Geographic Distribution of Brazilian Dentists: Motivation and Perception for Migration

Distribuição Geográfica dos Dentistas Brasileiros: Motivação e Percepção para a Migração

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Abstract

The Human Resources for Health (HRH) are considered as being crucial for the organization of the health systems and for the population health conditions; in this context, the purpose of this work is 1) to identify the current geographic distribution situation of Brazilian dentists, 2) to identify and analyze the perception and motivations of Brazilian dentists who migrated to the interior of the country. A case study approach was used and the data were collected from different sources (Federal Council of Dentistry, Health Graduation Indicators System, Geocapes, Brazilian National Institute of Geography and Statistics) using the mixed method, from the quantitative-qualitative exploratory sequential model, the qualitative phase was analyzed by using the "grounded theory" approach. The findings point out that the country has a great stock of dentists and that it significantly increased in recent years; however, it is poorly distributed over the territory, particularly when the differences between the interior and the capitals of the country are analyzed. The main category of the grounded theory was "The opportunities changing the ways to consolidate the professional"; the interviews point out that the dentists' place of birth and the opportunities over their professional career were crucial to determine the distribution of dentists throughout the Brazilian territory. It's concluded that Brazil has a dentistry workforce stock; however, it faces the results of the lack of HRH regulation policies which include dentistry. Such reality enhances the health gaps in some country regions and market saturation in major urban centers.

Keywords: Dentistry. Dental Staff. Job Market. Public Policy.

Resumo

Os Recursos Humanos em Saúde (RHS) são considerados fundamentais para a organização dos sistemas de saúde e para as condições de saúde de uma população, nesse contexto o objetivo desse trabalho é 1) identificar a situação atual da distribuição geográfica de dentistas brasileiros 2) identificar e analisar a percepção e motivações de dentistas brasileiros que migraram para o interior do país. Foi utilizada a abordagem de estudo de caso e os dados foram coletados a partir de diferentes fontes (Conselho Federal de Odontologia, Sistema de Indicadores das Graduações em Saúde, Geocapes, Instituto Brasileiro de Geografia e Estatística), utilizando o método misto, a partir do modelo exploratório sequencial quantitativo-qualitativo, a fase qualitativa foi analisada por meio da abordagem da "teoria fundamentada". Os achados apontam que o país apresenta um grande estoque de dentista, e que houve uma grande expansão nos últimos anos, no entanto este apresenta-se mal distribuídos pelo território, principalmente quando analisado as diferenças entre o interior e as capitais do país. A categoria central da teoria fundamentada foi "As oportunidades mudando os caminhos para consolidar o profissional", as entrevistas apontam que o local de nascimento dos dentistas e as oportunidades durante sua trajetória profissional foram decisivas para determinar a distribuição de dentistas no território brasileiro. Conclui-se, que o Brasil apresenta estoque de força de trabalho em odontologia, porém enfrenta os resultados da falta de políticas de regulação de RHS, que inclua a odontologia. Essa realidade acentua os vazios sanitários em algumas regiões do país e saturação do mercado nos grandes centros.

Palavras-chave: Odontologia. Recursos Humanos em Odontologia. Mercado de Trabalho. Política Pública.

1 Introduction

The international literature points out that in emerging countries, an inadequate dental workforce is considered an additional barrier to the oral health conditions of the population, imposing the creation of national plans capable of correcting these distortions¹. According to the World Health Organization (WHO), the highest burden of oral diseases is concentrated in vulnerable populations², on the other hand, Human Resources in Health (HRs) are concentrated in urban areas with better socioeconomic conditions, and resulting in

sanitary voids in areas with greater need for intervention, this is a challenge present in several countries around the world, since it accentuates the inequities of access to health³.

In Brazil, pro-equity policies implemented in recent decades have reduced inequalities, but were not enough to solve the problem⁴. In the case of poor geographic distribution of HRs, studies indicate that, among the actions carried out, the *Estratégia Saúde da Família* [Family Health Strategy] (ESF) had more representative effects when compared to some specific actions to provide HRs, such as, the *Programa*

de Interiorização das Ações de Saúde e Saneamento (PIASS) [Health and Sanitation Actions internalization Program] and the Programa de Interiorização do Trabalho em Saúde (PITS) [Health Work Interiorization Program (PITS)⁵]. More recently new programs were implemented, including the Programa Mais Médicos [More Doctors Program], however even with greater transversality of the actions did not reach all facets of the country's health labor market⁶.

