Family health: limits and possibilities for an integral primary healthcare approach in Brazil

Saúde da família: limites e possibilidades para uma abordagem integral de atenção primária à saúde no Brasil

Ligia Giovanella 1 Maria Helena Magalhães de Mendonça ¹ Patty Fidelis de Almeida 1 Sarah Escorel 1 Mônica de Castro Maia Senna 2 Márcia Cristina Rodrigues Fausto 3 Mônica Mendonça Delgado 4 Carla Lourenço Tavares de Andrade 1 Marcela Silva da Cunha 1 Maria Inês Carsalade Martins 1 Carina Pacheco Teixeira 5

Abstract The article analyzes the implementation of

Key words Primary health care, Integration, Intersectoriality

the Family Health Strategy (FH) and discusses its potential to guide the organization of the Unified Health System in Brazil, based on the integration of FH to the health care network and intersectorial action, crucial aspects of a comprehensive primary health care. Four case studies were carried out in cities with high FH coverage (Aracaju, Belo Horizonte, Florianópolis e Vitória), using as sources: semistructured interviews with managers and surveys with health care professionals and registered families. The integration analysis highlighted the position of FH Strategy in the health services network, the integration mechanisms and the availability of information for continuity of care. Intersectoriality was researched in relation to the fields of action, scope, sectors involved, presence of forums, and team initiatives. The results point to advances in the integration of FH to the health care network, strengthening basic services as services that are regularly sought and used as a preferential first contact services, although there are still problems in the access to specialized care. The intersectorial initiatives were broader when defined as integrated municipal government policy for the construction of interfaces and cooperation between the diverse sectors.

⁴ Secretaria Municipal de Saúde de Mesquita, Rio de Janeiro.

¹ Núcleo de Estudos Político-Sociais em Saúde,

Planejamento em Saúde, Escola Nacional de Saúde

Pública Sérgio Arouca.

Av. Brasil 4036/1001. Manguinhos 21045-210

Rio de Janeiro RJ.

Federal Fluminense

Cruz.

Fundação Oswaldo Cruz.

giovanel@ensp.fiocruz.br

Centro de Estudos Sociais Aplicados, Universidade

³ Escola Nacional de Saúde

Pública, Fundação Oswaldo

Departamento de

Administração e

5 Núcleo de Estudos Político-Sociais em Saúde, Escola Nacional de Saúde Pública, Fundação Oswaldo Cruz.

Resumo O artigo analisa a implementação da Estratégia Saúde da Família (SF) e discute suas potencialidades em orientar a organização do SUS no Brasil, a partir da análise da integração da SF à rede assistencial e atuação intersetorial, aspectos cruciais de uma atenção primária abrangente. Foram realizados quatro estudos de caso de municípios com elevada cobertura por SF (Aracaju, Belo Horizonte, Florianópolis e Vitória) tendo como fontes: entrevistas semi-estruturadas com gestores e inquéritos com profissionais de saúde e de famílias cadastradas. A análise da integração destacou a posição da Estratégia SF na rede assistencial, os mecanismos de integração e a disponibilidade de informações para continuidade da atenção. A intersetorialidade foi pesquisada quanto aos campos de atuação, abrangência, setores envolvidos, presença de colegiados, e iniciativas das equipes. Os resultados apontam avanços na integração da SF à rede assistencial, propiciando o fortalecimento dos serviços básicos como serviços de procura regular e porta de entrada preferencial, todavia permanecem dificuldades de acesso à atenção especializada. As iniciativas intersetoriais foram mais abrangentes quando definidas como politica integrada do governo municipal para a construção de interfaces e cooperação entre os diversos setores. Palavras-chave Atenção primária à saúde, Integração, Intersetorialidade

Primary Health Care (PHC), as a strategy to organize the health care system to cater to the needs of the population, requires understanding health care as a social right and confronting social determinants in order to promote health. A good organization of primary care services contributes to improved care with positive impacts on the health of the population and on the efficiency of the system^{1,2}.

In Latin America, in the context of the structural adjustments of the 1980s, the selective approach to primary care was advocated by multilateral agencies, with a minimal service package, usually low quality, being implemented everywhere³. Recently, with the election of center-left governments, regional governments have been developing policies to organize services and promote equity in health, renewing a comprehensive PHC scope⁴.

With the regulation of the Unified Health System (UHS), based on the principles of universality, equity and integrality and on the organizational directives of decentralization and social participation, in order to differentiate it from the selective PHC conception, the term basic health care began to be used in Brazil. This was defined as a set of individual and collective actions on the first level, directed at promoting health, preventing diseases, treatment and rehabilitation.

The Family Health Program, initially aimed at extending coverage focused on areas of higher social risk and implemented from 1994 as a parallel program that was "limited, good for the poor and poor like them" – gradually became central to the governmental agenda, becoming a structuring strategy for municipal health care systems and a PHC model for the country.

In 2006, the National Basic Care Policy, agreed upon by federal managers and representatives from state and municipal spheres in the Tripartite Intermanagers Commission, broadened the scope of basic care in the country and reaffirmed FH as a priority strategy and a substitutive model for basic care organization. A preferential first contact point and an entrance for a network of resolutive services of universal access, basic care must coordinate care in the services network and achieve integrality among its diverse dimensions⁶.

