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Comments on "The organization of pharmaceutical services by 'health region' in Brazil's Unified Health System"

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Abstract *This study aimed to describe and characterize the pharmaceutical services provided in Brazil's Unified Health System (SUS) from the point of view of the healthcare networks that are organized by region in the QualiSUS-Rede Project. This was a cross-sectional study, with data collected from December 2013 to July 2015, in public health establishments that carried out delivery or warehousing of medications (n = 4,938), in 465 municipalites, and the Federal District, in 43'Health Regions'. The results show the existence of at least one management service supporting the health network, and warehousing of medications in all the regions (> 90%). It also showed the availability of at least one healthcare service, in healthcare locations, by pharmaceutical professionals is irregular between the Regions, being highest in the Southeastern Region (74.3%), and lowest in the Northeastern Region (43.3%). The results underpine the need for effective structuring of pharmaceutical assistance in the SUS networks, overcoming the current restrictive vision of its activities, which gives value almost exclusively to the logistical component of support to the network, to the detriment of the clinical component. It is also important to expand, and improve the quality of, the population's access to medical drugs, and improve the quality of the healthcare offered to users of the system.*

Key words *Health systems, Regionalization, Pharmaceutical services*

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Introduction

The challenge of combating fragmentation, and providing continuous health services in a fair and wide-ranging manner, continues to be a major imperative for the majority of the countries of the Americas[1].

This challenge is more complicated in a country such as Brazil which, as well as its continental scale and very long frontier, lives with what is referred to as the "triple burden". This situation obliges managers to seek care solutions giving special attention to the simultaneous growth of the external causes and of chronic diseases, principally because of the significant aging of the population, while parasitic and infectious diseases, and malnutrition, typical of underdevelopment countries, continue to require attention and care[2].

In this context, the regionalization of Brazil's Unified Healthcare System (Sistema Único de Saúde, or SUS) is the major orienting axis of development of this system for the coming decades. It is the result of coordinated action by the three federal entities involved in the implementation of constitution of Health Regions, in which regional healthcare networks are organized[3].

In Brazil, the Federal Government, the States and the municipalities are defined as territories by political-administrative division. They are thus constituted into territories in which health practices are organized. However, from the point of view of organization of healthcare networks, it is necessary to configure other territories, that correspond to the Health Regions. These are understood as being a geographical area that holds a population with singular epidemiological and social characteristics and its own healthcare needs, and also with health resources already existing within it to serve that population[3,4].

In the Health Regions, regional healthcare networks are organized based on complementarities and exchanges, and agreed in a participative manner between managers of municipalities and States. The modelling of these regional networks of healthcare in the SUS presents a group of challenges which need to be overcome for an integrated system to be consolidated that ensures the access and the healthcare quality offered. For this, there is a need for cooperation and a spirit of solidarity between states and municipalities and between municipalities of each Health Region[5].

In 2010, guidelines were agreed in Brazil for structuring of the Healthcare Network (*Rede de Atenção à Saúde*, or RAS), which were defined as a strategy for overcoming the fragmentation of healthcare and management in the Health Regions. They seek to optimize the political and institutional functioning of the SUS, aiming to ensure that the user gets the group of services that s/he needs, with effectiveness and efficiency[6].

The Healthcare Networks can be understood as organizing arrangements of functional health units, either as care points or as diagnosis and therapy points, where procedures are carried out with different technological densities and which, when integrated through the logistics and management systems, seek to ensure integral healthcare in a given territory[2]. One of the fragilities that Rodrigues et al.[7] encountered, in an integrative review was lack of knowledge, on the part of primary healthcare professionals, of the various healthcare points.

Pharmaceutical policies are one of the cross-sectional, strategic types of public policy for the process of structuring and organization of the RAS, and with it strengthening of primary healthcare.

Pharmaceutical services involve technical and management activities such as a Healthcare Support System, but above all activities of healthcare itself, and they should express commitment to direct support for the user and obtaining of health results. Effective structuring of the pharmaceutical services in the RAS is a fundamental need, not only for widening and improving the population's access to medical drugs, but also for improving the healthcare offered directly to users of the system[2,8]. This type of action has been and is being defended in Brazil by significant actors such as the Health Ministry[9], and the Federal Pharmacies Council[10].