Likewise, in dentistry, the increase in the number of oral health teams (ESB) in the ESF, after the implementation of the National Oral Health Policy "*Brasil Sorridente*" ["Smiling Brazil"], was responsible for the expansion of coverage to the population, especially in the north and northeast regions of the country⁷. However, the disparities in access to oral health and geographic imbalances of the workforce still persist.

The studies carried out in rural and remote Brazilian territory on the subject are scarce, but those carried out so far indicate a precarious situation in the oral health conditions of these populations⁸ and relate this condition, among other factors, with the low incorporation of dental services in the analyzed sites^{9,10}, however, these analyzes deal with the theme of the distribution of human resources in oral health in a secondary way.

The lack of qualified human resources in dentistry makes it impossible to offer the service, even in places with an installed infrastructure¹⁰, this problem was also pointed out as an obstacle to the expansion of the services of the National Oral Health Policy (Brasil Sorridente)¹¹. Moreover, from the epidemiological data and distribution of dentists in the country, the studies indicated a lack of planning for the allocation of these professionals¹².

The data also pointed out that Brazil presents a great geographic imbalance in the distribution of dentists, with significant concentrations in large urban centers, such as in the city of São Paulo and scarcity in areas of the North, Northeast and Midwest regions ^{13,14}. In this perspective, the objectives of this study were: a) to identify and analyze the current situation of the geographic distribution of Brazilian dentists b) to identify and analyze the perception and motivations of Brazilian dentists who migrated to the interior of the country.

2 Material and Methods

The case study approach was used and the data were collected from different sources, using the mixed method, from the quantitative-qualitative sequential exploratory model. Therefore, the methodological course of this study was divided into two phases:

2.1 Secondary data collection

A survey was carried out in national databases, including: CFO, United Nations Development Program (UNDP Brazil), Brazilian Institute of Geography and Statistics (IBGE) and GEOCAPES - Georeferenced Information System, as described in Table 1. The CFO file database was made available for this research.

Table 1 - Analysis categories and aspects considered for the search in secondary databases

Categories of Analysis	Aspects Considered	Sources of Consultation	
Dentists Characteristics	Main inscriptions Registration transfers Secondary registrations Specialization Sex Place of birth Place of practice Number of vacancies and graduates in Dentistry Number of courses	Federal Council of Dentistry (CFO) System of Indicators of Health Undergraduate Degrees (SIGRAS) Geocapes	
Characteristics of Brazilian regions.	Population (Capital and interior)	Brazilian Institute of Geography and Statistics (IBGE)	

Source: resource data.

The results of the different consultation sources were organized in Microsoft Excel® spreadsheets and analyzed in Epi Info® software.

2.2 Qualitative phase

The School of Dentistry of the University of São Paulo (FOUSP) was chosen as the case of this study, because it is a public university located in the city of São Paulo, the largest city in the southern hemisphere and the sixth largest in the world in population. It is one of the cities with the highest urban concentrations in the world, including the number of dentists ^{15,16}.

From the professional record of dentists in the CFO, FOUSP graduates were identified between the years 2000 to 2013, and among them, intentionally, graduates were selected who worked in the interior of the country for the interviews.

The interviews were conducted individually in a face-to-face and distance way, through the Connect® platform. After initial contact, with 23 graduates (identified within the desired profile for the research), 10 in-depth interviews were conducted, and at this time, theoretical sufficiency of the data analyzed was observed. A semi-structured script based on previous studies was followed ¹⁷, this study was also used as a theoretical basis of the analyzes. The interviews were transcribed in an integral and literal way in the Express Scribe Transcription Software Pro® and analyzed according to the methodological framework of "Grounded Theory"¹⁸.

This research was approved by the Research Ethics Committee of the School of Dentistry of the University of São Paulo, under protocol number 754.608/2014.

