also provided in community spaces such as community centers, schools, and churches.

Even with formal 100% coverage by FHS, in all three cases, it was decided to retain the health centers. These structures, kept at the headquarters, were open daily and non-stop for basic healthcare, minor emergencies, and stabilization of patients for removal to another municipality. The modes of operation varied according to the financial capacity of each municipality. There was no 24-hour doctor, but teams of nurses and doctors on call, many from the FHS, who worked in shifts.

Organizational problems of the UBS in rural areas were one of the main reasons for seeking the health centers. These services were used as backup care for workers on weekends and at times when the UBS did not operate, stabilization of critical conditions for transfer, fulfilling an important emergency care function, in some cases even for users from other municipalities. There was, according to managers, a certain popular and political appeal to the maintenance of the health centers, whether by preference for emergency care and individual assistance or difficulties of access to the UBS. The service reinforced the population's desire, led by politicians, and by some professionals who, according to the interviewees, also valued medicalization over longitudinal follow-up. The funding for the health centers was mostly municipal and represented an expressive expense, which threatened its sustainability due to the non-existence of federal or state support policies.

Besides the availability, different and concomitant strategies organized the provision of PHC: (a) the UBS located at the headquarters and in the rural area, with priority to spontaneous demand healthcare; (b) the UBS located at the headquarters that housed two teams, one of which went to the rural area; (c) due to the dispersion and ease of transportation, part of the rural area population was assigned to a UBS at the headquarters; (d) in more distant rural locations with a larger population, there was a nursing technician who served as a 24-hour reference, as well as a vehicle on duty to respond to emergencies; and (e) due to the dispersion of the population and great distances, heathcare was provided in the communities by an itinerant team and at support points.

- **Interprofessional performance and collaboration**

In all three municipalities, the EqSF were complete, with no formal uncovered area (although the dispersion made it difficult to follow up all the families) and worked with the support of oral health teams and NASF. Such a characteristic implied a concrete possibility of sharing actions, diversity in the menu of services offered, as well as the matrixlization of knowledge and practices.

Thus, nurses and physicians routinely shared the follow-up of people with high blood pressure/diabetics, children, and pregnant women, in the strategy of interleaved consultations and, when necessary, interconsultations. Physicians routinely acted in individual assistance actions, for various reasons. Besides the training and the lack of the necessary qualifications for working in the FHS, it was mentioned that it would not be worth moving him/her from this function for "cost-benefit" reasons.

The interviewees highlighted the role of the ACS in the organization of access and surveillance actions, through the detection of risk situations, active search, and participation, to varying degrees, in collective actions (School Health Program, with NASF). In addition to house calls, it also helped in the transit of clinical information from the population to the EqSF, through the scheduling of appointments and/or communication of the agenda, delivery of medicines, notice of scheduling exams/consultations outside the city and the release of the results, and coordination of healthcare transportation.

In the three municipalities, the ACS was fundamental for communicating with users in the more remote rural areas because, in some places, there was no telephone reception and the worker took on the role of spokesperson for the community's health demands. It was seen that the ACS would be overloaded with administrative duties to the detriment of the more essential functions in the community care process.

In a supplementary manner, the ACS performed blood pressure measurements in all three municipalities. The managers considered it to be an important practice since the ACS were the professionals who were closest to the population and established the most frequent contacts in the households, acting as sentinels for the EqSF. No significant differences were identified in the performance of the ACS in the headquarters and rural areas, only difficulties inherent to the scattered territories, greater communication difficulties due to insufficient internet/telephones network, and challenges faced due to the socioeconomic vicissitudes of the population.

The performance of NASF was very well evaluated by managers and professionals, since they increased the portfolio of services and performed complementary and/or shared clinical actions, unfolding among scattered teams and territories. The collective activities were highlighted, especially the work in the Health Academy Program and in the School Health Program. Moreover, the NASF professionals provided clinical and educational support to the EqSF and played a leading role in health education activities.

The Health Academy Program was considered a success, with great adherence from the population: elderly people, women of all age groups, and men who, in general, were not connected to the healthcare services. An expanded set of preventive and health-promoting practices developed by professionals and NASF at the academies were identified, some in the evening to facilitate participation.

- **Technical, material and human resources**

The transportation of professionals and users presented itself as a critical issue in all evaluations. Roughly speaking, being remote rural municipality implied some need to commute over long distances and/or over precarious roads, often in synergy.