This group of activities, articulated in the multi-professional and inter-sectorial actions, is also essential for ensuring access to quality medical drugs, and promotion of their appropriate use[8]. A systematic review[11] found that the majority of the studies included pointed to the importance of the action of pharmaceutical professionals in the management of therapy, in advising the patient and in training of health professionals in the improvement of the process of care and achievement of clinical results.

However, as to significant advances in Brazil's pharmaceutical policies, it is recognized that there are still challenges to be faced in relation to the prospect of guaranteeing access to medical drugs and qualification of the pharmaceutical services provided to the population[12,13].

Considering the phase of implantation of the RAS in the country, it becomes opportune to

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work towards adaptation of the pharmaceutical services in such a way that they can contribute to this strategy with all their potential.

This present study aims to characterize the pharmaceutical services provided in the SUS from the point of view of the Healthcare Networks in the Health Regions included in the QualiSUS-Rede Project.

Methods

This is an analysis of data from the survey 'Pharmaceutical Services in the Brazilian Healthcare Networks (RASs): an approach in the QualiSUS-Rede regions', which was carried out through a partnership established between the Ministry of Health and World Bank. The aim of the study was to identify the situation of the pharmaceutical services, and management and healthcare techniques in the 15 priority Regions of the QualiSUS-Rede Project, in accordance with the guidelines proposed for the functioning of the Regional Healthcare Network (RAS). The QualiSUS-Rede was instituted as a strategy of support for organization of the RAS in Brazil, aiming to contribute to higher quality of care, management in health and management and development of technologies, through the organization of regional and themed Healthcare Networks and improvement of quality of care in general. It comprises five strategy directives, the first of which is 'Support for Structuring and Quality Improvement of the RAS'[14].

The study had a cross-sectional design, with data collected from December 2013 to July 2015 in all the public health establishments that were carrying out local warehousing of medical drugs, in 485 municipalities and the Federal District, in 43 Health Regions (http://sage.saude.gov.br/), which were part of the QualiSUS-Rede Regions in September 2013. The initial selection of the establishments was the National Health Establishments Registry (Cadastro Nacional de Estabelecimentos de Saúde – CNES) (http://cnes.datasus.gov.br/).

Five instruments were used for the collection of data: (1) a questionnaire to the Health Secretary; (2) a questionnaire to the person responsible for Pharmaceutical Services; (3) a questionnaire to the person responsible for the healthcare point and/or the therapeutic support point; (4) a questionnaire for the person responsible for the Pharmaceutical Supply Center; and (5) a questionnaire to the person responsible for the Hospital Pharmacy. The last three of these instruments were accompanied by a 'script' of direct observation.

In this article the data from instrument 3 were used – this instrument included structured questions, relating to management, structure and services offered in the establishment. It was applied by an interview of the persons responsible for the pharmacies of the following establishments: Primary Health Units/Health Centers/Health Posts, Psycho-social Care Centers (CAPSs), pharmacies of the prison system, and pharmacies in exclusive buildings (basic medical drugs/"live pharmacy"/ Popular Pharmacy/medical drugs of the specialized component).

The following were excluded from the analysis: hospital pharmacies; and the municipal and State pharmaceutical supply centers – because they have different instruments due to their specific characteristics.

The outcomes considered were the pharmaceutical services offered in the health establishments considered to be pertinent to: (1) Healthcare Points (Pontos de Atenção à Saúde, or PASs) – when the establishment and the related sector or area identified had a pharmacist (as a technical responsible and/or assistant), and carried out at least one of the following Clinical Pharmaceutical activities: dispensing; pharmacotherapeutic follow-up; therapeutic guidance; pharmacotherapeutic review and pre/post-treatment drug comparison or drug surveillance activities; (2) Diagnosis and Therapy Support Points (Pontos de Apoio Diagnóstico e Terapêutico, or PADTs) – when the professional of the establishment and related sector or area identified said that they carry out the delivery of the medical drugs in the establishment; (3) the Healthcare Network Support System (Sistema de Apoio a Rede de Atenção à Saúde, or SARAS), when the establishment stated that it in some way participates in at least one of the Technical Management Pharmaceutical Services of support to the network, and also local warehousing of medical drugs (selection/ programming/acquisition/distribution). The operational definitions of the variables used in the study are described in Chart 1.

