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ARTICLE

Admission of dentist in Brazilian Universal Health System (SUS): a priority agenda for the strengthening of Smiling Brazil

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Abstract *This article aims at: i) describing and analyzing the expansion of dental care in the Unified Health System (SUS); ii) Identifying and analyzing the characteristics of hiring dentists' in the public service; iii) characterizing public vacancies, their duties and remuneration. In this descriptive case study, databases of the Ministry of Health were consulted and public tender notices. The findings indicate that 48% of the dentists enrolled in the National Registry of Health Establishments (CNES) perform care in the SUS, in 13 years there was an increase of 118% of the municipalities with oral health teams (eSB) implanted. The population coverage estimated by eSB increased by 10.46% between the years 2007 and 2015. The main mechanism for joining the Dental Specialties Centers (CEO) was the public tender. Primary care salaries ranged from 1.05 to 12.67 Brazilian minimum wages, to 40-hour weekly jobs, and to CEOs from 3.35 to 7.05. It is concluded that, among other measures, the planning of HRH strategies is necessary. The continuity of successes regulatory measures of labor contracts and support to local managers enter the agenda of priority actions of oral health policy.*
Key words *Human Resources in Health, Public Policies, Oral Health*

Introduction

The poor geographic distribution of health professionals is a global problem which affects a number of countries[1], among which is Brazil[2] and correcting such distortions will certainly contribute to improve the health services coverage. Scholars on the subject point out that to reach the health objectives for all, a workforce at sufficient number, with professionals from different competent areas, motivated and properly assigned to a number of geographic regions, is required. In addition, the importance of explicit policies directed towards the development of Human Resources for Health (HRH)[3] should be emphasized.

International health agencies already foster such discussions over a certain time and, in 2013, Brazil hosted the 3rd edition of the Global Forum on Human Resources for Health, organized by the World Health Organization (WHO), Pan American Health Organization (PAHO) and Health Alliance Global Workforce. The forum resulted in a report which reinforced the need for the political commitment for the valuation of the HRH in the health agendas post-2015. This report encouraged the conduction of this study when it indicated that the government must elaborate regulatory mechanisms to ensure the health system response capacity[4]. This subject was also highlighted in the 4th Global Forum on Human Resources for Health held in 2017 in the city of Dublin, Ireland[5].

In Brazil, the "Mais Médicos" program was responsible for bringing the problem of the lack of health professionals in some regions of the country to the political discussions center, once the professionals tend to concentrate in major urban centers[6]. The Unified Health System (SUS) poses that the healthcare is fully provided, and for that purpose the coordination of the services with view to meet the promotion, prevention, cure and population rehabilitation is required.

Among the determinants which influence the health professionals' decisions concerning their working place, are: personal, professional, organizational, economic, political and cultural[7]. Thus, the financial incentives cannot be considered as the only way to encourage the recruitment and retention of professionals[8], interventions developed in different sectors, such as education, health and employment, have presented higher impact compared to stagnant interventions[9]. In this scenario, the Secretariat of Health Work and Education Management (SGTES), instituted the Health Work Management policy, which values the worker for SUS effectiveness and efficiency guaranteeing the basic service requirements, among them, are: Carrier, Position and Salary Plan and the employment relationship and social protection[10].

At SUS, the human resources contracting forms were subject to changes over the years. The 1988 Federal Constitution, instituted the Single Legal Regime (RJU), i.e., the statutory bond, on which the hiring process would exclusively occur by means of a public sector recruitment examination. However in 1998, the constitutional amendment expanded the employment relationship forms. Currently, the contracts can also be executed according to the Consolidation of Labor Laws (CLT) in addition to allowing the mediation of organization to outsource the HFH contracting (Public or Private)[11].

In this context, for recognizing the Oral Health as an integral and essential part for the general health and for the quality of life of the population[12], in 2004 the Ministry of Health implemented the National Oral Health Policy (PNSB), called "Brasil Sorridente" which, in addition to strengthen the primary attention by means of the Oral Health Teams (eSB), linked to the Family Health Strategy (ESF), constitutes an oral health attention network which was responsible for the expansion of the dentist jobs at SUS throughout the national territory. However, it is noted that, as well as in medicine, dentistry also shows health gaps, resulting from the poor distribution of dentists[13]. Taking this reality posed in Brazil into consideration and the existing conceptual framework concerning the factors which influence the HRH distribution[14], this article is intended to i) describe and analyze the dentist provision expansion at SUS, ii) identify and analyze the characteristics of the employment relationship of the dentists with the service; iii) characterize the public sector recruitment examination vacancies concerning the requirements, attributions and remuneration.