For users, there was health transportation in cases of emergency and for travel to elective appointments in regional references, with some vehicles purchased with resources from parliamentary amendments or other external sources, whose cost, exclusive to the municipality, represented a burden on the budget. The displacement of users to the macro-regional headquarters involved complex transportation logistics, with insurance against accidents, and the Intermunicipal Health Consortium was called to manage it, in order to ensure the legal and safety conditions.

The arrangements for the provision of transportation and the types of vehicles varied, but in general, there was an insufficient guarantee of full travel. To mitigate the difficulties of the rural population, some of the strategies were to keep vehicles on duty in strategic locations – regular vehicles, adapted ambulances, and/or Mobile Emergency Medical Service (SAMU) ambulances – and to schedule out-of-home appointments on days/times when transportation is available.

However, it was common for each user to take responsibility for his or her own travel, especially for routine care in the UBS and health centers. The school bus was used in all three cases as a common means of transportation to the UBS, although there were legal restrictions. Users also sometimes picked up rides with the EqSF or, with their own resources, paid for private cars. Some professionals reported the abusive prices charged to the population of more distant and poorer locations for road transportation.

With the exception of the ACS, the other professionals, with rare exceptions, did not live in rural areas, with some residing in the health region headquarters, relatively close to the remote rural municipalities headquarters. The city halls provided a vehicle, which was also used for home visits and other actions in remote locations. In general, the ACS were not guaranteed support to cover transportation costs, and they used their own cars or a lift, revealing a certain unbalance among PHC professionals.

The service network was not connected by electronic medical records, and the user was the holder of clinical information, which often implied the absence of care coordination by the teams, although some UBS had implemented the e-SUS (https://sisaps.saude.gov.br/esus/) and part of the ACS used a tablet to record their activities. Since these are small municipalities, managers and professionals sought information about clinical management through informal contacts. The ACS was the main reporting agent, allowing some continuity of care, especially in rural areas, although this was not an institutionalized assignment.

The implementation of telehealth was incipient, with initiatives only in cardiology for electrocardiograms, and teleconsulting was hardly used. The telehealth hub was located at the Teaching Hospital in Montes Claros. There were connectivity problems in rural UBSs, insufficient computers, and delays in teleconsulting responses.

In all three remote rural municipalities, attraction, retention and professional profile were mentioned as the main critical issue for the organization of PHC. The labor ties were diverse, ranging from statutory professionals (in general, nursing technicians, nurses, and ACS) to informal contracts that prevailed among physicians (corporate entities), whose strategy of attraction through public examinations was not effective.

The problem of physician turnover was faced in the remote rural municipalities by conciliating strategies such as the on-duty regime of the EqSF physician in the health centers, with a high cost for the municipalities, competing with the assistance itself in the UBS. The problems concerning attraction and retention differed depending on the location of the UBS, with a disadvantage for rural areas. Since the remote rural municipalities headquarters were close to the regions' headquarters, attraction was facilitated, but also without retention.

The evaluations of the More Doctors Program as a policy to face the difficulty in attracting and retaining physicians varied with regard to the relationship with other professionals, but it was considered successful and fundamental for all the municipalities in the health regions, even for those that didn't join, by changing the dynamics of the physician job market. The departure of Cuban doctors from the More Doctors Program and the dismantling of the policy has increased the difficulty of hiring physicians in the region, especially for rural areas, many of which have remained without a physician for a long time. The municipalities started to lose Brazilian contracted physicians, who preferred to migrate to the More Doctors Program in another municipality due to the stability in the payment of grants.

Box 1 presents a synthesis of the results of the organizational dimension of PHC practices and "expressive phrases" that lend weight to the experiences.

Figure 1 represents a synthesis of the organization of the PHC in the analyzed remote rural municipalities. The position relative to the center – the PHC – means a certain success (the closer it is) and critical points (the further away) for its provision in remote rural municiplaities.

Box 1

Synthesis of results and "expressive phrases" by categories of analysis. Remote rural municipalities, North Minas de Gerais State, Brazil, 2020.