The independent variables investigated were: Administrative Region (North, Northeast, Southeast, South, and Southeast); number of health regions and pharmaceutical services offered. The proportions were estimated, and Pearson chi-squared tests were applied for evaluation of the statistical significance, considering significance level of 5%. The statistics program SPPS 18.0 was used for the analyses.

Chart 1. Operational definition of the pharmaceutical service activities considered in the study, QualiSUS-Rede. Brazil, 2015.

Service	Operational definition
Service supplied in Healthcare Points (PASs)	
Dispensing of drugs	The establishment has a pharmacist, and this pharmacist reported delivering drugs always together with therapeutic guidance.
Therapeutic guidance	The establishment has a pharmacist, and this pharmacist reported giving therapeutic guidance with delivery of the medication and/or in group activities.
Pharmacotherapeutic follow-up	The establishment has a pharmacist and this pharmacist reported making pharmacotherapeutic follow-up.
Therapeutic conciliation	The establishment has a pharmacist and this pharmacist reported carrying out therapeutic conciliation.
Pharmacotherapeutic review	The establishment has a pharmacist and this pharmacist reported making pharmacotherapeutic review.
Drug surveillance	**In the establishment the person responsible reports carrying out notification of complaints and/or adverse reactions to drugs**
Service carried out at the Diagnosis and Therapy Support Points (PADTs)	
Drug delivery	Delivery of drugs in the establishment was carried out by a non-pharmaceutical professional and with therapeutic guidance to the user.
Management services as Healthcare Network Support System (SARAS)	
Selection of drugs	The pharmacist of the establishment or referral pharmacist reports participating in the process of selection of drugs; and/or: the person responsible for the pharmacy reports that activities carried out in the establishment include request for inclusion/exclusion of drugs in/from the municipality's standard list of drugs, and that list was made available to the health professionals and in the consulting offices of the persons prescribing.
Programming of drugs	The establishment's pharmacist reports participating in the programming of drugs, and/or where the person responsible for the pharmacy reported that there is in the establishment a timetable for sending of information for programming of acquisition of drugs and a timetable for sending of request for supply of the units to Pharmaceutical Central Supply (CAF).
Acquisition of drugs	The establishment's pharmacist reports participating in the acquisition of drugs.
Warehousing of drugs	Considered to be a criterion for inclusion in the study when there is warehousing of drugs in the establishment.
Distribution of drugs	The establishment's pharmacist or referral pharmacist reports distribution of drugs by the establishment, for supply of any healthcare post.

Source: Authors' compilation.

The study was approved by the National Ethics Research Committee (Comitê Nacional de Ética em Pesquisa, or Conep). All the interviews were preceded by signature of a Free and Informed Consent Form (TCLE).

Results

It was interviewed the persons responsible for pharmacies in 4,938 establishments that warehoused medical drugs, in 15 regions of the QualiSUS-Rede Project. A great majority (79%) were Health Centers/Health Units/Health Posts, located in 465 municipalities and the Federal District, belonging to 43 Health Regions in the period of the data collection. The percentage of loss was 4.1%, corresponding to 20 municipalities, due to problems in storage of the data.

Figure 1 gives the characterization of the sample in terms of the proportion of Health Regions, municipalities and establishments by Administrative Region. Approximately one-third of the establishments (n = 1,773) and of the mu-

nicipalities (n = 146) are in the Northeastern Region, and the Southeast was the Region with the highest proportion of health regions (n = 13), with all municipalities included in the study.

The great majority (78.0%) of the establishment had the participation of a pharmacist. The supply of pharmaceutical services by professional was analyzed in these 3,377 health service points. The service with the largest supply in the establishments was therapeutic guidance, individually or in groups (44.5%), followed by dispensing (33.5%), and there was a low level of realization of pharmacotherapeutic follow-up of the patients (7.1%). The services of therapeutic conciliation (pre/post-treatment drug comparison) and pharmacotherapeutic review were not reported in any of the establishments visited. It was notable that it was in the Southeastern Region that we found the largest proportion of establishments with the health services offered at the healthcare points, while the lowest supply was found in the Northeastern Region (Table 1).