Methodology

This is a Brazilian, descriptive case study which integrates a set of researches on HRH regulation developed by the Brazilian Human Resources Observatory on Dentistry (OBSERVARHODONTO) and the Institute of Hygiene and Tropical Medicine (IHMT) of the New University of Lisbon, Lisbon - Portugal.

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Different sources of information were used in order to generate the data required for the study. Secondary data extracted from different Ministry of Health banks was used, being: 1) *Department of Basic Care (DAB)*[15] – in order to identify the expansion of the dentist provision at SUS (by means of the eSB implementation history); 2) *DATASUS – Information Technology Serving SUS and the National Registry of Healthcare Establishments (CNES)*[16] – (in order to identify the number of dentists with job relationship with SUS); 3) *Healthcare e-management*[17] – in order to identify the population coverage of the eSB; 4) *Program for the Improvement of the Access and Quality of the Dental Specialty Centers (PMAQ-CEO)* – in order to analyze the employment relationship of the dentists with the job and the offer of specialized service in Brasil Sorridente in the five country regions. In this step, data from the external evaluation by PMAQ-CEO 1st Cycle, conducted in 2014[18], was used.

The external evaluation by PMAQ-CEO was divided into three modules: direct observation module, interview with the manager and with a professional from the unit and the last one, user satisfaction. In this study, questions from the interview with the manager and with a professional from the unit module were selected, because they allowed to identify the number of CEOSs in the country, the geographic distribution of the services and the employment relationship of the dentists with the job, determining the choice of this Brasil Sorridente network component for this study. Among the indicators, the following ones were considered: contracting agent (question VIII.4.1), type of relationship (question VIII.4.2), hiring mechanism (question VIII.4.3.1) and career plan/financial premium for performance (question VIII.5).

Finally, a documentary survey was conducted in the public sector recruitment examination's schedule of conditions. The schedule of conditions bank was made available by a company which advertises public sector recruitment examinations in websites and contained schedule of conditions related to different open positions in the country in the period from 2006 to 2015. Only the schedules of conditions which contemplated open positions for dentists with jobs in the city halls of Brazilian municipalities were selected, generating a total of 210 schedules of conditions. This data was organized on the SPSS program (version 15.0, SPSS Inc, Chicago, IL) and a draw by sample replacement selected five schedules of conditions per State (convenience sample) so as to contemplate the five Brazilian regions (Center-West, Northeast, North, Southeast and South). It's worth emphasizing that in some states, the maximum number of schedule of conditions found was five, thus, this number was also standardized for the other States, totalizing, therefore, a total of 135 schedule of conditions analyzed in a convenience sample. The schedule of conditions were fully read and the information relevant for the study, such as general aspects (year when the public sector recruitment examination was performed and geographic region), position aspects (specialty required, care level, number of positions offered, as-needed registry, employment relationship, contracting agent, hours worked and salary) were analyzed by applying descriptive statistics in software SPSS (version 15.0, SPSS Inc, Chicago, IL).

Results

The findings are presented in three sections: 1) Expansion of the dentist provision at SUS; 2) Characteristics of the employment relationship of the dentists with the service; 3) Characterization of the public sector recruitment examination for the dentists at SUS.

Expansion of the dentist provision at SUS

Around 48% of the dentists registered with CNES do Brasil provide services at SUS (Table 1). The North and Northeast regions present most of the dentists registered with CNES with job relationship with SUS, 61% and 67% respectively, while the Center-West, Southeast and South regions are prevalent in the private sector, this data shows that the dental work market is changing and is no longer being characterized only as a sector, but within a public-private scenario[19].

The implementation of Brasil Sorridente may have been an important booster of this number, once over only 13 years, a 118% increase has been noted in the municipalities with eSBs implemented. At the end of 2015, around 90% of the Brazilian municipalities presented eSBs, being 22,227 eSBs in modality 1 (dentist and oral health assistant) and 2,240 eSBs in modality 2 (dentist, oral health assistant and oral health technician). Concerning the population coverage estimated by the eSBs, a 10.46% increase was noted between 2007 and 2015 (Table 2).

Table 1. Number of dentists registered with the CNES.