CATEGORIES	OVERVIEW OF RESULTS	EXPRESSIVE PHRASES
Territorialization and customer allocation	• Defined territorial base (ZU/ZR); • Territorialization as a secondary instrument (ZU/ZR); • Access dependent on transportation (ZR), hours of operation (ZR/RU), location (ZR), and presence of physicians (ZR/ZU); • Teams made access more flexible despite the formal allocation (ZU/ZR); • Difficulty in territorial definition of new teams (ZR); • Party-political interference in the definition of the territories of activity.	"*...Teams are heterogeneous, impaired due to logistics, on account of access. We have people who are from one territory and are treated in another. Here in Rubelita, people from the ZR who are part of another EqSF come here" [health centers – 24 hours]. It's about logistics; it's closer. The cars are the ones that facilitate the logistics, a school car that comes and facilitates the transportation. Sometimes it is easier to come from there [rural area] to here [headquarters] than to go to the reference team in the rural area*" (GM, Rubelita).
		"*...There are places that I work in that are 120 kilometers apart, this is all in the wrong direction for health to be of quality. We leave at about 7 a.m. and then, depending on the time we leave, it is a two-hour trip. [I only come back early when I don't have lunch*" (M-ZR, Bonito de Minas).
		"*On days when we have no physician in the unit and the patient needs a medical consultation, he or she goes straight to the health centers. If the patient can't go, the city hall will send a car*" (E-ZR, Indaiabira).
		"*...Here [the coverage area] is very big, because it is close to Vargem Grande, a lot of people come here to medical consultation and they are from Vargem Grande, another municipality*" (M-ZR, Indaiabira).
		"*Those who seek it are the ones who have a difficult access, since we have a rural population that is extremely needy. They are in no condition to arrive by their own transportation to the municipality or to the Family Health Program. So, they take advantage of the school transport and go where they can get to. The point of coming here is just that. If the school transport would go to the region of the Family Health Program, they would go there, but as it comes to the headquarters they end up using this vehicle to also come in search of care*" (GM, Indaiabira).
		"*It depends on where he/she is. After all, if they are in a region where the school bus runs to take them to Rubelita, they go there. There are places that are closer to Salinas [other municipality], and there are places that are closer to us. So, they are very focused on locomotion, on transportation. It varies a lot, there' a major shortage of bus lines in this area*" (M-ZR, Rubelita).
		"*Sometimes, the manager wants to do something, but he can't, because they are tied to a series of issues, these small towns that usually have two candidates, so there's that rivalry, and then you have families with 20/30 people, if you do something that one of those people doesn't like, it jeopardizes 20, 30 votes*" (GR, Bonito de Minas).

(continues)

Box 1 (continued)

CATEGORIES	OVERVIEW OF RESULTS	EXPRESSIVE PHRASES
Types and organization of first contact services	• Most seek first care at the UBS (ZR/ZU); • Existence of health centers with daily and uninterrupted operation (ZU); • Permanence of health centers search for PHC actions and emergencies (ZR/ZU); • Support points in the community for service(ZR); • 8h/day shift – rare in the ZR; • Different labor agreements to attract physicians (ZR/ZU); • Intermittent access, predominance of spontaneous care (ZR); • Traveling teams (ZR); • ACS facilitated access to the UBS (ZU/ZR); • ACS organize the load in support points (ZR); • Different strategies to guarantee access for the population of the ZR.	"*But for whatever situation that is, the procedures are at the health centers. Our difficulty is in relation to this, here in the headquarters, as the population is used to receiving immediate medical attention. Many times the UBS has been performing only educational actions, even though the physician is there every day*" (GM, Indaiabira).
		"*When we go to the support point, the ACS goes from house to house, so we have an idea of who needs assistance. Then we do the home visit, or the car itself goes to the person's home and brings them to the support point and we provide the consultation and care*" (E-ZR, Indaiabira).
		"*...We go once a month (...) then, we use the associations (...) We go to the rural area, we provide medical care, and then we visit [but] the only support we can find there is improvised (...) it is the association's point*" (E-ZU, Bonito de Minas).
		"*We travel from Monday to Thursday; we are on a schedule. We schedule, for example, (...) to assist people with high blood pressure, diabetes, immunizations, and home visits. So, in one day we do all this. (...) that, communicating with the ACS (...). The physician, too, comes, he has his physician's days to come (...). There is a support point, there is a dentist's chair there, and he goes and does it there, but the population also comes here [headquarters]. [The physician] travels twice a month to the rural area*" (E-ZR, Bonito de Minas).
		"*...It has to be the way the population wishes, because otherwise they won't vote for me. Doing something that the population doesn't want (...). This is a very strong political issue, because as you know, the towns are all small, usually when the time comes, next year, there's a time when those who are in the city hall are already starting to suffer the effects of next year's elections, that's how it is, you have to serve these people*" (GR, Bonito de Minas).
Interprofessional performance and collaboration	• Complete teams, including oral health, and no uncovered areas (ZR/ZU); • NASF support (ZR/ZU); • Interleaved consultations between physicians and nurses – for attention to the programs (ZR/ZU); • Medical work centered on the individual procedure (ZR/ZU); • ACS's work is fundamental in organizing the team's actions (ZR/ZU); • ACS assisted in the management and informational coordination of care (ZR/ZU); • ACS overloaded with managerial demands to the detriment of community surveillance (ZR/ZU); • ACS measures blood pressure; • NASF developed clinical and collective actions (health academy, School Health Program and groups).	"*...It doesn't seem that I was a Family Health Program doctor, it seems that I am an emergency room doctor, since I only solve the blood pressure problem and dismiss the patient, there is no continuity, since there is no way to provide care every day for these patients*" (M-ZR, Bonito de Minas).
		"*...There is a lot of need for physicians and the nurses and other professionals are more in charge of education and meetings. I even schedule it, but the adhesion is low*" (E-ZU, Indaiabira).
		"*...Seeks the ACS, which reports to me. But in case of an emergency, they call and the car goes to pick it up, depending on the emergency, it comes to the unit, but the access is through the ACS, which informs us*" (E-ZR, Bonito de Minas).
		"*...Diabetes, high blood pressure and dyslipidemia patients are routed to nutrition for diet changes and those with low back pain are sent to physical therapy. So, it is a very good association between us*" (M-ZR, Bonito de Minas).