Drug surveillance service was reported in a quarter of the establishments (24.2%), taking

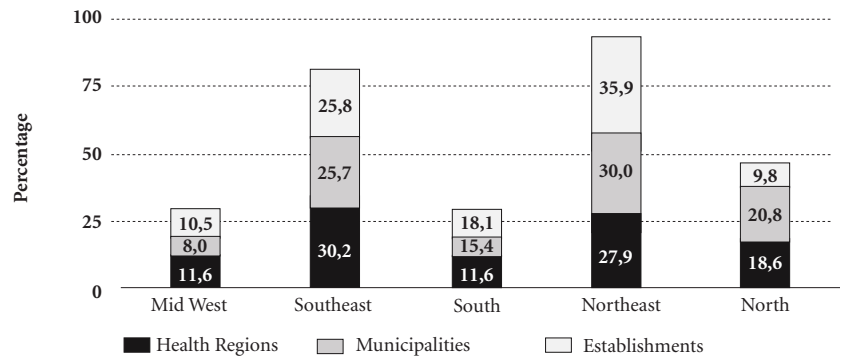

Figure 1. Characterization of the sample as to the proportion of Health Regions, Municipalities and Establishments by Administrative Region. QualiSUS-Rede Regions, Brazil, 2015.

Source: Authors' elaboration.

Table 1. Proportion of establishments with supply of Pharmaceutical Services at Healthcare Points (PASs) and at Diagnosis and Therapy Support Points (PADTs) in the QualiSUS-Rede regions, by administrative region and QualiSUS-Rede Region. Brazil, 2015.

	Northern Region		Northeast Region		Southern Region		Southeast Region		Mid-West Region		Total		P value***
	N	%	N	%	N	%	N	%	N	%	N	%	
Services in PASs													
Drug surveillance*	36	7,5	432	24,4	307	34,5	303	24,0	113	21,9	1191	24,2	
Clinical pharmaceutical services													
Dispensing of drugs	139	48,6	174	14,2	196	27,0	649	59,1	94	23,6	1252	33,5	≤ 0,001
Therapeutic guidance	151	52,8	324	26,5	307	42,2	750	68,2	128	32,1	1660	44,5	
Pharmacotherapeutic follow-up	22	7,7	19	1,6	38	5,2	168	15,3	18	4,5	265	7,1	
Service in PADTs**													
Drug delivery	174	36,0	1133	63,9	516	57,8	788	61,9	346	66,9	2957	59,9	≤ 0,001

* Calculated only for the establishments that had a pharmacist (n = 3,733). ** Calculated using the total of establishments visited (n = 4,938). *** Pearson Chi-squared test.

place in the highest proportion in the establishments of the Southern Region (34.5%), and in the lowest proportion in the establishments of the Northern Region of the country (7.5%).

Although the great majority of the establishments (86.0%) reported delivery of medical drugs by other professionals than the pharmacists (data not presented in a table), only 60% carried out this delivery with therapeutic guidance to the user. This proportion was greatest in the Center-West Region (66.9%) and Northeast (63.9%) and lowest in the Northern Region (36.0%) (Table 2).

As to the establishments that participate in the Pharmaceutical Management services, in the form of the Healthcare Network Support System (SARAS) in the regions, it was noted that the great majority of them reported participation in the programming services (83.8%) and services of selection of medical drugs (79.5%).

Comparing the administrative regions of the country: a greater participation in the selection of medical drugs in the establishments was reported in the Southern Region (88.7%); and of programming in the Southeastern (88.8%) and Southern (88.2%) Regions. There was a low participation in the processes of acquisition and distribution of medical drugs to other health service points in general, with the largest proportion in the Southeastern Region, 22.3% for acquisition and 35.1% for distribution.

Table 3 shows the distribution of the number of health regions, population and proportion of supply of pharmaceutical services in the health

Table 2. Proportion of establishments that take part in management Pharmaceutical Services as part of the Healthcare Network Support System (SARAS) in the Health Regions included in the QualiSUS-Rede Regions, by Administrative Region and QualiSUS-Rede Region. Brazil, 2015.

Management services provided as SARAS*	Northern Region		Northeast Region		Southern Region		Southeast Region		Center-West Region		Total		P value**
	N	%	N	%	N	%	N	%	N	%	N	%	
Selection of drugs	300	62,9	1365	77,8	787	88,7	1031	83,5	368	75,6	3851	79,5	≤0,001
Programming of drugs	362	75,9	1431	80,8	784	88,2	1123	88,8	421	81,6	4121	83,8	
Acquisition of drugs	18	3,7	130	7,3	67	7,5	284	22,3	14	2,7	513	10,4	
Distribution of drugs	29	6,0	142	8,0	143	16,0	447	35,1	35	6,8	796	16,1	

* Calculated using the total of establishments visited (n = 4,938). ** Pearson Chi-squared test.

