

Profile of users and attendances of Endodontics at CEO-UFRGS between 2016 and 2017

Valéria Rozales Ehlert*; Simone Bonato Luisi**

* Graduate in Dentistry, Universidade Federal do Rio Grande do Sul

** Associate Professor, School of Dentistry, Universidade Federal do Rio Grande do Sul

Received September 9, 2018. Approved May 21, 2019.

ABSTRACT

The Dental Specialties Centers (CEO) are a strategy of the National Oral Health Policy to assure the secondary care in Dentistry, constituting referral units for the primary attention. This cross-sectional study analyzed the characteristics of users and attendances in the specialty of Endodontics of the CEO at Universidade Federal do Rio Grande do Sul. A questionnaire was designed, based on the Oral Health Specialties Handout, besides questions that characterized the profile of users, and was applied to the trainees at the CEO at every completed endodontic treatment. The sample included 48 patients, obtained by convenience, in consecutive census sampling, with conclusion of 56 endodontic treatments during the period August 2016 to July 2017. The profile of users was predominantly females (62.50%), in the age range 31 to 50 years (41.67%) of White ethnicity 64.58%); the teeth with greatest treatment needs were the molars (67.86%); and most cases were in conditions compatible with those advocated by the handout. The treatments were completed in 2 or 3 sessions (66.67%), and the waiting time of users for attendance was shorter than 6 months (83.33%). The patients were indicated using a referral form (93.75%). The study revealed data that may contribute to the development of strategies to broaden the productivity by investments in new Technologies and equipment, aiming to reduce the number of sessions required for finalization of endodontic treatments, providing attendance to a larger number of patients and reducing the waiting time.

Descriptors: Secondary Care. Endodontics. Specialties, Dental.

1 INTRODUCTION

Oral health services in Brazil were historically characterized by actions of low complexity, curative and mutilating, with very limited access mainly to the school age group. Adults and the elderly only had access to emergency services, often mutilating, characterizing Dentistry as one of the health areas with the greatest social exclusion¹⁵.

In 2004, the Ministry of Health established guidelines for the National Oral Health Policy (PNSB), also known as the Smiling Brazil Program, which highlighted the need to increase the access to oral health care, with a comprehensive view of the health process and including procedures and services of medium and high complexity⁹.

Within the scope of care, the PNSB presents guidelines that basically aim at the expansion and qualification of Primary Care (AB) in oral health, by promotion, prevention, care and rehabilitation activities, allowing access to all age groups, promoting attendance in secondary care by the establishment of Dental Specialties Centers (CEO), which aim to strengthen the basic care, increasing its resolution⁴. These services should be reference units for the primary care, integrated into the locoregional planning process, offering specialties of periodontics, endodontics, care for patients with special needs, oral diagnosis with emphasis on oral cancer detection and minor oral surgery¹.

In 2006, an agreement was signed between Universidade Federal do Rio Grande do Sul (UFRGS), the Ministry of Health and the City Hall of Porto Alegre to establish a CEO at UFRGS. The aim was to integrate the dental specialized attention network of the Municipal Health Secretariat of Porto Alegre, with the perspective of training qualified professionals to work in these specialized health public services

and assume a collaborative and strategic position in the performance of UFRGS within the SUS²².

In 2014, the GraduaCEO component – Smiling Brazil was created within the PNSB, which is part of the Healthcare Network (RAS), developed in a partnership between the Ministries of Health and Education. One of the objectives is to integrate the dental clinics of Higher Education Institutions (HEI) into the public network to assure universality of access, equity and integrality in oral health care³.

Concerning the specialty of Endodontics, the responsibility of secondary care is to perform endodontic treatment on teeth with vital and non-vital pulp, endodontic retreatment, treatment of root perforations, and counter-referral after treatment completion to the Basic Health Unit (UBS). The user referred to the CEO for the endodontics specialty must present some conditions to be assisted in the specialized attention. With respect to the tooth, the conditions are total removal of decayed tissue, placement of dressing and temporary restorative material, the tooth should have sufficient clinical crown for placement of rubber dam clamps, without marked mobility and less than 2/3 of extrusion due to loss of the antagonist tooth. Concerning the oral cavity, the user should present oral adequacy with removal of infectious foci².