Region	Dentists registered with the CNES		
	Total	Serving at SUS	Not serving at SUS
Center-West	10.790	4.556 (42%)	6.234 (58%)
Northeast	24,785	16,490 (67%)	8,295 (33%)
North	6,454	3,930 (61%)	2,524 (39%)
Southeast	58,231	24,823 (43%)	33,408 (57%)
South	21,358	8,441 (40%)	12,917 (60%)
Total	121,618	58,240 (48%)	63,378 (52%)

Source: Elaborated by the author(s) using the data made available by the Ministry of Health, Unified Health System's Databank – DATASUS, National Registry of Healthcare Establishments – CNES Human Resources. 2015[16].

Table 2. History of implementation of Oral Health Teams in the primary care in Brazilian municipalities and estimated population coverage.

Year	No. of Municipalities with eSB	eSB. Modality I	eSB. Modality II	Estimated population coverage eSB
2002	2,302	3,819	442	*
2003	2,787	5,631	539	*
2004	3,184	8,234	717	*
2005	3,897	11,717	886	*
2006	4,285	14,019	1,067	*
2007	4,294	14,563	1,131	29.90%
2008	4,597	16,423	1,384	33.29%
2009	4,717	17,465	1,517	34.61%
2010	4,830	18,731	1,693	36.54%
2011	4,883	19,492	1,933	38.35%
2012	4,901	20,155	2,048	38.97%
2013	4,971	21,016	2,134	39.46%
2014	5,018	22,066	2,257	39.90%
2015	5,014	22,227	2,240	40.36%

*Data not available for the period.

Source: Elaborated by the author(s) with data made available by the Department of Basic Care and e-manager Basic Care[15,17].

Employment relationship of the dentists with the service

The CEOs are a reference for the basic healthcare, and also articulators of the oral health tertiary care at SUS. Brasil Sorridente has 1034 CEOs, being that 930 participated in PMAQ-CEO (62 in the Center-West, 355 in the Northeast, 59 in the North, 337 in the Southeast and 117 in the South). The implementation of the CEOs was also responsible for the expansion of job opportunities for dentists at SUS and the data reveals that the main hiring mechanism at CEO was the public service recruitment examination, however, around 33% did not occur through this way (Table 3).

According to PMAQ CEO data, concerning the contracting agent, it is noted that 20% of the analyzed dentists are cont hired from the direct administration, but by means of other hiring forms: public intermunicipal consortium, private intermunicipal consortium, public foundation, private foundation, social organization (SO), public interest civil society (OSCIP), philanthropic entity, company, cooperative and others which have not been typified (Table 3).

Concerning the professional growth opportunity, in the total of CEOs, 307 (33%) present-

Table 3. Hiring mechanism for dentists in the CEOs, contracting agent of the dentist in the CEOs and opportunity for professional growth.

Region	Hiring mechanism for dentists in the CEOs			Contracting agent of the dentist in the CEOs			Professional growth		
	Public Service Recruitment Examination	Others, not typified	Total	Direct administration	Others, not typified	Total	Professional growth		Total
							Yes	No	
Center-West	431 (70%)	186 (30%)	617	516 (84%)	99 (16%)	615	31 (50%)	31 (50%)	62
Northeast	1202 (44%)	1510 (56%)	2712	1,930 (70%)	809 (30%)	2739	53 (15%)	302 (85%)	355
North	411 (72%)	161 (28%)	572	524 (94%)	34 (6%)	558	24 (41%)	35 (59%)	59
Southeast	2678 (81%)	622 (19%)	3300	2,799 (86%)	454 (14%)	3253	136 (40%)	201 (60%	337
South	791 (75%)	267 (25%)	1058	780 (76%)	244 (24%)	1024	63 (54%)	54 (46%)	117
Total	5513 (67%)	2746 (33%)	8259	6,549 (80%)	1,640 (20%)	8,189	307 (33%)	623 (66%)	930

Source: Elaborated by the author(s) using data from PMAQ-CEO, 2015.

ed contracts with career plan for the dentists. However, there were variations concerning the geographic regions, being 50% of the CEOs in the Center-West, 15% in the Northeast, 41% in the North, 40% in the Southeast and 54% in the South region (Table 3).

Characterization of the public sector recruitment examination's schedule of conditions at SUS

Requirements and attributions

A total of 715 job vacancies, intended for dentists, to complete the staff of the city halls of Brazilian municipalities of the five geographic regions, was analyzed in a convenience sample of 135 schedules of conditions (5 per State). These job vacancies provided the practice in different points of the SUS care network (Table 4), however, at the primary care level, most of the schedule of conditions did not specify if the job vacancy was intended to complete the Family Health Strategy (ESF). Job vacancies intended for the as-needed registry were identified in 20 schedules of conditions, however, only 7 of them did not contemplate any job vacancy for immediate practice.