Table 3. Distribution of the number of Health Regions, population and proportion of supply of pharmaceutical services in Healthcare Points (PAS), Diagnosis and Therapy Support Points (PADTs) and Healthcare Network Support System (SARAS) points by Administrative Region, and by QualiSUS-Rede Project Region. Brazil, 2015.

Administrative Region	Health Regions (HRs)	Population* of the HRs	PASs**		PADTs***		SARAS***		Valor p
			n	%	n	%	n	%	
Northern Region	08	4.064.276	161	56,3	174	36,0	442	92,5	≤ 0,001
Northeast Region	12	8.911.847	528	43,3	1.133	63,9	1.653	93,5	
Southern Region	05	8.364.871	420	57,9	516	57,8	869	97,4	
Southeast Region	13	19.430.288	815	74,3	788	61,9	1.247	98,9	
Mid-West Region	05	4.652.706	186	46,7	346	66,9	476	93,9	
Total	43	45.423.988	2.110	56,6	2.957	59,9	4.687	95,6	

* Population according to IBGE. ** Proportion of establishments that have a pharmacist and offer at least one clinical service in the PASs in the administrative region (n = 3,377). *** Proportion of establishments that offer at least one pharmaceutical service in the PADTs and at least one other than warehousing while acting as SARAS in the administrative region (n = 4,938).

establishments in Healthcare Points (PASs), Diagnosis and Therapy Support Points (PADTs) and the Healthcare Network Support System (SARAS), by Administrative Region. The total population of the 43 health regions included in the QualiSUS-Rede Project totals approximately 45 million people who may be benefited by the supply of services of the healthcare network, with a highlight for the 13 Health Regions of the Southeastern Region, with approximately 20 million people.

It was found that there was at least one management service in support of the healthcare network – in addition to the storage of medications – in all the regions (> 90%). Supply of at least one assistance service at the care points was found to be irregular between the Regions: in the greatest proportion in the Southeastern Region (74.3%); and in the lowest proportion in the Northeastern Region (43.3%).

Discussion

This study provided an evaluation which, from the regional point of view was unprecedented, of both management and care pharmaceutical services provided in health establishments connected to the SUS in the regions covered by the QualiSUS-Rede Project. Attention can be drawn to the complexity of the sample, and the population coverage, of more than 45 million inhabitants distributed over 485 municipalities in the Federal District, belonging at the time to 43 health regions and 17 units of the Brazilian Federation of States.

The results obtained in this study should be considered as input material to help in perfecting the pharmaceutical services provided within the SUS, in terms of better responding to today's health needs in the context of the structural and functional challenges of the regional network. It is known that the situation of needs in health is changing, calling for decisions on a group of strategies to achieve integration of the SUS in all its dimensions.

The survey showed greater participation in the services of programming and selection of medications at establishments that took part in the Pharmaceutical Management services in the form of the Healthcare Network Support System (SARAS) in the regions; but there was low participation in the processes of acquisition and distribution of medical drugs to other care points. This could be the result of a trend to centralization of management services, and low participation in the integrated planning of pharmaceutical care – which in turn could cause supply gaps for the healthcare network, with low availability of drugs occurring in Primary Health Units[13].

The supply of clinical services provided by the pharmacist was identified, by Region, on the basis of what is specified in the framework of the RASs, grouping the results in accordance with whether the health establishment was classified as a Healthcare Points (PAS) and/or as a Diagnosis and Therapy Support Points (PADT). According to Lavras[3], the PASs that comprise the RAS are functional units, which call for differentiated and specific technological conditions (physical structure, equipment and inputs, profile of the professional staff, specific technical knowledge) and a well-defined field of activity, for supply of a group of health actions. The PADTs are also functional units, but ones that offer support procedures such as: diagnosis by image, pathology and clinical analyses, chart/graphic methods, delivery of drugs, etc.

Provision of pharmaceutical clinical services was shown to be inconsistent across the administrative regions of the country.