Studies on secondary care in oral health are increasing in Brazil, being important for the evaluation of these actions due to the organizational complexity of services²⁵. Combining this fact to the great demand for specialized dental treatment in the public health network in Brazil, the present study described the profile of users and attendances made in the specialty of endodontics in the CEO at UFRGS to analyze the characteristics of services offered in secondary care and provide information to enhance the service analyzed.

2 METHODOLOGY

The present cross-sectional study with descriptive data analysis was approved by the Institutional Review Board of UFRGS, according to CAEE n. 38025514.3.0000.5347. The study was conducted in the CEO outpatient clinic, in the field of Endodontics at UFRGS, by analysis of the responses to a questionnaire applied to the trainees, related to each treatment completed in the endodontics specialty. The questionnaire was designed based on the Oral Health Specialties Handout⁸, besides questions that characterized the user's profile, and was delivered printed to the trainee with the patient's record.

The study population was obtained by convenience in consecutive census sampling, and all questionnaires answered by trainees at the CEO in the period August 2016 to July 2017 were included in the study. Data refer to the services provided to users in the specialty of Endodontics in the CEO at UFRGS, referred to by the AB.

The trainees who agreed to participate signed an Informed Consent Form, designed based on Resolution 466/12 of the National Health Council. The inclusion criteria for participation in the study were: voluntary and anonymous participation in the research, reading and signing of the informed consent form; be acting in the CEO of Endodontics at UFRGS as an academic or dentist member of the Integrated Residency in Oral Health with emphasis in Endodontics.

The responses were analyzed by descriptive statistics.

3 RESULTS

Forty-eight patients received endodontic treatment during the study period. Among these, 30 were females (62.5%), 16 were males (33.33%) and 2 did not have such information (4.17%). The predominant age group was 31 to

50 years accounting for 41.67% of cases, 39.58% were 16 to 30 years old, 16.67% were 51 to 80 years old and 2.08% were 12 to 15 years old. The majority of patients were white (64.58%), 18.75% were black and 16.67% were admixed. Table 1 shows the Health Units and the District Offices of patients.

The study included students attending the 7th, 8th and 10th semesters, which altogether assisted 31 patients (64.58%); and postgraduate students, who assisted 17 patients (35.42%). Overall, 56 endodontic treatments were completed during the study period. The molars (18 upper and 20 lower) represented 67.86% of completed cases, followed by premolars (16.08%), incisors (7.15%) and canines (5.37%). Table 2 presents data related to the number of consultations required for completion of endodontic treatments, evidencing that most cases were completed in 2 or 3 sessions.

Table 3 presents the variables related to conditions recommended by the Oral Health Specialties Handout⁸ with regard to referrals. Table 4 describes the related to the referral form of patients referred to the CEO of Endodontics at UFRGS.

The time the patient had to wait between the date of referral by the UBS and the specialized care was shorter than 6 months in 83.33% of cases (40 patients), in 10.42% of cases the waiting time varied from 6 months to 1 year (5 patients), and 6.25% of patients did not know the waiting time (3 cases).

4 DISCUSSION

Currently, there is great demand for specialized dental treatment in Brazil's public healthcare network, yet there is lack of studies directed at CEOs. The specialty of Endodontics presents great demand by users, thus it is important to qualify the services provided to the population.