(continues)

Box 1 (continued)

CATEGORIES	OVERVIEW OF RESULTS	EXPRESSIVE PHRASES
Interprofessional performance and collaboration		"*I perform the visit with the physician (...). So, everything is shared like this: prenatal care, high blood pressure, diabetes. But not the preventive, since I am the one who does it (...) if I have any doubts, I tell him, or talk to him. Sometimes he comes to my office*" (E-ZR, Rubelita).
		"*All the registration of the expectant mother, the first consultation is with me. But it is one appointment with me and one with the physician. Prenatal care is split. Childcare is all me. I am also the only one who does the preventive. Now, the home visit are with me and the physician*" (E-ZU, Indaiabira).
		"*All ACS measure blood pressure. Although they are not specialized yet, right, because they should have a degree, but almost one hundred percent of our workers are nursing technicians*" (GM, Indaiabira).
Technical, material and human resources	• Provision of transportation for professionals (ZR); • Health transportation for users – emergencies and elective consultations in other municipalities (ZR/ZU); • School transportation (ZR); • Direct disbursement and payment of unreasonable amounts by the population for the acquisition of a means of road travel (ZR); • The ACS were not granted support to cover their transportation costs; • The service network was not connected by electronic medical records; • User as the sole bearer of clinical information; • Incipient implementation of Telehealth; • Connectivity problems; • Problems in attracting and retaining physicians; • Turnover of physicians, especially in the ZR; • More Doctors Program has stabilized the physician job market in the region; • Exit of Cuban doctors from More Doctors Program again made it difficult to settle. Exit of Cuban doctors from More Doctors Program again made it difficult to retain physicians.	"*There is no [mass transportation in this area], there is only school transportation that ends up giving people a ride*" (E-ZR, Indaiabira).
		"*There is a bus [for treatment outside the municipality] Monday, Wednesday and Friday. Sometimes it is necessary for the [unit] car to go*" (E-ZR, Rubelita).
		"*The SAMU here is excellent, if it wasn't for them, the impoverished people here would die, but they send all kinds of cars! (...) it's been rolling for two days and that's it, the car breaks down and there's no SAMU*" (M-ZR, Bonito de Minas).
		"*...Many cannot afford to do it because it is too expensive to come and, unfortunately, their earning power consists of a pension and Brazilian Income Tranfer Program. They pay up to BRL 120 just to come by car*" (E-ZR, Bonito de Minas).
		"*...the patient [who lives far away]: 'I'm dizzy, I'm going to spend 300 reais to have my blood pressure measured'. They won't spend money to come here to have their blood pressure measured, they will take some tea and stay with high blood pressure anyway*" (M-ZR, Bonito de Minas).
		"*So, this is a physician's problem not only here in the municipality, not because they or we want them to, but at the end of the year, the physicians take those specialization exams and leave. This turnover occurs for this reason. Usually nurses stay a long time*" (E-ZR, Bonito de Minas).
		"*In the team there is no turnover, as we are all permanent employees, the dentist, me, the technicians, the ACSs. There was only one professional from NASF, a psychologist who left and one who had already worked with us joined us. (...) Real change, only a physician*" (E-ZU, Indaiabira).
		"*The More Doctors Program issue helped a lot. Due to the fact that it was possible to retain a physician in an area where no other physicians would stay, then I was able to keep a Cuban for three years in a place where other physicians would not stay, except for an exorbitant salary that the municipality would not be able to pay. So it helped the municipalities in that sense, because it managed to bring assistance to remote places*" (GR, Bonito de Minas).