The activity of dispensing can be defined as *an action carried out by a pharmaceutical professional for the purpose of providing medical drugs and orientation for their rational use, in response to the presentation of a prescription prepared by a professional*[15]. A consensus has grown in Brazil of designating as 'delivery of drugs' any action that involves the supply of medical drugs directly to user, but does not comply with all the conditions in the above definition, especially that of realization by a pharmaceutical professional[16]. The supply of dispensing services was low in the health regions investigated, even when the pharmacist was present, and, in a great majority of the establishments, what was reported was delivery by other non-pharmaceutical professionals without orientation being given to the user. Gaps in the qualification of pharmacists for activities of dispensing, and the non-understanding of the role of the pharmacist in clinical activities directly by the user by the community and also by other healthcare professionals, provide reasons that are frequently referred to for the delivery of drugs being the responsibility of other professionals, as indicated in a study in Malaysia[17].

It can be highlighted that this result can point to gaps in the organization of the services and qualification of the professionals for carrying out of this service in a manner that is integrated to the

health actions in the healthcare network, which should have elements of orientation, and promotion, to the population, of rational use of drugs.

Also incipient was any reporting of pharmacotherapeutic follow-up of the patients in the Health Regions and there was no reference to the supply of services of pre/post-treatment drug comparison and pharmacotherapeutic review. Evidence has demonstrated the impact of clinical services for the community[18,19]. The purpose of pharmacotherapeutic monitoring/follow-up of users, and pharmacotherapeutic review, is evaluation of the medical drugs used by patients, prescribed and not prescribed, for the purpose of identifying drug interactions, or low levels of adherence to treatment, such as might be compromising the therapeutic results. The therapeutic conciliation (comparison of the drugs prescribed after discharge from hospital with those that were being used by the patient before the hospital admission), including those prescribed by the primary healthcare doctors, aims to propose solutions to the user and to the team for harmonization of the patient's care plan[9].

It needs to be highlighted that the clinical activity of the pharmacist should be integrated with the health team for the achievement of optimum results, and inter-professional barriers in the integration of pharmacists into the primary healthcare team need to be overcome, as was pointed out in a study made in England[20]. Integration of the actions of the various professionals is fundamental for guaranteeing maximum effectiveness and minimum risk in therapies. For this, it needs to be integrated coordination of the decisions in pharmacotherapeutic care of users, so as to facilitate care continuity in the care network[21].

The Northeast and Center-West regions stood out from the others for a low level of supply of services of dispensing, therapeutic guidance and pharmacotherapeutic follow-up. However, these regions presented the highest proportional supply of the service of diagnostic and therapeutic support. This situation both (i) reflects the shortage of professionals, and also (ii) raises questions on the qualifications of the pharmacists that carry out clinical functions in the establishments, and the process of training of those professionals. It is also in our view related to the distribution of work time/working hours – which has the effect of causing them to give priority to the technical and management activities carried out to support the network.

This reaffirms the need for greater discussion on the importance of a qualified supply of clinical services, able to respond better to users' health needs, and to overcome issues related only to access and to the quality of the pharmaceutical products made available. This requires action articulated with the process of healthcare able to ensure continuity of care, and also prevention and resolution of problems related to pharmacotherapy[1]. Various authors[8,23-25] have agreed on the great challenges involved in the implementation of pharmaceutical services, giving priority to the need for healthcare, from basic healthcare to specialized healthcare, with a focus on people – family and community – replacing the focus on the medical drugs as merchandise.

The majority of the services investigated in this study were in basic healthcare – in which the Pan-American Health Organization[8] argues that the provision of pharmaceutical services is a key element, especially in that it involves for the direct relationship with the user/patient. This activity includes: health promotion, dispensing, pharmacotherapeutic accompaniment/follow-up, drug surveillance, and support for responsible self-medication. The list of services investigated includes some addressed to groups in various situations of vulnerability, such as the pharmacies of the CAPSs, of the prison system or those of the specialized component – situations in which there are users with differentiated care requirements.

Health establishments or posts providing Diagnostic and Therapeutic Support were found to be in the same proportion as those supplying clinical services. However a point that calls attention, and should be emphasized, in relation to the regional organization of the services to be offered and the quality of the service of delivery or supply of drugs to the user, is that the majority of the healthcare posts and/or therapeutic support posts report the delivery being carried out by non-pharmaceutical professionals.