Stimulated by federal financing incentives, currently FH is present in 94% of towns with 29 thousand teams implemented and estimated coverage of 48% of the country's population (92 million). However, a look at the experiences underway reveals great diversity in the assistential models with respect to the immense inter and intra regional disparities and the social inequalities that mark Brazilian reality. Therefore, broader coverage has not always corresponded to the change in the assistential

model advocated by the strategy^{7,8}.

This article presents part of the results of the research that aimed to analyze the implementation of the FH strategy, focusing on integration with the health care network and with intersectorial action in four large urban centers, to discuss the potential of FH as a comprehensive primary health care strategy. The axes of the analysis are integration and intersectoriality, fundamental elements of a comprehensive PHC.

Implementing a comprehensive or integral conception of primary care implies constructing health care systems guided by PHC, connected by a network, centered on the user and responding to all the population's health needs. Thus the integration of the system is a condition to counteract a selective PHC conception as a parallel program with a restricted low-quality service package, directed at the poor⁴. And intersectorial action is necessary for PHC not to be restricted to the first level, but to be a base and reference for all care, covering biological, psychological and especially social aspects, relating to collective problems on the diverse levels of determination of health-illness processes, promoting health.

Problems related to the integration of the system and the coordination of care have been receiving wide attention in recent health care system reforms, with initiatives being taken to strengthen PHC⁹. The proposals for strengthening the primary care position in the system are a result of the recognition that the health services system is fragmented and that chronic illnesses are prevalent, demanding greater contact with health care services and other social equipment in a context where there is pressure for more efficiency^{10,11}.

Service network integration from the PHC perspective involves a regularly sought of health services, PHC services as a preferential first contact and gate to the health system, guaranteed access to the various care levels through strategies that join the actions and services needed to solve less frequent and more complex¹² needs with formalized reference mechanisms and actions coordinated by the PHC team to guarantee continuous¹³ care. Integration, coordination and continuity are inter-related and interdependent processes expressed in different scopes: in the system, professional action and the experience of the patient to be cared for.

For its part, intersectorial action is necessary for a broad PHC, because as proposed in Alma Ata, PHC involves the understanding of health as inseparable from economic and social development, signifying the need to confront the social determinants of the health-illness processes, which requires connection with other public policy sectors¹⁴.

Intersectorial action seeks to overcome the fragmentation of public policies and is understood as the interaction between various sectors in planning, execution and monitoring of interventions to confront complex problems and the needs of population groups¹⁵. In health care, intersectorial action is essential to affect the social determinants of the health-illness process and promote health. The health results (both final and intermediate) reached by intersectoriality are more effective than those the health sector would attain on its own^{16,17}. From the PHC perspective in the municipal scope, intersectorial action is processed on various levels: in the area's community action, in the organization of Municipal Health Office and in the connection of municipal policies.

Intersectorial action is planned within FH. This FH team attribution is reaffirmed in the 2006 National Basic Care Policy, which in its work process lays out the "development of intersectorial actions, integrating social projects and related sectors, directed at promoting health" ⁶.

Methodology

This article discusses part of the results of the research that studied four cases of FH Strategy implementation in Brazilian large urban centers. The case studies performed use a research strategy based on quantitative and qualitative methodologies and converging information sources which were combined to answer the investigation's questions^{18,19}.

The cities were purposely selected so as to choose consolidated experiences. The selection criteria and the characteristics of the selected cities – Aracaju, Belo Horizonte, Florianópolis and Vitória – are presented in Table 1.

Integration and intersectoriality were analyzed within the scopes of: health care system organization, professionals' work process, and the care received by families. In the four large cities, information was gathered from three sources: municipal managers, through interviews (77); FH team professionals, with self-applied questionnaires (1,336), and registered families, with structured questionnaires applied in their homes (3,312 families) (Table 2).

For the selection of registered families, a conglomerate sampling plan was drawn up, with three selection stages: FH team as primary sampling unit, community health agent (CHA) as secondary unit, and as elementary unit, the registered family. The field research was carried out in the period from May to September, 2008.

This article brings together the analysis of selected indicators, comparing study results with managers, professionals and families, using two axes for analysis: health care network integration and intersectorial action.

For integration analysis, different dimensions were investigated. In the health care system organization dimension, the implementation of integration instruments were identified and examined, such as specialized regulation centers, waiting time monitoring and service strategies for spontaneous acute

Table 1. Selection criteria and characteristics of the towns studied, 2007.

Criteria/ Characteristics	Aracaju	Belo Horizonte	Florianópolis	Vitória
Year of FH team implementation – Time of implementation minimum of 5 years ²⁰	1998	2002	1998	1998
FH team population coverage> 50%	86.7%	69.6%	71.3%	60.1%
Number of implemented FH team*	127 (128)	484 (504)	84 (84)	56(62)
Number of BHU	50	145	48	30
Presence of previously identified innovating practices**	Receptiveness	Receptiveness Network Integration	Practice field for degree formation	Intersectoriality QIA Adhesion
Municipal population 2007	505,286	2,399,920	406,564	317,085
Country region	Northeast	Southeast	South	Southeast
Qualification in Full Management of Municipal System	Yes	Yes	No	No

Source: Nupes/Daps/Ensp/Fiocruz - Family Health Research, four case studies, 2008.

^{*} In parentheses, the greatest number of FH teams registered in the BCIS (Basic Care Information System) until February 2008. Other data, December 2007.