Concerning the requirements for the job vacancy, all of them required undergraduate degree in dentistry and 102 (14%) of the job vacancies required specialization course for the positions. It is important to highlight that although the CEOs provide specialized services, the dentist is not required to be an expert.

This study sought to characterize some relevant hiring conditions in schedule of conditions opened in the different municipalities of the country. It was noted that most of the schedule of conditions (45%) were from city halls of municipalities with population between 10,000 to 50,000 thousand inhabitants, 35% with population up to 10,000 and 20% with population of more than 50,000. Concerning the Municipal Human Development Index (HDI-M) 98% of the schedule of conditions belong to municipalities with HDI-M considered as been medium by the United Nations Development Program (UNDP Brazil), i.e., between (0.500 to 0.799).

Remuneration

The salaries offered in the schedule of conditions were organized by region according to the care level and workload of the jog vacancy (Table 5). The workload of the schedule of conditions ranged between 10 to 40 hours/week, but most of

Table 4. Job vacancies offered in the schedule of conditions analyzed according to the five Brazilian regions.

Region	Schedule of Conditions	Job vacancies	Job vacancies per care level – n (%)		
			Primary care	CEO	Not Informed
Center-West	15	55 (8%)	8 (15%)	-	47 (85%)
Northeast	45	201 (28%)	87 (43%)	45 (22%)	69 (34%)
North	35	186 (26%)	6 (3%)	-	180 (97%)
Southeast	20	251 (35%)	139 (55%)	1 (0,3%)	111 (44%)
South	15	22 (3%)	7 (32%)	5 (23%)	10 (45%)
Total	130	715 (100%)	247 (35%)	51 (7%)	417 (58%)

Source: Elaborated by the author(s) with data from the analyzed schedule of conditions.

Table 5. Remuneration related to the job vacancies and the region characteristics*.

Region	Level of Attention					
	Primary Care		CEO		Not Informed	
	Workload					
	20 h/w	40 h/w	20 h/w	40 h/w	20 h/w	40 h/w
Center-West						
Minimum	7,11	4,79	-	-	1,67	3,29
Maximum	7,11	5,78	-	-	5,40	8,56
Northeast						
Minimum	-	1,05	2,73	-	1,72	1,44
Maximum	-	8,95	2,73	-	2,23	6,45
North						
Minimum	-	4,13	-	-	2,86	2,00
Maximum	-	7,06	-	-	3,42	6,45
Southeast						
Minimum	2,87	2,86	3,38	3,35	1,43	3,58
Maximum	2,87	12,67	3,38	3,35	4,10	4,45
South						
Minimum	2,41	3,79	4,17	7,05	4,31	3,22
Maximum	3,37	5,63	4,17	7,05	4,84	11,51

*The values are related to the ratio of the schedule of conditions salary (for the different programs and workloads) to the Brazilian minimum wage related to the public service recruitment examination according to the Departamento Intersindical de Estatística e Estudos Socioeconômicos (DIEESE)[20].

Source: Elaborated by the author(s) with data from the analyzed schedule of conditions.

them required 20 or 40 hours/week. As the salary references were from a 10-year period, we established our analysis from the ratio of the schedule of conditions salary to the Brazilian minimum wage related to the year the public service recruitment examination was conducted[20].

Discussion

It is noted that in little more than one decade, there was an expressive increase of the availability of job opportunities and that approximately half of the workforce in dentistry presents a relationship with SUS. The increase of the eSBs can be noted not only in major urban centers, but in the whole country, what is certainly cooperating to correct part of the iniquities and reduce, to some extent, the inequalities in the use of the services[21]. However, the population coverage is still insufficient and places the principle of the universal healthcare at risk, as stated by SUS. Concerning the employment relationship in the CEOs, it was identified that 20% of the dentists are hired by management modalities which are not subject to the direct administration of the State. This subject is very controversial among the main political actors of the SUS, with opposite and

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favorable opinions[22]. Girardi and Carvalho[23], points out that identifying the contracting agents is crucial to outline management strategies and instruments directed towards the HRHs[23]. There are evidenced that differences in the employment relationship among the professionals of the same service may present negative consequences to the team work process[24].

In the analyses of the public service recruitment examinations' schedule of conditions, it was noted that although the hiring via public service recruitment examination provides stability for the professional, for not being bond to possible political changes and guaranteeing the labor rights, the low salaries found in some schedule of conditions, the remuneration and workload variations to perform the same job may discourage the professional and affect the initiatives of the program for fighting against the work precariousness at SUS[25]. The literature indicates that in order to reach the universal healthcare coverage availability, accessibility, acceptability and quality of the healthcare workforce are required[2]. Thus, it's equally that in addition to the professionals' availability, the monitoring and evaluation of the entire set of interventions being conducted in the health sector are conducted so as to identify the results of the implemented strategy and allow the investigation of the contextual factors which influence its success or failure[26].