Table 1. Distribution of patients according to District Office and Health Unit of origin

District Office	Health Unit	N of Patients	%
Glória/Cruzeiro/Cristal (GCC)	Alto Embratel	1	2.08%
	Belém Velho	1	2.08%
	Divisa	1	2.08%
Leste/Noroeste (LENO)	Bom Jesus	5	10.42%
	Divina Providência	1	2.08%
	Jardim FAPA	1	2.08%
	Timbaúva	1	2.08%
	Vila Jardim	1	2.08%
	Vila Pinto	1	2.08%
Sul/Centro-Sul (SCS)	Calábria	1	2.08%
	Campo Novo	1	2.08%
	Cidade de Deus	1	2.08%
	Guarujá	1	2.08%
	Moradas da Hípica	1	2.08%
	São Vicente Mártir	1	2.08%
	Tristeza	1	2.08%
	Vila Nova Ipanema	1	2.08%
Noroeste/Humaitá/ Navegantes/Ilhas (NHNI)	Conceição	1	2.08%
	Farrapos	1	2.08%
	Floresta	1	2.08%
	IAPI	1	2.08%
	Ilha Pintada	2	4.17%
	Jardim Itu	1	2.08%
Norte/Eixo-Baltazar (NEB)	Costa e Silva	1	2.08%
	Nossa Senhora Aparecida	1	2.08%
	Rubem Berta	1	2.08%
Restinga/Extremo-Sul (RES)	Núcleo Esperança	2	4.17%
	Paulo Viaro	1	2.08%
	Ponta Grossa	2	4.17%
	Restinga	1	2.08%
Lomba do Pinheiro/Partenon (PLP)	Herdeiros	1	2.08%
	Panorama	2	4.17%
	Viçosa	1	2.08%
Centro	Modelo	1	2.08%
	Santa Marta	2	4.17%
	FASE	1	2.08%
	POA-1	1	2.08%
	Saúde Indígena	1	2.08%
Did not reply		1	2.08%

Table 2. Number of consultations needed for completion of endodontic treatment

Number of consultations	Number of completed cases	%
1	2	3.57%
2	15	26.79%
3	17	30.36%
4	7	12.50%
5	3	5.36%
6	3	5.36%
7	1	1.79%
Did not reply	08	14.29%
Total	56	100.00%

Table 3. Description of variables related to conditions foreseen by the Oral Health Specialties Handout (2008)⁸ concerning the referrals

Variable	Response	Number of referrals	%
Was there indication of another tooth to be treated?	No	40	83.33%
	Yes	6	12.50%
	No reply	2	4.17%
Does it present total removal of decayed tissue, pulp chamber opening, placement of dressing and temporary restorative material?	No	9	18.75%
	Yes	38	79.17%
	No reply	1	2.08%
Does it present sufficient clinical crown for placement of rubber dam clamps?	No	1	2.08%
	Yes	46	95.83%
	No reply	1	2.08%
Does it present marked mobility?	No	44	91.67%
	Yes	2	4.17%
	No reply	2	4.17%
Is there oral adequacy with removal of infectious foci?	No	2	4.17%
	Yes	44	91.67%
	No reply	2	4.17%

Table 4. Description of variables related to the referral form

Variable	Response	Number of patients	%
Was the patient referred using the referral form?	No	3	6.25%
	Yes	45	93.75%
Does the referral form contain explanation on the current condition of the tooth?	No	13	27.08%
	Yes	30	62.50%
	No reply	5	10.42%
Does the referral form correctly specify the tooth number?	No	4	8.33%
	Yes	40	83.33%
	No reply	4	8.33%
Does the referral form contain the reason for referral?	No	7	14.58%
	Yes	37	77.08%
	No reply	4	8.33%
Does the referral form contain the signature and stamp of the professional?	No	3	6.25%
	Yes	41	85.42%
	No reply	4	8.33%

Studies reveal a difference in the pattern of utilization of health services between men and women. According to data from the National Household Sampling Survey (PNAD) conducted by the Brazilian Institute of Geography and Statistics in 2003, 71.2% of women and 54.1% of the men attended medical appointments on that year¹². Based on the profile of users of secondary care in Dentistry at SUS, women are predominant users of specialized dental services²⁴. The present study found that 62.5% of the patients assisted in the CEO of Endodontics at UFRGS in years 2016 and 2017 were females, in agreement with previous studies^{16,18}. These data indicate that females present greater care for both general health and oral health.