^{**} Based on interviews with federal managers.

demand. In the FH team work processes, the use of integration instruments, and professionals' perception on first contact service and the guarantee of access to specialized care were examined. In the users' care experience, the existence of a regularly-sought service and the constitution of the FH Unit as a first contact service were verified.

For the intersectoriality analysis, intersectorial connection strategies developed in the cities and the role played by FH Strategy were identified. The intersectorial action of the municipal executive branch was studied from the perspective of the Municipal Health Office and policy makers and managers of other offices identified as being more connected with the Municipal Health Office. The analysis dimensions given priority were: fields of action; scope of intervention; sectors involved at local levels (FH teams) and central levels (Municipal Health Office and other offices); existence and functioning of associated forums; and themes/problems of intersectorial intervention.

The research was financed by the Basic Care Department of the Brazilian Ministry of Health's Health Care Office.

Results

FH integration to the health care network

The results of the analysis of FH integration to the health service network were organized into two fields: the Strategy's position in the network and the integration mechanisms, emphasizing the use of information technologies.

The FH Strategy's position in the assistential network

In the four cities studied, the FH Strategy was adopted with a view to changing the basic care as-

sistential model, placing the FH team as first contact service, aiming to constitute an integrated health services system (Table 3).

The cities of Aracaju, Belo Horizonte, Florianópolis and Vitória implemented FH teams in their traditional basic units and constructed new units for FH implementation in areas without supply. There is an effort to overcome the doubling of assistential models in basic care, in an attempt to transform health care centers into model FH units. In some of the units, basic care specialists function as support professionals for the health care center's FH teams. For the policy makers and managers, this measure allowed a common organization logic for basic care to be defined, preventing clashes between different assistential proposals (Table 3).

The regionalization of the municipal system is also a strategy to guarantee access to the specialized care and network integration present in the four cities, investing in the formation of medical specialization centers and regionalized emergency care services to offer support in medium complexity to the basic care units in the region (Table 3).

Primary care services have been taking shape as an important source of regular care and a preferential first contact service in the four cities studied. More than 70% (85% in Belo Horizonte) of the registered families seek the same health service for health care assistance or prevention. Out of these, the following indicated the health care center and/or FH unit as their first contact and regularly-sought service: 75% in Belo Horizonte, 70% in Vitória, 70% in Aracaju and 50% in Florianópolis (Table 3).

Lower proportions of inhabitants who were ill in the last 30 days reported having sought care in FH units or health centers, with more than 50% being reached only in Belo Horizonte, a town where there are diverse strategies for connecting spontaneous acute and programmed demand care and where spontaneous acute demand is daily cared. The lowest proportion was seen in Florianópolis (28%),

Table 2. Questionnaires with professionals and families by town.

Questionnaires	Aracaju	Belo Horizonte	Florianópolis	Vitória	Total
Doctors	56	72	61	35	224
Nurses	66	75	70	50	261
Nursing Aides/Technicians	60	89	72	43	264
ACS	150	170	140	127	587
Total professionals	<i>332</i>	406	343	<i>255</i>	1,336
Families	800	900	789	822	3,312
Total respondents	1,132	1,306	1,132	1,077	4,647

Source: Nupes/Daps/Ensp/Fiocruz - Family Health Research, four case studies, 2008.

where part of the FHU care for non-priority groups just once a week.

FH team professionals also recognize basic care services as a preferential first contact service. More than 80% of doctors and nurses in the four cities agreed with the statement "The population seeks the FH unit first when it needs health care" (Table 3).

Network integration mechanisms

In the four towns, health services network integration to guarantee specialized care is a concern present in policy makers and managers' actions and speeches. One of the main strategies identified to integrate basic care to medium complexity in the four cases was the implementation of computerized specialized care regulation centers (Table 4).

Table 3. Position of the Family Health Strategy in the health services network, according to professionals, policy makers and users, four large urban centers, Brazil, 2008.

Indicators	Aracaju	Belo Horizonte	Florianópolis	Vitória
Policy makers				
Proposed preferential first contact service	FHS	FHS	FHS	FHS
Implementation of the FH teams in the pre-existing Health Centers	FH team in the health centers	FH team in the health centers	FH team in the health centers	FH team in the health centers
Medical professionals with basic specializations as support to FH team	Yes	Yes	Yes	Yes
Strategies for spontaneous demand care	Admission and daily care	Admission and daily care	Admission and daily care	Admission and daily care
Regionalization of the municipal health care system	Eight healh care regions	Nine health care regions	Five health care regions	Six health care regions
Regionalization of emergency care services	Partial	Yes	Partial	No
Regionalization of polyclinics/ specialization centers	Partial	Yes	Partial	Yes
Families				
Percentage of registered families that seek the same health care service for health assistance or prevention	76.4	85.0	73.8	75.6
Percentage of families that indicate the Health Care Cente of Family Health Unit as a service they regularly seek ¹	er			
Health Center (HS)	32.9	41.0	30.6	31.8
Family Health Unit (FHU)	36.7	$33.6 \\ 74.6$	19.7 50.3	$37.4 \\ 69.2$
Total HS + FHU	69.6			
Percentage of inhabitants who were ill in the last 30 day cared for at the Health Center of Family Health Unit $^{\rm 2}$	rs 41.1	52.4	28.1	47.8
Professionals				
Percentage of doctors and nurses who strongly agreed/ agreed with the statement "The population seeks the Family Health Unit first when it needs health care"	92.6	89.1	87.8	83.5

Source: Nupes/Daps/Ensp/Fiocruz – Family Health Research, four case studies, 2008.