This study sought to approach the expansion of dentists in the SUS and analyze it under the view of the employment relationships, considering that the professional stability is crucial to motivate and improve the development of the professionals in the health sector[27]. With the management decentralization, established from the 1988 Federal Constitution and regulated by Laws 8.080/90 (Health Organic Law) and 8.142/90[28] the municipality became the major employer of health professionals, including the dentists[29]. Currently, the country has 5,570 municipalities, being important to emphasize that each of them present different socioeconomic realities and, many times precarious, placing Brazil among the countries presenting the highest inequality rate in the world[30]. The Brazilian reality, characterized by the regional diversities, poses important details to be analyzed, among them, Campos et al.[31]question: What compensation does SUS offers to the municipalities concerning the structure and infrastructure, instruments and public management models in order to guarantee a constitutional mission? In case of Brasil Sorridente, the political directives point out the need to: "undertake the commitment for the qualification of the basic care, guaranteeing quality and problem-solving, regardless of the strategy adopted by the municipality for its organization"[32](p.4). If, on the one hand the politics recommend that the eSBs provide quality in care, on the other hand, it may fail in case it does not present the organizational mechanisms required to do it. Politics must have an inducing role in the work qualification; currently, to register an eSB, implement a CEO or any other Brasil Sorridente network component, the municipal Manager is required to submit a proposal to the Municipal Council of Health and, if approved, it must submit it to the State Bipartite Intermanagers Commission (BIC). In case of accreditation of the eSBs, such proposal must include, among other information, the description of the recruiting, selection and hiring process of the team professionals. In case the proposal is approved, the municipality receives the transfer of resources for the implementation of the requested component[33], however, the process is not monitored. The importance of some initiatives by the Ministry of Health is remarkable concerning the employment relationships as, for example, the Career Policy for SUS and the Negotiating Table, but it's also required that the HRH hiring practices are part of Brasil Sorridente policy agenda, because in addition to being considered as a powerful tool for more efficient management, they can be crucial to improve the quality of the HRH provision measures[34]. Recognizing the evidence that the incentives considered as being efficient for the health workers must present: clear objectives; being realistic; reflecting the health professionals' needs and preferences; being well designed and strategically able for their purposes; being appropriate for the local context; being fair; equitable and clear; being measured and followed; incorporating financial and non-financial elements[35]. It's clear that only expanding the number of health professionals without establishing a national regulatory HRH picture, which contemplates such evidence, may affect the sustainability of the policies and affect the access to health, particularly in remote and vulnerable communities.

Although the job opportunities at SUS have increased, surveys still point out a growing trend to the poor distribution of dentists in the country, particularly for considering that the concentration of educational institutions and the better purchasing power of the population in the major urban centers influence the decision on where the dentists will work, once this professional class

seeks a double public/private practice[36]. This is a crucial subject, however poorly explored in the health systems[37]. The lack of a position and salary plan may collaborate with this behavior and favor the SUS professionals turnover[38]. Brasil Sorridente organizes the oral healthcare based on the ESF precepts, which recommends a workload of 40 hours/week. This strategy recognizes and values the need of the employment relationship and the distribution of professionals, in addition to the commitment and partnership between the professionals and the community[39], however, some inconsistencies are reported such as, for example, the flexibility of the workload in detriment of precarious hiring forms[40]. The presented results point out that this can be the reality also in dentistry, once public service recruitment examinations' schedule of conditions intended to the eSBs with a workload of 20 hours/week were identified. This reality may cooperate for the distance of the professional from the service and for possible ethical conflicts related to the public/private market, such as, for example, the achievement of the *status* and financial gain in the private service and the guarantee of stability and labor advantages in the public service[19]. The professional valuation must be strengthened; for that purpose, Nogueira[41] points out the importance of a legal situation of the relationships by means of professionals duly approved in the public service recruitment examination. A study conducted in a macro-region of the State of Minas Gerais verified the selection criteria used to hire health worker and identified that the municipal secretaries used a number of selection criteria and that only 20% of them were by means of public service recruitment examination. The study also calls the attention to some selection forms adopted by the secretaries, such as, for example, the political appointment which, according to the author are: "alternatives for the archaic incorporation of employment, customer and heritage favoring"[42](p.925).