Regarding the age group, the greatest demand for treatment was observed for adults between 31 and 50 years, followed by young people between 16 and 30 years. This result is similar to the report of Ribeiro et al.²⁰, who showed a greater demand and consequent need for endodontic treatment in patients in the adult age range between 21 and 59 years. The demand of adult and young patients for rehabilitation services in oral health was considered positive, since for a long time attention to this population was restricted

to emergency and non-conservative care¹².

The demand of elderly patients was only 16.67%. Despite the increased offer and coverage of dental care in Brazil, the use of services by the elderly is still much lower than in other age groups. There is an accumulated demand for treatment and high prevalence tooth loss without prosthetic rehabilitation, resulting from a history of individualistic, low-complexity oral health model and the lack of specific programs for this group¹⁷.

The municipal system of Porto Alegre has 55 UBS, which together with 88 Family Health Units (USF) are the main access points for the search for primary healthcare. The patients treated at the CEO of Endodontics at UFRGS were referred by 38 different health units and six CEOs. Referrals to the CEO are based on the proximity to the health unit. There are always three nearest options, yet if there are remaining offers the patient may be referred to another farther CEO¹⁸.

In the present study, the group of teeth that most received endodontic treatment were the first molars (24 teeth, 42.85%, 12 upper and 12 lower teeth). These teeth erupt early and thus are often confused with deciduous teeth, without concern by the caretakers to maintain them. Moreover, the

literature reveals that the first molars are the teeth most affected by carious lesions, since the cariogenic activity begins in its long period of eruption, with greater plaque accumulation, extending this situation until the teeth occlude, around the age of eight years⁶.

The dental literature evidences the importance of the permanent first molar for mastication, speech and the establishment and integrity of occlusion, thus evidencing its relevance to the stomatognathic system. Thus, the dentists should be aware of the particular needs of each group of teeth and patients, such as the type of occlusal morphology, stage of tooth eruption, risk of developing carious lesions, the patient's motivational state to establish an efficient hygiene and consequently the control of caries disease and also the awareness of parents or caretakers about the importance of teeth for oral health¹³.

The communication between primary and secondary care is very important to promote comprehensive patient care. Thus, the Ministry of Health outlined the treatments that should be offered in primary care before referral to secondary care². In the present study, in 91.67% of cases, the user presented correct oral adequacy according to the conditions recommended by the Oral Health Specialties Handout. This result is satisfactory, since it reflects good integration between primary and secondary care in the city of Porto Alegre, demonstrating that the protocols are being followed by professionals.

The present results revealed that most endodontic treatments were completed in 3 or 2 sessions, accounting for 66.67% of cases. This result agrees with the findings of Dorr¹⁰, who evaluated another CEO in the same city, noting that 81.5% of endodontic treatments were completed in up to three sessions. The study conducted by Saliba et al.²³, which evaluated a CEO in the state of São Paulo, revealed that a mean of 4.1 consultations were necessary for endodontic treatment. Based on

this information, it is evident that the trainees of the CEO of Endodontics at UFRGS present productivity compatible with professionals of other CEOs of the country, since the mean number of consultations to complete the treatments is similar.

The use of contemporary techniques and equipment in endodontics, such as microscopes, electronic apex locators and rotary nickel-titanium instruments not only increased the success rate of endodontic treatment, but also shortened the time required for treatment completion²⁶. It is known that endodontic treatment in one session is a treatment option, since it presents satisfactory clinical results similar to those obtained in multiple sessions, both in the postoperative period and in the long-term¹¹. Therefore, there is evident need for investments in new technologies and equipment for the specialty, to promote greater speed and reduction in the number of consultations for treatment completion.