¹ Families who regularly seek a service: n= 611 em Aracaju, n = 763 in Belo Horizonte, n= 588 in Florianópolis, n = 623 in Vitória. In Aracaju, Belo Horizonte and Florianópolis the high proportion of users who indicated the Health center as a service they regularly seek results from not knowing the FH denomination for their neighborhood's HC, as the implementation of FH teams was mostly carried out in the pre-existing units known as health centers.

² Ill inhabitants who sought health services in the last 30 days: n=214 in Aracaju, n=248 in Belo Horizonte, n=203 in Florianópolis, n= 188 in Vitória.

Table 4. Indicators for Family Health Strategy integration to the health care network, four large urban centers, 2008.

Indicators	Aracaju	Belo Horizonte	Florianópolis	Vitória
Specialized appointment regulation tool	TAS – UHS Care Terminal	SISREG	SISREG	SISREG
Waiting times monitoring	Partial	Local and central	Local and central	Local and central
Percentage of doctors and nurses who report the existence of a center for scheduling specialized	90.2	99.3	89.3	92.9
appointments				
Percentage of doctors who say they are able to				
always/in most cases carry out scheduling for				
other services				
Specialized clinics	42.9	80.6	47.6	71.5
Diagnosis and therapy service	37.5	55.5	42.7	42.9
Maternity	57.2	86.1	75.4	74.3
Internment	28.5	33.3	24.6	25.7
% of doctors who estimate the waiting time for	44.6	61.1	81.8	34.3
patients referred for specialized appointments to be 3 months or more				
% of doctors and nurses who say one of the main	81.1	91.8	91.6	89.4
problems for integration is: waiting times that				
hinder adequate access to specialized and hospital				
attention				
Implementation of electronic medical records at the FH Units	No	Yes	Yes	No

Source: Nupes/Daps/Ensp/Fiocruz - Family Health Research, four case studies, 2008.

Belo Horizonte, Florianópolis and Vitória opted for SISREG, an online information system provided by DATASUS/MS, to manage and operate regulation centers, from the basic care network to the specialized and hospital networks, aiming for greater flow control and optimization of resource use. Aracaju implemented the UHS Care Terminal, linked to the UHS card, as its pilot-project.

The implementation of SISREG in the health centers made it possible to schedule examinations and specialized consultations for procedures with sufficient supply, to define clinical priorities and to monitor waiting times. When the patient is registred in the electronic schedule system, the priority for care is defined based on a classification of high, medium or low risk according to diagnosis. The computerized system allows the FH team to follow the user's path, so "It is in basic care that treatment is coordinated", as a local manager in Vitória pointed out. Local managers also mentioned as results of SISREG implementation: a lower number of absences to specialized consultations, reduced lines and waiting times, the possibility to redistribute quotas among health centers, supply contracting based on demand, analysis of forwardings and greater impartiality in schedule control.

Belo Horizonte stands out among the network connection initiatives. Apart from the computerized regulation system, the Municipal Health Office encourages the creation of regulation commissions at the health centers, with criteria for establishing priorities in ascending order coming from the health center.

The strategies for network integration and regulation of access to specialized care informed by the policy makers and managers are confirmed by the professionals. The vast majority of doctors and nurses in the FH teams in the four cities recognize the existence of centers for scheduling specialized consultations (Table 4).

The effectiveness of the integration tools is conditioned by supply. The managers in the four cities report insufficient supply in the municipal network to meet the demand for specialized care, producing waiting lines.

How the professionals perceived scheduling ease and service agility was taken as an indicator for guaranteed access to specialized care. The ease to schedule medium complexity services differed among the cases studied. Only 43% and 49% of doctors in Aracaju and Florianópolis were able to always or almost always schedule, while in Belo

Horizonte the proportion was 81% (Table 3). The better results seen in Belo Horizonte may be attributed to the system's better organization and availability of supply. In the four cases, the main difficulty is access to procedures for diagnosis and therapy. Half or less of doctors said they were able to schedule these procedures (Table 4).

Guaranteed scheduling doesn't always bring greater service agility. The average waiting time for specialized consultations was estimated as 3 months or more by 82% of doctors in Florianópolis, 61% in Belo Horizonte, 45% in Aracaju and 34% in Vitória. On the other hand, scheduling for maternity was reported by more than 70% of doctors in three cities, which indicates improved access for childbirth care. FH professionals are not yet able to guarantee hospital admissions. Less than a third of FH doctors said they were able to schedule these (Table 4).

More than 80% of FH team doctors and nurses in the four cities believe long waiting lists are the main problem for network integration (Table 4).

Information availability and transference is fundamental for the regulation and continuity of care, a fact recognized by the policy makers and managers who have been computerizing units and implementing electronic records, already present in Florianópolis and Belo Horizonte (Table 4). Belo Horizonte has been standing out in information computerization (electronic records, scheduling of consultations and examinations) and in the implementation of ICT strategies for team support (telemedicine, telenursing and teleodontology).