3 Results and Discussion

3.1 Findings regarding the secondary data

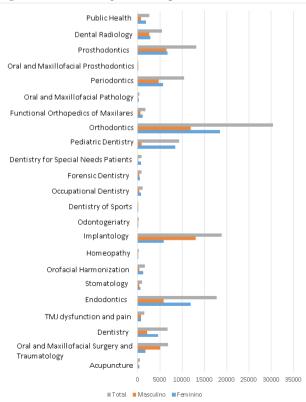
3.1.1 Stock/availability of dentists

From 1991 to 2016, Brazil presented a considerable increase in the number of undergraduate courses in dentistry, with this increase more representative in private educational institutions, which increased from 37 in 1991 to 235 in 2016, with a higher percentage of the number of undergraduate courses in dentistry. while public institutions increased from 46 in 1991 to 64 in 201627. In 1991 most institutions were of a public legal nature and there was currently an inversion for the private sector. In 2019, the number of dentistry courses in Brazil is 550¹⁹.

A study on the quantitative scenario of vacancies available to students in medical, nursing and dentistry courses estimated that dental vacancies should increase from 20,589 in 2012 to 30,781 in 2025²⁰, however, data from 2016 reveal that Brazil already had a higher availability of vacancies in dentistry schools than estimated, totaling 44,538 vacancies, (39,198 in private institutions and 5,340 in public institutions), with consequent increase in the number of graduates. In 2016, the country presented 14,544 new dentists in the labor market (11,134 in private institutions and 3,411 in public institutions)²¹.

The CFO data point out that in 2023 the country has 384,640 dentists registered in activity, of which 131,976 thousand specialists (16). The availability of specialist in Brazil can be observed in Figure 1.

Figure 1 - Number of specialists registered in the CFO



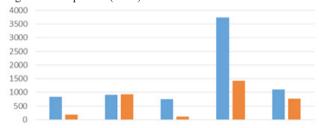
Source: resource data.

Regarding the availability of masters and doctors, GeoCapes data indicate that in 2017 (last available data) Brazil presented 1,520 graduate graduates in stricto sensu programs in the field of dentistry (593 academic master, 526 professional master's degree and 401 doctorate), in 2000, Brazil graduated 663 graduate students (433 academic master, 68 professional master and 162 doctorate)²².

3.2 Geographical distribution of dentists in Brazil

Analyzing the geographic distribution of graduates, according to the region of course completion, there is a higher concentration in the southeast region and in private institutions (Figure 2).

Figure 2 - Geographical distribution of graduates, according to region of completion (2014)



	North	Northeast	Midwest	Southeast	South
Private Educational Institution	842	914	754	3735	1112
Public Education Institution	179	930	117	1415	770

Source: resource data.

Another aspect considered was the proportion of dentists per inhabitants, according to large regions, separating the capitals from the interior of the states (Table 1).

Table 1 - Proportion of dentists per inhabitants according to capitals and interior of the Brazilian states

State (IIII)	Inhab/CD	Inhab/CD		
State (UF)	(Capitals)	(Interior)		
SC	211	655		
PR	286	753		
RS	291	750		
Southern Region	276	725		
ES	178	1,001		
MG	293	803		
SP	373	784		
RJ	398	708		
Southeast Region	362	786		
GO	295	960		
MT	353	1,133		
MS	449	866		
Midwest Region	342	879		
PB	339	1,609		
SE	347	6,995		
RN	362	1,871		
PE	386	2,180		
PI	441	2,513		

State (UF)	Inhab/CD (Capitals)	Inhab/CD (Interior)	
AL	443	4,033	
MA	502	3,595	
BA	530	1,895	
CE	581	2,908	
Northeast Region	457	2,339	
TO	401	1,328	
RO	488	959	
PA	510	3,070	
RR	526	4,748	
AM	545	4,163	
AP	696	4,271	
AC	735	2,615	
North Region	539	2,331	

Source: Own elaboration with data from CFO.

The central theme of this study, "geographic distribution of dentists in Brazil", was analyzed considering different methodological approaches and also through data triangulation, which allowed to verify different aspects related to this problem.