The present study revealed that the time elapsed between the date of referral and attendance in the CEO at UFRGS was shorter than 6 months in most cases (83.33%). Although this time is not ideal, the result is similar to that found in the study of Persici²², which revealed that Endodontics was the dental specialty with the greatest unattended demand in March 2015 in the city of Porto Alegre, with a mean waiting time of 8.3 months. The specialty has the longest wait times in Brazil, with a mean of 68.3 days, and some units present a waiting time of 315 days⁵. It should be emphasized that the great unattended demand and the delay for scheduling in the public network can cause important damage to the patient and system, since if endodontic treatment is not performed in appropriate time there will be a greater chance of tooth loss, with consequent need for other more invasive and costly treatments, such as those resulting from tooth loss¹⁹.

In study of Limão et al.¹⁴, the endodontic specialty presented a relevant waiting time at

national, regional and local levels, which may be associated with the high demand for endodontic procedures as a result of lack of intervention in the early stages of dental caries. The waiting time for care in the specialized service is related to factors such as unattended demand, lack of structure, number of professionals and service organization²³. In addition, it is known that absenteeism is great, and professionals often become unoccupied because of frequent patient absences. According to Cayetano et al.⁷, an evaluation of Endodontics in the public service in Brazil, by the PMAQ-CEO in 2017, identified Endodontics as the specialty with the highest absenteeism index and the highest waiting list among those offered by Brazilian CEOs. Absenteeism, associated with the fact that the service analyzed worked only three shifts per week, can explain the small number of completed cases (56 cases) in the study period. The relevance of aforementioned data reflects in the access and quality of secondary care in dentistry, besides providing important information for future actions both at the management level and at several points in the network.

Most patients (93.75%) seen in the CEO of Endodontics at UFRGS were referred using the referral form. This result is positive, since it indicates that the regulatory complex and service flow organization protocol work properly in Porto Alegre. In addition, in Dentistry, the search for provision of public services that meet the criterion of continuity based on the principle of integrality is anchored on the understanding and application of concepts of referral and counter-referral, thus a well-regulated system would somehow contribute to equity²¹.

The ideal interface would include access to secondary care for all referred cases without barriers; referral system for secondary care of procedures not performed in primary care; appropriate timely referrals and counter-referral to the primary care⁸. The organization, by health

managers, of an adequate referral system to the specialized care still represents one of the most important challenges to be faced and evidences, in the daily routine, the search for comprehensive assistance to the citizens²¹.

5 CONCLUSION

Based on analysis of the profile of users and attendances performed at the CEO of Endodontics at UFRGS, the present study highlights the importance and relevance of educational and preventive public policies for caries control, with special attention to molars, since these are the teeth most often treated. The present data may also serve as basis for the development of strategies to increase the productivity by investments in new technologies and equipment to reduce the number of consultations required for completion of endodontic treatment, providing care for a larger number of patients and reducing their waiting time.

RESUMO

Perfil dos usuários e dos atendimentos na especialidade de Endodontia do CEO-UFRGS entre 2016 e 2017

Os Centros de Especialidades Odontológicas (CEO) são uma estratégia da Política Nacional de Saúde Bucal para garantir a atenção secundária em Odontologia, constituindo-se em unidades de referência para a atenção primária. Este estudo transversal analisou as características dos usuários e dos atendimentos na Especialidade de Endodontia do CEO da Universidade Federal do Rio Grande do Sul. Foi formulado um questionário baseado no Manual de Especialidades em Saúde Bucal, acrescido de perguntas que caracterizavam o perfil do usuário e aplicado aos estagiários atuantes no CEO a cada tratamento endodôntico concluído. A amostra totalizou 48 pacientes, obtida por conveniência, em amostragem consecutiva do tipo censo onde foram concluídos 56 tratamentos

endodônticos, durante o período de agosto de 2016 a julho de 2017. O perfil dos usuários encaminhados foi, predominantemente, do sexo feminino (62,50%), na faixa etária de 31 a 50 anos (41,67%) e da raça branca (64,58%); os dentes que mais necessitaram tratamento foram os molares (67,86%); e na maioria dos casos encontravam-se em condições compatíveis com as preconizadas pelo Manual de Especialidades em Saúde Bucal; os tratamentos foram concluídos em 2 ou 3 consultas (66,67%); o tempo de espera dos usuários para atendimento foi inferior a 6 meses (83,33%). Os pacientes foram encaminhados por meio da ficha de referência (93,75%). O estudo evidenciou dados que podem contribuir para o desenvolvimento de estratégias que ampliem a produtividade por meio de investimentos em novas tecnologias e equipamentos que possam reduzir o número de consultas necessárias para a finalização dos tratamentos endodônticos, proporcionando atendimento para um número maior pacientes e reduzindo o tempo de espera.