In the cities studied, the supply of examinations and specialized consultations is gradually being inserted into computerized regulation and scheduling systems, however, an important challenge to network integration and guaranteed access to specialized care is the presence of different health service providers. The capital cities studied have specialized state services in their territories which have not been decentralized and serve the population of the entire state.

The obstacles to integration are largest in Vitória and Florianópolis, cities that have recently taken on responsibility for the management of specialized care. In Vitória, managers admit real limits to PHC integration to the assistential network due to the city's low governability over part of the specialized services, which are under state management. The Agreed and Integrated Plan has proved insufficient to reduce fragmentation between the state and municipal health networks, for there are no guarantees that the planned quotas for procedures will be distributed among the municipal health units. The purchase of specialized services from the private pro-

viders to overcome the insufficiency of municipal supply is not always a successful strategy, whether because the city lacks certain specializations or whether because of the low pay offered by the UHS pay table.

Another obstacle pointed out by municipal policy makers was the absence of Ministry of Health policies for the medium complexity sectors. The policy makers said that in spite of the difficulties faced, the cities have policies to guarantee secondary care, but the same did not occur at the federal level, where there were no specific policies or financing for medium complexity.

Intersectoriality

In the four cities, intersectorial action strategies are developed through the ordinary forums with a diversity of scope (Chart 1). Vitória and Belo Horizonte stand out due to the presence of integrated municipal policies with municipal scope. The city of Vitória is striking for its adopted model of integrated public management, which established intersectoriality as a directive for constructing local public policies. The city has a Social Policies Committee, made up of managers of municipal offices, aiming to connect and integrate the sectors, and it also has Territorial Chambers: permanent forums made up of managers and technicians from the various public institutions that act in the territory, seeking to promote an interface between the sectors in order to optimize resources.

Outstanding among the initiatives of the Vitória executive branch is the Terra Mais Igual (More Equal Earth) project, an integrated social and urban development and environmental preservation program for areas with a low-income population, with the aim of promoting better quality of life, generating empowerment, through a set of social and environmental actions and public works and services. FH takes part in the project and municipal managers from the various areas find policies more effective when there is integration with FH, especially with the CHA, as the capillarity of health services helps to diffuse the initiatives in the territories.

In Belo Horizonte, Permanent Intersectorial Chambers for Social Policies and Urban Policies were created, coordinated by the municipal secretaries of various areas and subordinate to the mayor. They regularly discuss the budgeting and integration of policies. Executive groups for specific themes and Regional Intersectorial Nuclei were also instituted, bringing together the health, education and social assistance sectors to follow the Bolsa Família Program. There are two priority government programs with intersectorial connection: the BH Cidadania

(BH Citizenship) and the Vila Viva programs, which carry out integrated actions in more vulnerable territories.

In the perspective of BH health policy makers and managers, the local territory is the base for intersectorial connection initiatives and the FH team have a vital role in identifying health and social risk situations and the potential to consolidate local social services networks.

The Aracaju Municipal Health Office develops connected actions to confront specific problems, such as the fight against dengue fever, and is principally integrated with the education and social assistance offices (Chart 1). Among the broader intersectorial connection initiatives in the city are themes such as urban mobility and environment and the

experiences of the Participatory Budget and the Domestic Violence Prevention Nucleus. At the local level, the social worker placed at the FH Unit is a link with the social services sector, making it easier to follow the health care conditionalities of the Bolsa Família income supplementation program.

In Florianópolis, the development of intersectorial actions is recent and based on specific projects. Those interviewed stated that, as a whole, the city seeks to connect health, education and social assistance actions, especially with respect to the elderly, children, the homeless population and sanitary and environmental surveillance. The School Health Promotion Commission was especially noted by the managers. It is a forum that has the participation of FH, education, NGO and school representatives,

Chart 1. Intersectorial action in the four large urban centers. Brazil, 2008.

Dimensions	Aracaju	Belo Horizonte	Florianópolis	Vitória		
Fields of action						
Intersectorial intervention themes/problems	Dengue fever, violence, teenage pregnancy, physical disability, urban mobility, environment	Participatory budget, Bolsa Família, social vulnerability, dengue fever, risk factors for cardiovascular diseases, environmental question	Questions related to specific population groups: the elderly, children, the homeless, municipal director plan	Poverty, unemployment, environmental depredation, violence, traffic accidents, teenage pregnancy		
Institutionality						
Level of coverage	Specific projects	Municipal policy	Specific projects	Municipal policy		
Government sectors involved	Municipal health, education, social assistance offices, public cleaning agency, university	Municipal health, education, social assistance, urban policy offices	Municipal health, education, social assistance offices, university	Municipal health, education, social assistance, citizenship and human rights, work and income generation, culture, sports and leisure, urban safety offices and Terra Mais Igual Project		
Intersectorial forums and associations	Committee to control dengue fever, nucleus on violence, Bolsa Família, participatory budget	Intersectorial social policy chambers, executive groups, Bolsa Família work group, regional managing nuclei, BH Cidadania, Vila Viva Social Project	Commission to promote school health	Social policy committee, territorial chambers in all regions of the city, Terra Mais Igual Project, participatory budget		
Planning basis	Sectorial	Municipal	Local	Municipal		

Source: Nupes/Daps/Ensp/Fiocruz. Family Health Research – four case studies.

jointly coordinated by the Health and Education Offices.