This study presents limitations inherent to the method because it is based on secondary data. These sources may present biases once they depend on the continuous update of the bodies responsible for the information. In order to reduce such bias, several data sources were found. In addition, the OBERVARHODONTO is developing qualitative surveys intended to deepen such analyses.

Finally, it is understood that recognizing the facilitators and the contextual barriers related to the health professionals distribution becomes crucial to plan the future actions. Concerning the facilitator, a number of policies directed to the HRS can be highlighted in different sectors in Brazil[43], specific policies on the problem, such as PROVAB and Mais Médicos, as well as others which did not present only this objective provided the expansion of services in national territory, such as, for example, Brasil Sorridente.

Concerning the obstacles, this study contributed to identify weaknesses existing in the dentists' work relationship with the services, particularly concerning the lack of regulation in the employment contracts. The State impartiality concerning the municipal decisions must be reviewed; not in the retrograde and arbitrary sense of the centralized and inflexible management, but in the search of co-responsibility and clarity. In 10 years with Brasil Sorridente, US$ 2,6 billion were invested in the oral health, a necessary expenditure and with several benefits to the population[13]. Now, it is necessary to analyze the impact indicators of it and of other policies and adjust the next steps with view to the intersectoral approach or the actions and in the commitment with decreasing the social inequalities. The countries planning to qualify the health workforce, with view to reach the universal coverage, must propose regulation measures in different context, in the health professionals' qualification, management at all the system levels and also the regulation of the human resources for health, which must be directed by the population needs and expectations, taking the socioeconomic and cultural diversity into consideration. Therefore, it's necessary, among other measured, to plan strategies directed to the HRH.

The challenges posed to Brazil to overcome the health inequalities and improve the provision, require the continuous expansion of job opportunities in dentistry, so as to strengthen the network and allow the completeness of care at SUS, however, the continuity of the successes achieved requires that the regulatory measured of the employment works and support to the local managers are part of the priority actions agenda of Brasil Sorridente policy.

Collaborations

M Gabriel worked in the study design, methodology, data collection and analysis, article structuring and writing, and wording review in all versions, including the final one. MH Cayetano and MM Chagas worked in the data collection and analysis, article structuring and writing in all the versions, and in the final wording review. ME Araujo, G Dussault, GA Pucca Junior and FCS Carrer worked in the study design and in the article wording review in all the versions, including the final one.