Descritores: Atenção Secundária à Saúde. Especialidades Odontológicas. Endodontia.

REFERENCES

1. Brasil. Ministério da Saúde. Portaria nº 599, de 23 de março de 2006. Define a implantação de especialidades odontológicas (CEO) e de laboratórios regionais de próteses dentárias (LRPDs) e estabelece critérios, normas e requisitos para seu credenciamento. Diário Oficial da União. 2006 mar. 24; Seção 1. p. 51.
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Manual de especialidades em saúde bucal. Brasília, DF, 2008. 128 p. (Série A. Normas e manuais técnicos).
3. Brasil. Ministério da Saúde. Portaria Interministerial nº 1.646, de 5 de agosto de 2014. Institui o componente GraduaCEO, no âmbito da Política Nacional de Saúde Bucal, que irá compor a Rede de Atenção à Saúde (RAS), e dá outras providências. Diário Oficial da União. 2014 ago. 6; Seção 1. p. 46.
4. Bulgareli JV, Faria ET, Ambrosano GMB, Vazquez FL, Cortellazzi KL, Meneghim MC, et al. Informações da atenção secundária em Odontologia para avaliação dos modelos de atenção à saúde. Rev Odontol UNESP. 2013; 42(4): 229-36.
5. Carrer FCA, Cayetano MH, Figueiredo N, Padilha WWN. O avaliador externo e o usuário do CEO: narrativa de experiência durante o Ciclo I do PMAQ-CEO. In: Figueiredo N, Goes PSA, Martelli PJJ. Os caminhos da saúde bucal no Brasil: um olhar quali e quanti sobre os Centro de Especialidade Odontológicas (CEO) no Brasil. Recife: UFPE; 2016. p. 236-52.
6. Carvalho JC, Ekstrand KR, Thylstrup A. Dental plaque and caries on occlusal surfaces of first permanent molars in relation to stage of eruption. J Dent Res. 1989;68 (5):773-9.
7. Cayetano MH, Gabriel M, Almeida FCS, Araújo ME. Retrato da Endodontia no serviço público no Brasil por meio do PMAQ-CEO. Anais. São Paulo: Associação Paulista de Cirurgiões Dentistas, Resumo, 2017.
8. Chaves SCL, Soares FF, Rossi TRA, Cangussu, MCT, Figueiredo ACL, Cruz DN, et al. Características do acesso e utilização de serviços odontológicos em municípios de médio porte. Ciênc Saúde Coletiva. 2012; 17(11): 3115-24.
9. Costa JLBM. Avaliação dos serviços públicos de endodontia nos centros de especialidades odontológicas de Minas Gerais [Tese]. Belo Horizonte: Universidade Federal de Minas Gerais; 2016.
10. Dorr GD, Grecca FS, Giordani JMA. Avaliação dos atendimentos endodônticos em um Centro de Especialidades Odontológicas em Porto Alegre, RS. Rev ABENO. 2016; 16(3):85-9.
11. Hizatugu R, KadoE, Miyasaki E, Okino K,