Finally, it should be highlighted that the process of systemic integration which is being pursued in the SUS also calls for integration in the dimensions of both health services and professional practices. In this aspect, there is a need to decide on a group of initiatives directed toward qualification, organization and integration of structures or processes related to these services and to the professional practices that are carried out within them[26].

From this perspective, even though there have been a group of significant advances in pharmaceutical services in the SUS, one must recognize that there are still challenges to be faced in the as-

pect of guaranteeing quality, accesses, and stimulus for the rational use of medical drugs[26].

The programming of actions and services in the regions, especially for the clinical services, should be thought out, programmed and offered based on the needs of the population actually in the territory, based on the epidemiological and nosological data and profiles and obeying the existing capacity of establishments, such as pharmacies[27].

Effective structuring of Pharmaceutical Services in the RASs is a fundamental need, not only for expanding and qualifying the population's access to drugs, but also to improve the quality of the healthcare directly offered to users of the system. For this, there is a need to overcome a restrictive vision of the activities of pharmaceutical care – which habitually gives value almost exclusively to its logistical component, to the detriment of the clinical pharmaceutical component[26].

Pharmaceutical Services should be understood to mean a group of activities that could be characterized as: Support to the Regional Healthcare Networks (RRAS) – related to supply; Therapeutic Support – delivery of drugs; Pharmaceutical Care – related to education in health; and Pharmaceutical Clinical Practice per se. Among the highlights are the activities of drug surveillance, and those carried out through individual or shared consultations, which are essential in the process of facing the chronic conditions.

It is known that the clinical handling of these conditions calls for not only continuity of care and integration of multi-professional work, but also a differentiated activity of each professional, which in the case of the pharmacist should concentrate as priority on the co-morbidities; multi-drug patients; and/or those with low acceptance of use of drugs.

We agree with Lavras[3], Mendes et al.[13], Mendes[24] e Magalhães Júnior et al.[28] that this regional organization of the health system and the logic of the RASs needs to attend to the various situations of models, and not only a regionalization linked to containment of the use of services, to avoid costs arising from transfers between the regions[29].

It should be able to overcome the factors that perhaps most interfere in formation and consolidation of the RRAS, which are the fragmentation of services, and the absence, or fragile articulation, between its various healthcare posts in their different levels of activity. Pharmaceutical services, which are also in a fragile state and are normally removed from this process of construction of the healthcare network in the territory, are included in this case.

Thus, proposing the characterization of the activities related to Pharmaceutical Services as inherent to the PASs; to the PADTs; and also as part of the SARAS as a whole, whether or not coexisting in a single establishment, widens the understanding of the different natures of these activities. Attention is drawn to the need to value the activities related to pharmaceutical care so as to better respond to the population's health needs, inserting them clearly as activities specific to the functional units of the healthcare networks.

Finally, it can be emphasized that the guidelines agreed in 2010 for the RAS[6] – which describe the pharmaceutical services only as part of the Support System, and as part of the so-called Pharmaceutical Services System, which involves the organization of this service in all its phases: selection, programming, acquisition, storage, distribution, prescription, dispensing and promotion of rational use of drugs – need to be redefined on the basis of this evidence obtained in the QualiSUS-Rede Project.

As a limitation of the study we can highlight that absence, in the questionnaire, of a question that explicitly identifies the process of pre/post-treatment drug comparison and pharmacotherapeutic review as a record of the clinical services for establishment of health could be a limiting factor. The data on these services were captured through open questions, which could have contributed to their low degree of mention by interviewees. It is also possible that lack of knowledge or difference of understanding of the services about which the questions were asked may have influenced the findings.

The results underline the need for effective structuring of Pharmaceutical Services in the RAS, overcoming a restrictive vision of the activities of pharmaceutical service, which almost exclusively gives value to its logistical component to the detriment of its clinical component – to expand and increase the quality of the population's access to drugs, and increase the quality of healthcare offered to users of the system.

Collaborations

SQ Araújo, KS Costa, VL Luiza, C Lavras, EA Santana and NUL Tavares took part in the drafting, contributed to the conception and outlining of the manuscript, critical review of the intellectual content, and the analysis and interpretation of the results, and approved the final version of the manuscript; they declare themselves to be responsible for all the aspects of the work, ensuring its precision and integrity.

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