References

1. Buchan J, Couper ID, Tangcharoensathien V, Thepannya K, Jaskiewicz W, Perfilieva G, Dolea C. Early implementation of WHO recommendations for the retention of health workers in remote and rural areas. *Bull World Health Organ* 2013; 91(11):834-840
2. Campbell J, Buchan J, Cometto G, David B, Dussault G, Fogstad H, Fronteira I, Lozano R, Nyonator F, Pablos-Méndez A, Quain EE, Starrs A, Tangcharoensathien V. Human resources for health and universal health coverage: fostering equity and effective coverage. *Bull World Health Organ* 2013; 91(11):853-863.
3. Dussault G, Dubois CA. Human resources for health policies: a critical component in health policies. *Hum Resour Health* 2003; 1(1):1.
4. World Health Organization (WHO), Global Health Workforce Alliance. *Human resources for health: foundation for Universal Health Coverage and the post-2015 development agenda. Report of the Third Global Forum on Human Resources for Health*. Genebra: WHO; 2013.
5. World Health Organization (WHO), Global Health Workforce Alliance. Dublin Declaration on Human Resources for Health. Building the health workforce of the future. *Fourth Global Forum on Human Resources for Health*; 2017 Nov 13-17; Dublin, Irlanda.
6. Oliveira FP, Vanni T, Pinto HA, Santos JTR, Figueiredo AM, Araújo SQ, Matos MFM, Cyrino EG. Mais Médicos: um programa brasileiro em uma perspectiva internacional. *Interface (Botucatu)* 2015; 19(54):623-634.
7. Dussault G, Franceschini MC. Not enough there, too many here: understanding geographical imbalances in the distribution of the health workforce. *Hum Resour Health* 2006; 4:12.
8. Willis-Shattuck M, Bidwell P, Thomas S, Wyness L, Blaauw D, Ditlopo P. Motivation and retention of health workers in developing countries: a systematic review. *BMC Heal Serv Res* 2008; 8:247.
9. Kroezen M, Dussault G, Craveiro I, Dieleman M, Jansen C, Buchan J, Barriball L, Rafferty AM, Bremner J, Sermeus W. Recruitment and retention of health professionals across Europe: A literature review and multiple case study research. *Health Policy* 2015; 119(12):1517-1528.
10. Magnago C, Pierantoni CR, França T, Vieira SP, Miranda RG, Nascimento DN. Política de Gestão do Trabalho e Educação em Saúde: a experiência do ProgeSUS. *Cien Saude Colet* 2017; 22(5):1521-1530.
11. Martins MIC, Molinaro A. Reestruturação produtiva e seu impacto nas relações de trabalho nos serviços públicos de saúde no Brasil. *Cien Saude Colet* 2013; 18(6):1667-1676.
12. Petersen PE. Global policy for improvement of oral health in the 21st century--implications to oral health research of World Health Assembly 2007, World Health Organization. *Community Dent Oral Epidemiol* 2009; 37(1):1-8.
13. Pucca Junior GA, Gabriel M, Araujo ME, Almeida FC. Ten Years of a National Oral Health Policy in Brazil: Innovation, Boldness, and Numerous Challenges. *J Dent Res* 2015; 94(10):1333-1337.
14. World Health Organization (WHO). *Increasing Access to Health Workers in Remote and Rural Areas Through Improved Retention: Global Policy Recommendations*. Genebra: WHO; 2010.
15. Brasil. Ministério da Saúde (MS). Departamento de Atenção Básica. *Histórico de Cobertura da Saúde da Família* [página na Internet]. [acessado 29 Dez 2017]. Disponível em: http://dab.saude.gov.br/portaldab/historico_cobertura_sf.php
16. Brasil. Ministério da Saúde (MS). Banco de dados do Sistema Único de Saúde (DATASUS), *Cadastro Nacional de Estabelecimentos de Atenção à Saúde (CNES) Recursos Humanos* [página na Internet]. [acessado 29 Dez 2017]. Disponível em: http://tabnet.datasus.gov.br/cgi/deftohtm.exe?cnes/cnv/prid02AC.def
17. Brasil. Ministério da Saúde (MS). *e-Gestor atenção, informação e gestão da atenção básica* [página na Internet]. [acessado 15 Jan 2018]. Disponível em: https://egestorab.saude.gov.br/
18. Brasil. Ministério da Saúde (MS). Departamento de Atenção Básica. *Programa de Melhoria do Acesso e da Qualidade dos Centros de Especialidades Odontológicas* [página na Internet]. [acessado 16 Maio 2018]. Disponível em: http://dab.saude.gov.br/portaldab/ape_pmaq.php?conteudo=1_ciclo_ceo
19. Gomes D, Ramos FRS. O profissional da odontologia pós-reestruturação produtiva: ética, mercado de trabalho e saúde bucal coletiva. *Saude Soc* 2015; 24(1):285-297.
20. Departamento Intersindical de Estatística e Estudos Socioeconômicos (DIEESE). *Salário mínimo nominal e necessário* [página na Internet]. [acessado 27 Jan 2016]. Disponível em: http://www.dieese.org.br/analisecestabasica/salarioMinimo.html