In order to contextualize and verify the magnitude of the problem, the following aspects were analyzed: availability and distribution of dentists. From the quantitative data, it was verified that, in different sectors, there was a considerable growth in the stock of dentists in Brazil, whether they are graduates, specialists, masters and doctors. The country has experienced an increase in the number of professionals, a situation that has changed the dental labor market in recent years. Attention is drawn to the increase in the number of private institutions that offer undergraduate courses in dentistry, and the greater representativeness of them compared to public institutions. The data reveal that this expansion coincides with the period of consolidation of neoliberalism in the governments of President Fernando Henrique Cardoso, in which the adopted policies promoted an acceleration of the creation of Higher Education Institutions (HEIs), with consequent expansion of the offer of vacancies via private sector (23).

It was the increase in the public and, fundamentally, private sectors that justify the large number of graduates of dentistry courses identified in this study. It should be noted that there are some warnings about this expansion, indicating that the measures implemented, with an increase in the number of vacancies in universities were not enough to meet the demand for RHS in some regions of the country (24).

Another relevant data is the large number of registered specialists, about 36.5%, revealing that Brazil has a diverse stock of dentists. It is possible that this search for specialties generates an increasingly expensive and exclusionary dentistry for the population, to the detriment of a care based on the precepts of primary health care. Add to this analysis the fact that the high degree of specialty may be an additional obstacle to better distribution and retention of RHS in the

interior of the country (25).

Regarding the concentration of professionals by macroregion, the discrepancy in the distribution of the workforce in oral health in Brazil is evident, with a strong concentration in the richest regions of the country (South and Southeast). When the proportion of inhabitants by dentists is done, it is verified that in addition to the regional concentrations, there is a preference for the capitals, in relation to the interior.

3.3 Geographical distribution of dentists graduated in Brazil

At this stage of the study, it was focused on dentists, graduates of FOUSP from 2000 to 2013. From the CFO information, the personal and professional data of the graduates were analyzed. A total of 1,847 graduates were identified in the databases, of which 1,360 (73%) were female and 687 (37%) were male.

The findings were organized according to the type of registration in the council, in order to avoid duplicity, the entries were considered: active principal, active secondary and enrollment by transfer, the registrations canceled or with the same number of "National Service of Dental Surveillance" were removed from our sample. In relation to the location of the professionals, the state of registration was considered and separated between capital and interior.

Of the 1,847 graduates, 1,744 have active main enrollment, and 20 of them also had active secondary enrollment, 103 had active transfer enrollment and 505 (27%) had at least one specialization registered with the CFO. To define the migratory flow of the graduates, the place of birth and the place of practice was considered, since all graduated from FOUSP/São Paulo - SP (Table 2).

Table 2 - Place of birth and practice of the graduates

Variables	Categories	n	(%)	
1) Was he/she born	Yes	1661	88.9%	
in the state of São Paulo?	No	186	10.1%	
2) Place of birth	Capital	1043	59.7%	
	Interior	618	38.6%	
	Abroad	15	0.8%	
	Not informed	16	0.9%	
3) Do you practice in the State of São Paulo?	Yes	1737	94.0%	
	No	110	5.9%	
	Capital	1160	62.8%	
4) Place of practice	Interior	670	36.2%	
	Not informed	17	1.0%	

Source: Own preparation with CFO data.

Table 3 shows the distribution of the number and proportion (%) of dentists graduated by FOUSP in the period from 2000 to 2013, according to the place of birth and the place of practice, and it is possible to observe through the association test by $\chi 2$ that the fact of being born or not in São

Paulo presented a statistically significant difference with the fact of operating or not outside São Paulo. Almost all dentists born in São Paulo, work in São Paulo (99.4%), while those who were not born in São Paulo, 89.0% work in São Paulo (p<0.0000). The data obtained also showed that 56.25% of dentists who were born outside São Paulo and work outside São Paulo, work in the state where they were born.