(continues)

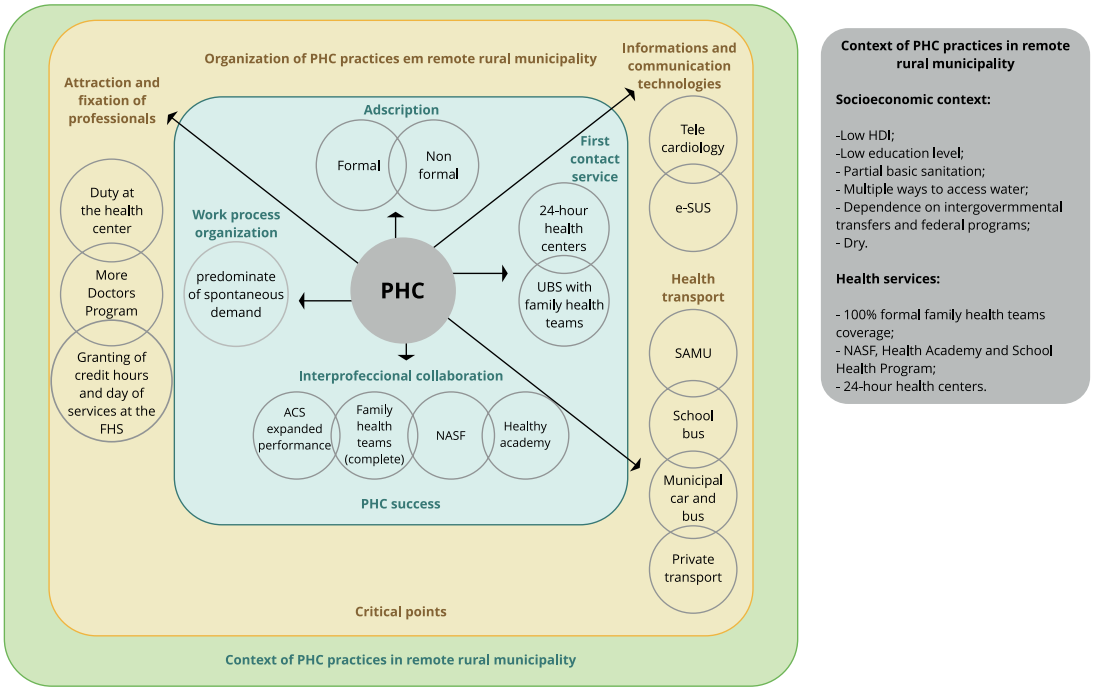
Box 1 (continued)

CATEGORIES	OVERVIEW OF RESULTS	EXPRESSIVE PHRASES
Technical, material and human resources		*"Without More Doctors Program it was difficult for us, we had four physicians herethat were perfect [not More Doctors Program]. Each one in his unit working 40 hours a week, every day of the week, perfect. We stayed here for two years, a dream, like Switzerland, then came the new proposal of Mais Médicos, then these two physicians left"* (GM, Indaiabira).
		"...We stayed six months without physicians, [the physician we had left] to join the More Doctors Program. We had two excellent professionals in my team and in Pintado's team, and they decided to go to the More Doctors Program because of the better salary and stability. So, they left the municipality to go to More Doctors Program" (E-ZU, Indaiabira).