Managers in the four capital cities cite FH as a potential strategy for developing intersectorial actions, however, they stress that health sector participation in the intersectorial initiatives of the municipal executive branch could be increased, seeking a more central role for health care.

FH team participation in intersectorial actions does not always happen. Half or less of FH teams professionals in the four cities participate in joint activities with other sectors for the solution of community problems (Table 4). In Vitória and Aracaju, the professionals that most participate in intersectorial actions are nurses (58% and 53%), in BH

it is Community Health Workers (34%) and, in Florianópolis, doctors (41%) (Table 5).

Among the problems forwarded by the CHA in joint activities at the local level with public organizations, the most frequently mentioned theme was school/education, which is compatible with the long-standing integration in the history of Brazilian public health. Also mentioned were themes such as waste collection, housing, urbanism, sewage and security (Table 5).

The FH team recognize the low participation in intersectorial activities as a problem. A high percentage of doctors (>65%) in the four towns found their mediation capacity of intersectorial actions to confront community problems to be unsatisfactory.

Table 5. Indicators for Family Health Strategy intersectorial action, four large urban centers, 2008.

Indicators	Aracaju	Belo Horizonte	Florianópolis	Vitória
Percentage of FHS professionals who participate in				
activities directed at solving community problems				
with other public or society entities				
Doctors	30.4	12.5	41.0	37.1
Nurses	53.0	24.0	38.6	58.0
CHA (Community Health Agent)	50.7	34.1	33.6	48.0
Nursing aides/technicians	33.3	30.3	29.2	34.9
Types of problems forwarded by CHA who perform				
activities with other sectors1				
School/education	68.4	58.6	100.0	37.8
Waste collection	56.6	29.3	46.8	25.2
Sewage	39.5	22.4	38.3	17.3
Urbanism (streets, squares, public illumination)	44.7	24.1	36.2	11.8
Water	30.3	13.8	34.0	11.0
Housing	44.7	19.0	29.8	23.6
Public security	50.0	19.0	25.5	9.4
Income/work generation	35.5	20.7	21.3	15.7
Transportation	13.2	12.1	14.9	6.3
Percentage of doctors who find their mediation capacity of intersectorial actions to be unsatisfactory	67.8	70.8	72.2	64.7
Percentage of families who were aware of meetings organized by the FH teams to discuss neighborhood health problems ²	25.3	30.5	27.9	42.5
Percentage of families invited by CHA in the last 12 months to participate in meetings or activities related to neighborhood problems ³	22.0	13.8	24.6	32.2

Source: Nupes/Daps/Ensp/Fiocruz – Family Health Research, four case studies, 2008.

 $^{^{1}}$ CHA who said they participated in activities directed at solving/forwarding problems: n = 76 in Aracaju; n = 58 in Belo Horizonte; n = 47 in Florianópolis n = 61 in Vitória.

² Families who know the FH: n= 672 in Aracaju, n=760 in Belo Horizonte, n=596 in Florianópolis, n=680 in Vitória.

³ Families who know the CHA in their area: n=527 in Aracaju, n=631 in Belo Horizonte, n=394 in Florianópolis, n=590 in Vitória.

Discussion:

FH - an integral primary care strategy?

When comparing results, it must be taken into account that the study was designed for a complex analysis of public health care which, in seeking to assess FH potential as an integral PHC strategy, selected experiences that federal managers believed to be consolidated, limiting the generalization of results. The heterogeneity of basic care models implemented in Brazilian towns is striking⁸. The discussion of results, however, allows the capabilities and the limits of this intervention to be identified.

The analysis of network integration and the intersectoriality of consolidated FH experiences reveals the complexity of changing the assistential model, and the permanence of these challenges in the consolidation phase, and shows that Municipal Health Office is not always attaining these two objectives at the same time.

Overcoming the persistent effects of fragmentation in the UHS health care services network and allowing PHC to be the preferential first contact service and gate, as well as the ordering and integrating center of the service networks and health promotion, prevention and recovery actions, is one of the main challenges that municipal policy makers and managers recognize.

The implementation mechanisms and the results obtained by each town are different, but the four cases point to the construction of strategies to overcome the historical insularity of basic care actions. In the four cities studies, the efforts to integrate FH Strategy to the services network were positively assessed by managers and recognized by professionals and families.

An integrated network presupposes a preferential first contact service and gate that organizes access²¹. In the cities studied, care and access to specialized services are structured based on FH with the creation of a preferential first contact service and gate and resolutive PHC services (through an increased medicine list and greater access to complementary exams). The results found are coherent with other studies that identified a good FH performance with a high score for the first contact dimension^{22,23}. The existence of a first contact service, sought regularly each time the patient needs care in the case of illness or routine check-ups contributes to care coordination³.

Recognizing that no isolated part of the health care systems has all the resources and skills needed to solve the needs of a population necessarily implies forming integrated networks, which recognize the interdependency and, often, the conflicts between social actors and distinct organizations in a power-sharing situation²¹.

The most successful network integration initiatives include investments in information and communication technologies, with the implementation of computerized regulation systems and electronic records. The creation of own municipal specialized services represents an effort on the part of local policy makers and managers to guarantee secondary care. The formation of integrated discussion forums between basic and specialized care, telemedicine and matrix support, is also an important strategy, with the potential to overcome the distance between managers and professionals on the two assistential levels and network fragmentation.