Table - 3 Distribution of number and proportion (%) of dentists graduated by FOUSP from 2000 to 2013, according to the place of birth and the place of practice

Variable	Categories			Practices out of SP		Total	p of χ²
		n.	%	n.	%		
Born	Yes	1570	99.4	9	0.6	100.0	< 0.0000
in São Paulo	No	130	89.0	16	11.0	100.0	

p: Descriptive level of association test by x^2

Source: resource data.

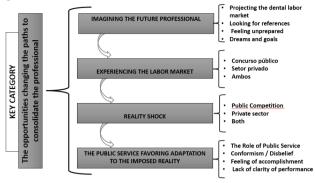
When analyzing the case of FOUSP, in relation to distribution, a profile similar to the national one is observed, as most graduates were born and work in the state of São Paulo. The association test allowed us to observe that the place of birth is related to the place of professional practice and that dentists seek to work in the place where they were born, corroborating with other evidence, that demonstrate similar results and point out the need to review the location of offer of undergraduate courses (26). One fact that draws attention in the FOUSP case is the fact that only 23 graduates were selected for the study, because they present the desirable migratory profile, this is an indication that the migration among the graduates of this course is still timid.

3.2 Qualitative phase: perception and motivations of dentists who migrated to the interior of the country.

For the qualitative phase, potential research subjects were identified, from the places of practice of the FOUSP graduates. It was sought to interview dentists who experienced migration during their professional career. This migration of the graduates included: to be born in the capital (CSP) and practice in the interior of the state (ISP), to be born and practice in the interior of the state (ISP), to be born in the state capital (CSP) and practice in the interior of another Brazilian state (IOE), to be born and practice in the interior of another Brazilian state (IOE). These possibilities of performance integrated the group that represents the theoretical sampling of this study. The interviews were conducted with 10 graduates, and at this time, theoretical sufficiency of the analyzed data was observed. It is important to highlight that all participants of this phase had double professional bounds (public-private).

From the reports of dentists a theoretical model was built that brings together the categories: "imagining the professional future", "experiencing the labor market", "shock with reality" and "adapting to reality", the integration of these categories pointed to the central category called "opportunities changing the paths to consolidate the professional" that allows us to understand their motivations for migration (Figure 3).

Figure 3 - Theoretical model: Opportunities changing the paths to consolidate the professional Own elaboration with data from qualitative research



Source: resource data.

3.2.1 Category: Imagining the professional future

Dentists reported that entering the dentistry course is motivated by numerous factors, and at this stage, students present dreams and goals for their professional future. They report a desire for great financial return, as a result of a distorted look at professional performance.

I wore braces ... then you see the dentist attending one after the other... you say the guy is rich, millionaire and works little, just squeezing the rubber bands.

The phase of starting professional life was pointed out by the graduates, as a period of insecurities and feelings of unpreparedness to face the world of work. They begin to take courses and seek options for insertion in the labor market, which is still uncertain.

When we graduate, we don't know much, I started making several improvements.

In college, no one gives some good tips, I started to realize that the business is difficult, very difficult... then some people around began to talk "ahh! Public contest.

3.2.2 Category: experiencing the labor market

As a result of the imaginary and in security of the beginning of the professional career, dentists reported that the experiences lived during under graduation influenced their choices. They sought to reconcile personal and professional desires, allowed themselves to dare and experience the different possibilities of practice. They faced financial needs and began to understand the labor market, much driven by the opportunities that emerged. The speeches of the graduates show opportunities could not be wasted.

I thought I would finish college and leave, but I stayed five more years... it was the circumstances that led to stay longer, the opportunities.

My goal? "Of course it was to have a private office.

I was studying, half a year, I tried a lot (of public contests)... I went to Santa Catarina, Sergipe, Goiânia, Recife... I ventured a little... then I understood a little of life, going out a little, opened my head, I saw what the national reality is like. I

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went to the test, but when I got there, I thought well, no, life won't be that right? A lot of suffering! Then I passed in Santa Catarina, so I could choose between the two... Of course I will go South, if I went there I would help people, but we have to think about us, quality of life. There in the interior of Sergipe is poverty, social difficulty ... I was going to be isolated, it is far from home too

I had no plans to go back to the interior, I just came back because of the contest... Today the market is very competitive, so the contest is safer (salary, 13th, stability, when one gets sick...and also because I have always liked the part of caring for the people who need).