21. Almeida G, Sarti FM, Ferreira FF, Diaz MD, Campino AC. Analysis of the evolution and determinants of income-related inequalities in the Brazilian health system, 1998-2008. *Rev Panam Salud Publica* 2013; 33(2):90-97.
22. Nogueira RP. O desenvolvimento federativo do sus e as novas modalidades institucionais de gerência das unidades assistenciais. In: Santos NR, Amarante PDC. *Gestão Pública e Relação Público Privado na Saúde*. Rio de Janeiro: Cebes; 2010. p. 24-47.
23. Girardi SN, Carvalho CL. Contratação e qualidade do emprego no programa de saúde da família no Brasil. In: Brasil. Ministério da Saúde (MS). *Observatório de recursos humanos ou saúde no Brasil: estudos e análises*. Rio de Janeiro: Fiocruz; 2003. p.157-190.
24. Faria HX, Dalbello-Araujo M. Precarização do trabalho e processo produtivo do cuidado. *Mediações* 2011; 16(1):142-156.
25. Brasil. Ministério da Saúde (MS). Secretaria de Gestão do Trabalho e da Educação na Saúde. Departamento de Gestão e da Regulação do Trabalho em Saúde. *Programa Nacional de Desprecarização do Trabalho no SUS: Desprecariza SUS: perguntas & respostas: Comitê Nacional Interinstitucional de Desprecarização do Trabalho no SUS/Ministério da Saúde, Secretaria de Gestão do Trabalho e da Educação na Saúde, Departamento de Gestão e da Regulação do Trabalho em Saúde*. Brasília: MS; 2006.
26. Huicho L, Dieleman M, Campbell J, Codjia L, Balabanova D, Dussault G, Dolea C. Increasing access to health workers in underserved areas: A conceptual framework for measuring results. *Bull World Health Organ* 2010; 88(5):357-363.
27. Chen L, Evans T, Anand S, Ivey Boufford J, Brown H, Chowdhury M, Cueto M, Dare L, Dussault G, Elzinga G, Fee E, Habte D, Hanvoravongchai P, Jacobs M, Kurowski C, Michael S, Pablos-Mendez A, Sewankambo N, Solimano G, Stilwell B, de Waal A, Wibulpolprasert S. Human resources for health: Overcoming the crisis. *Lancet* 2004; 364(9449):1984-1990.
28. Brasil. Constituição da República Federativa do Brasil de 1988. *Diário Oficial da União* 1988; 5 out.
29. Conselho Federal de Odontologia (CFO). *O que esperamos do próximo Presidente do Brasil: 2015-2108*. Brasília: CFO; 2014.
30. Pan American Health Organization (PAHO), World Health Organization (WHO). *Health in the Americas 2012* [Internet]. [acessado 22 Mar 2016]. Disponível em: http://www.paho.org/saludenlasamericas /index.php?option=com_docman&task=doc_view&gid=118&Itemid=
31. Campos FE, Machado MH, Girardi SN. A fixação de profissionais de saúde em regiões de necessidades. *Divulg Saude Debate* 2009; 44:13-24.
32. Brasil. Ministério da Saúde (MS). *Diretrizes da política nacional de saúde bucal*. Brasília: MS; 2004.
33. Brasil. Ministério da Saúde (MS). *Passo a passo das ações do Brasil Sorridente* [página na Internet]. [acessado 20 Mar 2016]. Disponível em: http://dab.saude.gov.br/portaldab/ape_brasil_sorridente.php
34. Roodenbeke E, Dussault G. Contracting health personnel. In: Perrot J, Roodenbeke E, editores. *Strategic contracting for health systems and services*. New York: Transaction Publishers; 2011. p. 249-284.
35. International Council of Nurses. International Hospital Federation. International Pharmaceutical Federation. World Confederation for Physical Therapy. World Dental Federation. World Medical Association. *Guidelines: incentives for health professionals*. Genebra: WHO; 2008.
36. Cardoso AL, Stiebler V, Machado MH. Mercado de Trabalho dos Odontólogos no Brasil. *Divulg Saude Debate* 2010; 45:71-79.
37. Global Health Workforce Alliance (GHWA), World Health Organization (WHO). *A universal truth: No health without a workforce. Third Global Forum on Human Resources for Health Report*. Genebra: GHWA, WHO; 2013.
38. Medeiros CRG, Junqueira ÁGW, Schwingel G, Carreno I, Jungles LAP, Saldanha OMDFL. A rotatividade de enfermeiros e médicos: um impasse na implementação da Estratégia de Saúde da Família. *Cien Saude Colet* 2010; 15(Supl. 1):1521-1531.
39. Alves VS. Um modelo de educação em saúde para o Programa Saúde da Família: pela integralidade da atenção e reorientação do modelo assistencial. *Interface (Botucatu)* 2005; 9(16):39-52.
40. Mattos GCM, Ferreira EFE, Leite ICG, Greco RM. A inclusão da equipe de saúde bucal na Estratégia Saúde da Família: entraves, avanços e desafios. *Cien Saude Colet* 2014; 19(2):373-382.
41. Nogueira RP. Problemas de Gestão e Regulação do Trabalho no SUS. In: Nogueira RP, Piola SF, Vianna SM, Rodrigues VA. *Tendência na evolução do emprego e nas relações de trabalho em saúde: a gestão de recursos humanos no Sistema Único de Saúde*. Brasília: UNB; CEAM, NESP, ObservaRH; 2010. p.45-65.
42. Junqueira TDS, Cotta RMM, Gomes RC, Silveira SDFR, Siqueira-Batista R, Pinheiro TMM, Sampaio RF. As relações laborais no âmbito da municipalização da gestão em saúde e os dilemas da relação expansão/precarização do trabalho no contexto do SUS. *Cad Saude Publica* 2010; 26(5):918-928.
43. Buchan J, Fronteira I, Dussault G. Continuity and change in human resources policies for health: lessons from Brazil. *Hum Resour Health* 2011; 9:17.

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