ACS: community health workers; E: nurse; EqSF: family health teams; M: physician; GM: municipal manager; GR: regional manager; NASF: Family Health Support Center; PHC: primary health care; SAMU: Mobile Emergency Medical Services; UBS: basic health unit; ZR: rural area; ZU: urban area.
Source: prepared by the authors from the interviews.

Figure 1

Synthesis of the organization of the primary health care (PHC) in the analyzed remote rural municipalities, North Minas de Gerais State, Brazil, 2020.



ACS: community health workers; FHS: family health strategy; HDI-M: Human Development Index-Municipality; NASF: Family Health Support Center; SAMU: Mobile Emergency Medical Services; UBS: basic health unit.
Source: prepared by the authors.

Discussion

In this paper, the areas for action of the EqSF are defined based on criteria of formal and informal allocation of customers, meeting the needs of the territories. It is observed that the gateway function is shared between the UBS and the health centers, with a predominance of spontaneous demand care. In a positive way, the interprofessional collaboration is leveraged by the action of NASF and by the shared work developed in the Health Academy Program, as well as an expanded action is noticeable in relation to the scope of practice of the ACS. On the other hand, the computerization of the UBS is incomplete and the use of telehealth is quite residual, not having been incorporated into the work flow in the FHS. Roughly speaking, local and federal strategies for the provision and retention of physicians are mixed, with varying degrees of success. In addition, in order to provide access to the APS, especially for the rural areas of the remote rural municipalities, complex transportation arrangements are made possible, sometimes by the municipal management, sometimes by the users themselves.

Regarding the background aspect, the results show that under the remote rural municipalities inequalities are at work that affect the organization and sustainability of the PHC. These are more vulnerable territories than the national average, with significant differences in living conditions between the "headquarters" and the "rural zone". According to managers and professionals, rural areas have worse socio-sanitary indicators and greater territorial dispersion, factors that influence the provision of health care [12], requiring differentiated patterns of organization of the EqSF so as not to widen or sustain inequalities.

The FHS achieved full coverage, even though it did not guarantee accessibility, a result found in other rural scenarios [9]. The existence of "support points" is a strategy to make the healthcare in these locations viable, even if in improvised and inadequate facilities, and without funding policies [7].

In a macro-region of great vulnerability, the supply of high complexity is dependent on the private network contracted to the SUS, an obstacle to the management of integral healthcare [15]. In the three municipalities, the headquarters do not present great distances in relation to the headquarters of the health region, nor severe climate conditions that impede the transit of the population, a different scenario from other remote rural municipalities in the country [7,9]. Intermunicipal Health Consortia appear as a strategy for provision of medical specialties, but unlike other consortial arrangements [16], there was no State or Federal co-funding, which worsened the possibilities of providing comprehensive healthcare by the remote rural municipalities.

In this specific context, regional arrangements for organizing specialized back-up, supported by health transportation, seem to be suitable, which may not be sufficient in other remote realities. Still, for populations in rural areas, the financial barriers to afford transportation are more significant, requiring specific measures, such as available on-call cars or some form of reimbursement/payment for private cars commonly used by the population. The absence of public transportation for rural areas mitigates the access of these populations to a set of public policies [17], in addition to exposing them to unsafe modes of transportation.

In relation to the organizational aspects, formal registration is a secondary instrument, since it does not reflect the different occupation modes and therapeutic itineraries. As the territorial dispersion in rural areas is expressive, the availability of transportation presents itself as the most critical resource to condition the real flow of users, for whom there seemed to be good receptivity and understanding on the part of professionals in the care of spontaneous demand, a result not found in other papers [9].

The FHS has changed the pattern of seeking first contact services in Brazil [18] and has also been found in the surveyed remote rural municipalities. However, the sharing of this function with the health centers is well-known, units with a long tradition in Minas Gerais State, whose sustainability, especially in medical care, is not assured due to the financial burden on the municipalities. Although in the three cases there are no small-sized hospitals, the health centers seem to have functions and problems similar to those of such units regarding the difficulties to respond in a problem-solving manner to healthcare demands and the lack of integration with the UBS [19]. In the cases, the maintenance is justified by the recognition of the barriers to access to PHC, the territorial characteristics and displacement dynamics of rural populations, and political costs of its suppression, as also occurs in relation to small-sized hospitals [19]. National policies such as "Health on the Spot" [20] do not serve

the remote rural municipalities, which still could be provided with some resources directed to the maintenance of the health centers, even though from the care and quality point of view they do not represent the most adequate option.