3.2.3 Category: Shock with reality

From the opportunities that arose, and the experiences lived, dentists were able to reflect on the barriers and strengths of the profession, as well as the dental market. At this stage, it was observed a shock with reality, important to highlight that this "shock" was not characterized by a positive or negative circumstance, only as a way to come across something unknown. In this category the process of maturing the professional who abandons the imaginary and concretizes reality is observed.

When I returned to Recife I came back for two things, one was to return to my hometown, near my family and another to live. Here we don't just work all the rime, right? If we earn more, great! Otherwise, what can we do, right? We stay at home if we don't have money to spend.

When I was in São Paulo...we were aware even before the articles were published. When I arrived here and was going to go to some dentist colleague who could do this and that, he said I was crazy... (laughter) ... whenever I go to a course I go to São Paulo...

There (inside) has no violence... big city and small town has a lot of difference, there we are respected, ... here we are nothing!

In these seven years working in PSF.... I was 'oral health coordinator' for 5 years, but I am to complete the specialization in orthodontics, then I intend to detach a little... and by the middle of the next year I intend to stay only with the same part of the office.

When we graduate, people don't know your work, you don't have a name, you have to gradually prove it...Now I'm no longer afraid of the competition.

The conditions of the population are not even close to what we have in the southern center of the country ... My focus is high-level service, so I have clients who are class A and B only, we have a small market share to work with, private services are very restricted, or if you work with a popular clinic feature to reach these other classes C, D and E.

3.2.4 Category: the public service favoring adaptation to the imposed reality

In the process described by the informants it became evident that after a period of work in the labor market, the recognition and self-evaluation of achievements and professional career generates, sometimes, feelings of accomplishment, conformism and disbelief of reality or of a different future. The statements and perceptions indicate that dentists find it difficult to understand the reality, have restrictions on the position of dentistry in the market, feel devalued within the health area, both in the public and private

sectors. In this category speeches and perceptions emerged that emphasized the role of public service favoring adaptation to reality.

There at the health center I get happy because I help people and I also earn for that right!

Look, it is.... I was already more optimistic, I confess to you that I was..., in public health matters, I thought it was easier, but today I see it is difficult.

So... but it is difficult, you know how it is the graduation of the dentist, we are a lot of tooth, tooth, tooth...this is a problem of the dentist, the dentist does not sell health.

it is gratifying that the people really need, and that is what I say, the patients always say oh doctor, but you came here, we cared for us so well and we do not pay anything for it.... but on the contrary they pay tax and this is expensive and we have to treat the patient well, we receive well for that there (wanting or not) I feel fulfilled... the difficulties we have to overcome, especially in the public service, if there is a lack of material you will get another, and those who like it overcome these difficulties.

I am a supporter of SUS, I know that my work makes a difference to many people, I can have this feeling of accomplishment... people say they have little money for health, I work in a poor municipality and I am working with full conditions, I can do what I need, what I want and I have a decent salary, so it lacks management.

Always when I see the new ones coming, I see that I was like them, the new ones arriving are excited, they are happy have no problem, right, so that's it, we arrive happy at work, then gradually we manage what a public servant is like... you don't have to exaggerate that much... You don't have to exaggerate so much... No need to get to a person and attend immediately; schedule, we go calmly, it is not just urgency, I wanted to meet everyone, because I was motivated, I did not know what it was like...

3.2.5 Central Category: Opportunities changing the paths to consolidate the professional

The central theory "Opportunities changing the paths to consolidate the professional" represents the lonely and uncertain trajectory of the dentist's life. This theory arises from the process that begins still in graduation with a distorted imaginary, graduation in turn, leads the newly graduated dentist to experience the labor market which generates a shock with a reality very different from that idealized, however the experiences, especially in the public sector, they allow their adaptation to the imposed reality. It was observed that this trajectory and the opportunities motivate migration and extrapolate geographical boundaries, the search for consolidating himself or herself as a professional, causes the dentist to migrate from private to public, from public to private, from large centers to the interior and vice versa, the opportunities were decisive to trace the dentists trajectories in the labor market.