The four cities have in common the municipal police makers' political decision to implement FH Strategy to strengthen basic care in the municipal health care system, an essential factor for FH expansion. However, beyond political will, the municipal experiences show that implementation of FH as an ordering and integrating center for the health care services network is facilitated by the institutional legacy.

The cities of Belo Horizonte and Aracaju were qualified by the national UHS operational rules to fully manage the health system. On the one hand, municipal management of the system on the different complexity levels was required and, on the other hand, the cities were given greater autonomy in running processes for connecting the health care services network. The greatest difficulties, as identified by managers, lie in organizing the network due to low governability over specialized UHS services in their territories.

Guaranteed access to specialized care faces a series of difficulties in its implementation. However, there has been progress in the regulation of references and the monitoring of waiting lines, with the implementation of computerized regulation tools. A study performed in 2002 showed that managers already recognized the bottleneck of specialized care, however, they were not able to measure the waiting times, much less regulate them²⁴.

Among the obstacles identified for creating the network, the main one is insufficient supply of specialized care, aggravated by low integration with state providers which in some towns are still responsible for most medium complexity services. Greater personal interaction between generalists and specialists was another challenge pointed out for the greater integration of work processes, even more than hierarchical relationships and the isolation between basic and specialized care.

Equally important were the recurrent complaints from municipal managers about the absence of federal policies for specialized care. The construction of integrated networks requires greater investment in medium complexity services, an assistential level which the interviewees consider "the great UHS bottleneck". It is imperative to fulfill the promises of integrality by demercantilizing the more complex care levels or, at least, by finding a certain balance in the relationship between the market and the public sphere when providing these actions for the population.

When it comes to intersectorial initiatives, the experiences are more diversified. Intersectorial action is broader when it responds to a municipal policy and an integrated government action modality that is different from specific projects. Intersectoriality is a dynamic and complex process, constantly clashing with the sectorial, competitive and hierarchically vertical tradition that marks organizations and public services in Brazil²⁵.

It is recognized that FH team intersectorial practices are limited by their hierarchically inferior position, their local action, their dependency on how superior levels handle problems²⁶ and the fact that the FH team role of mediating intersectorial actions is conditioned by the municipal government's connecting action²⁷. However, the results show that these are not widespread practices. Less than a third of professionals develop actions directed at solving community problems. The derisory results given by the families in FHS community action match the results of other studies where a low score was given to the "community orientation" dimension by FH^{22,23} users, although this was better than for traditional BCU²².

Some managers state the need to recognize the limits of FHS action, as intersectorial connection must be a structuring strategy on behalf of the municipal executive branch. However, this should not be an impediment for FH teams to take on community actions. Apart from the inadequate qualification of professionals, the way that intersectorial action lags behind advances in integration in some of the cases studied raises the question of whether there might be a trade off. In the great urban centers, do the efforts needed to guarantee access to quality and resolutive health care, by organizing a complex municipal system, exhaust the possibilities for investing in intersectorial connection as a Municipal Health Office initiative?

The answer to this hypothesis requires specific investigation, however, it can be said that the health care sector's power to intervene in social determinants is not predetermined. The extent to which the

health care sector takes the initiative and leads intersectorial intervention depends on the type of problem to be confronted and must be flexible¹⁷.

In the experiences researched, different situations presented themselves, with different emphases given by the managers according to the terms of intervention. Although limited, the greater interface between health care and other sectors for building citizenship with intersectorial approaches in municipal government policies, expressed in the creation of intersectorial policy management forums and in participatory budget experiences, have broadened the vision of health care social determinants.

The obstacles that need to be overcome in order to guarantee integral care are diverse – financial, insufficient supply and inadequate human resources^{28, 29} qualification. However, to sum up, the studies show that FH has the potential to be implemented in a comprehensive PHC approach, conditioned by local adaptation of the model, with an increase of assistential and professional FH Units resources. For its part, intersectorial action requires more general initiatives from the municipal executive branch to support the local FH teams actions. The main intersectorial initiatives found in the study transcended health care, being led by other sectors, and corresponded to an integrated municipal social development policy.

Taken as parameters for analyzing the implementation of a broad PHC, integration and intersectoriality are challenges, not always converging, which persist in the consolidation phase of FH Strategy.

Collaborators

L Giovanella, MHM Mendonça, PF Almeida and S Escorel participated in the general conception, research and final writing; MCM Senna, MM Delgado and MS Cunha collaborated in the research and writing of the intersectoriality dimension; PF Almeida, MCR Fausto and CP Teixeira in the research and writing of the integration dimension; CLT Andrade and MIC Martins in methodology and research.