The challenge of balancing care for spontaneous and scheduled demand is present in many urban centers and rural areas [10], but in remote rural municipalities the former prevails. Although the end result is not, in fact, continuing healthcare, it allows for immediate contact with a professional. This seems to be an intrinsic issue in remote areas, since the difficulty of access imposes on the PHC organization to deal with the spontaneous demand of those in transit at the municipal headquarters. Studies show that first-contact access is associated with same-day care and longer family physician hours [13]. Even if the presence of the physician was not guaranteed for 40 hours in the EqSF, especially in rural areas, efforts were made to ensure timely access, also by sharing the monitoring of priority groups with nurses, with intermittent consultations. This is a strategy to minimize the lack of care in case of vacancy of the medical professional, recurrent in rural settings [21].

The most strongly interprofessional component lies in the performance of the NASF/Health Academy Program. Municipalities have joined national policies to increase the scope, support, and increment of health promotion from such devices. The greater the dispersion, lower population density, and longer travel times, the greater the need for integrated and comprehensive PHC care provision, with incorporation of areas such as, for example, mental health [3,22]. For rural municipalities, dependent on the federal government's subsidies, the lack of funding for NASF poses a concrete threat to interprofessional activities.

The ACS act on several fronts, from mediating access to the UBS to covering communication gaps, which are more frequent in rural areas. Professionals and managers report an overload of duties to the ACS, also found in other papers [23]. In all three cases, blood pressure measurement is part of the scope of practice, positively evaluated by managers and professionals. Although controversial due to several arguments [24,25], in a rural setting and facing the vicissitudes in timely access, such practice should be analyzed in the light of the production of healthcare, even serving to disseminate safe information for disease prevention and health promotion.

Another important finding refers to the incipiency of telehealth due to the difficulties of connectivity and computerization of the UBS, when the justification should be exactly the opposite: it is precisely because they are rural remote municipalities, dispersed and with long distances to be traveled by users, that telehealth strategies are indispensable, urgent and part of the solution to ensure more comprehensive care [2].

Despite all the advances in the production of care via PHC in the remote rural municipalities, there are real limitations to sustainability through discontinuous provision of professionals. This is a worldwide problem for rural and peripheral areas [26,27]. Continental countries, such as Australia and Canada present PHC organizational models specific to such contexts [28,29]. In Brazil, in turn, the only federal policy that addressed, even partially, such problem – the More Doctors Program – was discontinued and mischaracterized. The new federal policy, while not responding to the gaps in the More Doctors Program [30], was not effectively implemented and again left the municipalities adrift, responsible for attracting and retaining physicians, which proves unsustainable for maintaining the APS in its FHS model.

This paper considered the experience of managers and professionals, whose perceptions and evaluations proved to be synergistic regarding the organizational characteristics of the PHC. However, the experiences of other key players, such as users, were not included. The three cases, belonging to the North Minas Gerais territory, present unique and distinct characteristics from other remote rural municipalities in Brazil.

Conclusions

Devices and actions implemented from successive national primary health care policies have had positive effects on the organization of the PHC, making it more accessible and giving direction to the model. At the same time, initiatives and informal arrangements, undertaken by municipal administrations and EqSF, are evidenced in the organizational aspect of the APS, seeking to account for the unique reality of the remote rural municipalities and the gaps not addressed by federal policies, despite the great difficulties for maintenance and sustainability.

This paper reveals that remote rural municipalities are not a single unit. Headquarters and rural areas are unequal in relation to living conditions and need different organization and resources for PHS provision. In any case, the paper ratifies the undeniable need for maintenance and improvement of federal policies for the provision and training of physicians to work in the remote rural municipalities; co-funding for transportation, essential to ensure access to health care in rural areas; training of the EqSF (training and infrastructure) to undertake a greater role in emergency care, linked with the health centers; maintenance of federal funding for NASF teams in a scenario that requires greater problem-solving and with few facilities for health promotion; effectiveness of telehealth in its various functions; and appreciation of the expanded scope of practice of nurses and ACSs, which already occurs.