The qualitative research was revealing, the speeches of the graduates broke with some previous conceptions and explained some points that were not understood in the quantitative phase, such as motivation for migration. It was possible to observe that the process of choice, of the place of practice of dentists is a complex phenomenon, and the qualitative findings extended the scope, already identified in the literature, on the

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determinants of geographic distribution, in order to specify the Brazilian reality, adding to the theoretical models most used in the literature the category "opportunities".

Previous studies indicate that the determinants are influenced by several factors: personal, professional, cultural, organizational, economic and political, and the recognition of these determinants is a fundamental step for the country to understand the extent of the problem, enabling the orientation of appropriate interventions choices^{27,28}.

The findings indicate that at the current moment of Brazilian dentistry, these factors already described in the literature certainly influenced dentists, it was observed that the place of birth is an important factor to be considered and that interferes with the choices, however, the central theory that emerged were based on the "opportunities", the main theory that emerged was based on the "opportunities". because it was them that made dentists change their paths and structure themselves as professionals, so the "opportunities" were decisive for the dentists choices. In Brazil, these opportunities are very linked to public/private duality^{12,27}.

It was observed, in the first category, called "Imagining the world of work". This process of uncertainty is pointed out in the literature as expected and is related to the moment of great change through which the future dentist must pass, the entry into the world of work, the leaving the college, the coping with reality without the professors' and colleagues' support can be a cause of great stress and frustration for some students²⁹.

In view of this situation, the following categories arise: "experiencing the world of work" and "the shock with reality" respectively. It is possible that the observed phenomena of a dentist who is randomly inserted in the labor market, full of dreams, and is faced with a reality that shocks him or her, be the result of a Dentistry course that still offers a training inclined to the private market and to individualized and autonomous care, which limits the horizon of these dentists(30), even though the university should guide the professional future to the market, presenting the various possibilities of practice^{29,31}. Dentistry has expanded its performance in recent years, it is verified that dentists occupy positions of management, in companies, as a fundamental member in oral health and family health teams, in the public and private sector. It is worth mentioning that the graduation must mobilize and develop skills so that the graduate can face the barriers of the profession. In this context, internships can give students tools that minimize the natural shock of this phase³².

After the recognition phase, the dentist reaches the stage of adaptation to the imposed reality, which was very modulated by his or her performance in the public service. It is observed that realization, conformism and disbelief permeated the feelings of this dentist who was stuck to the facts and inserted in a given context.

Considering this professional trajectory of the Brazilian dentist, it is observed that the opportunity, a key element of

our central theory, has been characterized by the possibility of the public contest, which was decisive for the migration of these professionals through the Brazilian territory. Associated with this, it was also observed the dentists' desire to return to their hometown to consolidate themselves as a professional. In view of this scenario, of lack of regulation, it is necessary that public policies take these factors into account and generate opportunities for the benefit of the professional, the health system and especially of society, that suffer from the health gaps¹².

Smiling Brazil is a successful policy, which expanded access and coverage of oral health services in the Brazilian public system³³, however, there were no specific regulation policies that intervened in the process of the workforce distribution in oral health in a decisive and articulated way to correct the sanitary voids and improve the distribution of dentists¹².

Based on the results, it is observed the need to create an agenda based on the demands pointed out in this and other studies, with measures aimed at correcting the dentists geographic imbalances, these actions should include incentive packages to be more effective³⁴. Actions must be planned, and public policies capable of generating the opportunities that regulate the distribution of dentists throughout the territory, so that this movement is not only dependent on the market and the interests of capital.

4 Conclusion

It is concluded, therefore, that Brazil presents stock of labor force in dentistry, but faces the results of the lack of policies for regulation of HRs, including dentistry, which generates and accentuates the sanitary voids in some regions of the country and market saturation in large centers. Based on the perception and trajectory of Brazilian dentists, it was possible to realize that professional consolidation is the result, fundamentally, of the opportunities that arise randomly in his or her career, and these opportunities are factors determining for the distribution of these dentists throughout the territory.

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