References

- Macinko J, Starfield B, Shi L. The Contribution of Primary Care Systems to Health Outcomes within Organization for Economic Cooperation and Development (OECD) Countries, 1970-1998. HSR: Health Services Research 2003; 38(3):831-865.
- Starfield B, Shi L. Policy Relevant Determinants of Health: An International Perspective. *Health Policy* 2002: 60:201-218
- Conill EM, Fausto MCR. Análisis de la problemática de la integración de la APS en el contexto actual: causas que inciden en la fragmentación de servicios y sus efectos en la cohesión social. Rio de Janeiro: Documento Técnico EuroSocial Salud; 2007.
- World Health Organization. Primary Health Care. Now more than ever: The World Health Report 2008. Geneva: WHO: 2008.
- Capistrano Filho D. O Programa de Saúde da Família em São Paulo: Estudos Avançados 1999; 13(35):89-100.
- Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Política Nacional de Atenção Básica. Brasília: DAB/SAS/Ministério da Saúde; 2006.
- Escorel S, Giovanella L, Mendonça MHM, Senna MCM. O Programa de saúde da família e a construção de um novo modelo para a atenção básica no Brasil. *Pan American Journal of Public Health* 2007; 21(2/3):164-176.
- Viana ALd'Á, Rocha JSY, Elias PE, Ibañez N, Bousquat A. Atenção básica e dinâmica urbana nos grandes municípios paulistas, Brasil. *Cad Saude Publica* 2008; 24(Supl 1): S79-S90.
- Giovanella L. A atenção primária à saúde nos países da União Européia: configurações e reformas organizacionais na década de 1990. *Cad Saude Publica* 2006; 22(5):951-963.
- Hofmarcher MM, Oxley H, Rusticelli E. Improved Health System Performance Through Better Care Coordination. Paris: OECD; 2007.
- Saltman RB, Rico A, Boerma WGW. Primary care in the driver's seat? Organizational reform in European primary care Berkshire: Open University Press; 2006.
- Starfield B. Atenção Primária: equilíbrio entre necessidades de saúde, serviços e tecnologia. Brasília: Unesco/ Ministério da Saúde; 2002.
- Feo JJO, Campo JMF, Camacho JG. La coordinación entre Atención Primaria y Especializada? Reforma del sistema sanitario o reforma del ejercicio profesional. Revista de Administración Sanitaria 2006: 4(2):357-82.
- 14. Carvalho AI, Buss PM. Determinantes sociais na saúde, na doença e na intervenção. In: Giovanella L, Escorel S, Lobato LV, Carvalho AI, Noronha JC, organizadores. *Políticas e sistema de saúde no Brasil.* Rio de Janeiro: Fiocruz: 2008.
- Junqueira LAP. Intersetorialidade, transetorialidade e redes sociais na saúde. Revista de Administração Pública 2000; 34(6):35-45.
- 16. Teixeira CF, Paim JS. Planejamento e Programação de Ações Intersetoriais para a Promoção da Saúde e Qualidade de Vida. In: Teixeira CF, Paim JS, Vilasboas AL, organizadores. *Promoção e Vigilância da Saúde*. Salvador: Instituto de Saúde Coletiva; 2002.p. 59-78.

- 17. World Health Organization. Public Health Agency of Canada. Health Equity Through Intersectoral Action: An Analysis of 18 Country Case Studies. WHO/ PHAC; 2008. [cited 2008 Nov 04]. Available from: http://www.phac-aspc.gc.ca/publicat/2008/hetia18esgai18/pdf/hetia18-esgai18-eng.pdf
- Yin RK. Estudo de caso: planejamento e métodos. Porto Alegre: Bookman; 2005.
- Veney JE, Kaluzny AD. Evaluation and Decision Making for Health Services. Ann Arbor, Michigan: Health Administration Press: 1991.
- Mendes EV. A atenção primária à saúde no SUS. Fortaleza: Escola de Saúde Pública do Ceará; 2002.
- Hartz ZMA, Contandriopoulos A-P. Integralidade da atenção e integração de serviços de saúde: desafios para avaliar a implantação de um "sistema sem muros". Cad Saude Publica 2004; 20 (Supl 2):S331-S336.
- 22. Elias PE, Ferreira CW, Alves MC, Cohn A, Kishima V, Escrivão Jr A, Gomes A, Bousquat A. Atenção Básica em saúde: comparação entre PSF e UBS por estrato de exclusão social no município de São Paulo. *Cien Saude Colet* 2006; 11(3):633-641.
- Ibañez N, Rocha JSY, Carrara de Castro P, Ribeiro MCSA, Forster AC, Novaes MHD, Viana ALd'Á. Avaliação do desempenho da atenção básica no Estado de São Paulo. Cien Saude Colet 2006; 11(3):683-703.
- 24. Escorel S, Giovanella L, Mendonça MHM, Magalhães R, Senna MCM. Avaliação da implementação do programa SF em dez grandes centros urbanos: síntese dos principais resultados. 2ª ed. Brasília: Ministério da Saúde/SAS/DAB; 2005.
- Andrade LOM. A saúde e o dilema da intersetorialidade São Paulo: Hucitec; 2006.
- Mendes EV. Uma agenda para a saúde. São Paulo: Hucitec; 1996.
- Papoula SR. O processo de trabalho intersetorial das ESF no município de Petrópolis-RJ: fatores restritivos e facilitadores [dissertação]. Rio de Janeiro (RJ): Ensp/ Fiocruz: 2006.
- 28. Heimann LS, Mendonça MHM. A Trajetória da Atenção Básica em Saúde e do Programa de Saúde de Família no SUS: uma busca de identidade. Lima NT, Gerschmann S, organizadores. Saúde e democracia. História e Perspectiva do SUS. Rio de Janeiro: Fiocruz; 2005.
- Conill EM. Ensaio teórico-conceitual sobre APS: desafios para organização de serviços básicos e da Estratégia Saúde da Família em centros urbanos no Brasil. *Cad Saúde Pública* 2008; 24(Sup1):S7-S27.