In an unequal, continental, federative country that faces the vicissitudes arising from political culture, one of the challenges for the formulation of national and state policies is the balance between induction and recognition of local realities and initiatives, which, in the cases researched, are the only ones to recognize the distinct needs of the population in the remote rural municipalities's headquarters and rural areas, with partial and insufficient answers. Besides this, the recognition of the worst living conditions, of mobility that characterize rurality scenarios, requires the coordinated action of several policy sectors, which are not effectively covered by district/municipal policies, as the experience of many countries shows.

Finally, understanding the forms of use of space and social life that define rural healthcare itineraries, the context of PHC practices and organizational context represents an important step towards the improvement and implementation of actions and policies that guarantee the right to healthcare for its populations.

Contributors

P. F. Almeida, A. M. Santos, L. M. S. Cabral and M. C. R. Fausto participated in the conception of the study, interpretation of the data, writing of the manuscript and approval of the final version.

Additional informations

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Resumo

Analisam-se as características estruturais da atenção primária à saúde (APS), em suas dimensões de contexto e organizacional, em municípios rurais remotos da Região do Norte de Minas Gerais, Brasil. É um estudo de caso com abordagem qualitativa, utilizando-se 21 entrevistas semiestruturadas com gestores e profissionais das equipes de saúde da família (EqSF) e dados secundários. Para a dimensão de contexto, os resultados mostram que sob os municípios rurais remotos atuam condicionantes socioeconômicos que afetam a organização da APS e vulnerabilizam a população, sobretudo as das zonas rurais dos municípios rurais remotos. Em relação à dimensão organizacional, as principais características são: coexistência de adscrição formal e informal de clientela; duas modalidades de serviços de primeiro contato (unidades básicas de saúde – UBS, e centros de saúde 24 horas); priorização do atendimento à demanda espontânea; forte atuação do Núcleo de Apoio à Saúde da Família para o desenvolvimento de atividades de promoção e prevenção; escopo ampliado de práticas do agente comunitário de saúde; garantia parcial de transporte para os usuários; informatização parcial das UBS com a implantação do e-SUS; telecardiologia; e o Programa Mais Médicos. Este estudo revela que municípios rurais remotos não são uma unidade, visto que sede e zona rural são desiguais em relação às condições de vida e carecem de organização, políticas e financiamento específicos para a garantia do acesso à APS. O que se observa, com todas as limitações, são iniciativas municipais com grandes dificuldades para a manutenção e a sustentabilidade e, por vezes, sem a necessária correspondência à utilização do espaço e da vida social que definem os itinerários sanitários rurais.

Atenção Primária à Saúde; Saúde da População Rural; Acesso aos Serviços de Saúde

Resumen

Se analizan las características estructurales de la atención primaria a la salud (APS), en sus dimensiones de contexto y organizativas, en municipios rurales remotos de la Región del Norte de Minas Gerais, Brasil. Se trata de un estudio de caso con abordaje cualitativo, utilizándose 21 entrevistas semiestructuradas con gestores y profesionales de los equipos de salud de la familia (EqSF) y datos secundarios. Para la dimensión de contexto, los resultados muestran que bajo los municipios rurales remotos actúan condicionantes socioeconómicos que afectan la organización de la APS y vulnerabilizan a la población, sobre todo a la de las zonas rurales de los municipios rurales remotos. En relación con la dimensión organizativa, las principales características son: coexistencia de adscripción formal e informal de pacientes; de dos modalidades de servicios de primer contacto (unidades básicas de salud – UBS, y centros de salud 24 horas); priorización de la atención a la demanda espontánea; fuerte actuación del Núcleo de Apoyo a la Salud de la Familia para el desarrollo de actividades de promoción y prevención; alcance ampliado de prácticas del Agente Comunitario de Salud; garantía parcial de transporte para los usuarios; informatización parcial de las UBS con implantación del e-SUS; telecardiología; y el Programa Más Médicos. Este estudio revela que los municipios rurales remotos no son una unidad, visto que sede y zona rural son desiguales, en relación con las condiciones de vida, y además carecen de organización, políticas y financiación específicas para la garantía del acceso a la APS. Lo que se observa, con todas las limitaciones, son iniciativas municipales, con grandes dificultades para su mantenimiento y sostenibilidad y, a veces, sin la necesaria correspondencia con la utilización del espacio y vida social que definen los itinerarios sanitarios rurales.

Atención Primaria de Salud; Salud Rural; Accesibilidad a los Servicios de Salud

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