- Meneghine GP, Matayoshi A. Endodontia em sessão única: mito ou realidade. 1ª ed. São Paulo: Atheneu; 2002.
12. Laroque MB, Fassa ACG, Castilhos ED. Avaliação da atenção secundária em saúde bucal do Centro de Especialidades Odontológicas de Pelotas, Rio Grande do Sul, 2012-2013. *Epidemiol Serv Saúde*. 2015; 24(3): 421-30.
 13. Lima MN, Pinheiro MLS, Cunha LM, Albuquerque MRG, Lopes KS, Carneiro SV. Prevalência da perda dos primeiros molares permanentes em crianças de 8 a 12 anos atendidas na Unicatólica. *JOAC*. 2017;3(1):1-6.
 14. Limão, NP, Protasio, APL, Machado, LS, Gomes, LB, Valença, AMG. Oferta da assistência odontológica especializada na Atenção Básica do Brasil, Nordeste e Paraíba. *REFACS* [Internet]. 2017 [Cited Aug. 10, 2018]; 5(Supl.1):131-140. Available at: <http://seer.uftm.edu.br/revistaeletronica/index.php/refacs/article/view/1987>
 15. Machado LX, Toassi RFC, Warmling CM. Gestão da Atenção Primária à Saúde: Práticas de acolhimento em saúde bucal na atenção primária à saúde. In: Bulgarelli A F, Nunes ÂMA, Warmling CM, Hugo FN, Frichembruder K, Lemos VMA. *Redes de Atenção à Saúde: Práticas, experiências e propostas na gestão da Saúde Coletiva*. Porto Alegre: Rede Unida; 2016. p. 245-288.
 16. Malka VB. Perfil de atendimento do Centro de Especialidades Odontológicas de Endodontia da FO-UFRGS [monography]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2015.
 17. Nunes CSR, Silva MP, Barcessat ARP. Acesso aos serviços de saúde bucal de adultos e idosos. *Est Científica UNIFAP*. 2017; 7(3): 9-18.
 18. Peron TB. Perfil do atendimento no centro de especialidades odontológicas de endodontia da FO-UFRGS no primeiro semestre de 2016 [monography]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2016.
 19. Persici S. Regulação como ferramenta de gestão: análise da compatibilidade entre oferta e demanda por consultas odontológicas especializadas no município de Porto Alegre-RS [monography]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2015.
 20. Ribeiro ILA, Veloso HHP, Valença AMG, Brasil Júnior O, Lima Neto EA. Avaliação da qualidade de vida e nível de satisfação do usuário da rede de atenção especializada com o tratamento endodôntico no município de João Pessoa, Paraíba, Brasil, 2009. *ROBRAC*. 2012; 21(59):557-63.
 21. Rodrigues L A, Vieira JDM, Leite ICG. Avaliação do fluxo de referência para um centro de especialidades odontológicas implantado em cidade de médio porte na região Sudeste. *Cad Saúde Colet*. 2013; 21(1): 40-45.
 22. Rösing CK, Daudt F. A perspectiva da Atenção Especializada em Periodontia. Porto Alegre, 2016. Apresentação em PowerPoint. [Cited Aug. 10, 2018]. Available at: http://189.28.128.100/dab/docs/portaldab/documentos/mesa_iv_periodontia_ceo.pdf
 23. Saliba NA, Nayme JGR, Moimaz SAS, Cecilio LPP, Garbin CAS. Organização da demanda de um Centro de Especialidades Odontológicas. *Rev Odontol UNESP*. 2013; 42(5): 317-23.
 24. Silva HEC, Gottens LBD. Interface entre a Atenção Primária e a Secundária em odontologia no Sistema Único de Saúde: uma revisão sistemática integrativa. *Ciênc Saúde Coletiva*. 2017; 22(8): 2645-57.
 25. Souza GC, Lopes MLDS, Roncalli AG, Medeiros-Junior A, Clara-Costa IC. Referência e contra referência em saúde bucal:

regulação do acesso aos centros de especialidades odontológicas. Rev Salud Pública. 2015; 17(3): 416-28.

26. Symanski NC. Terapia Endodôntica: sessão única x sessão múltipla: revisão de literatura [monograh]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2015.

Correspondence to:

Simone Bonato Luisi

e-mail: simone.luisi@ufrgs.br

Faculdade de Odontologia da UFRGS

Rua Ramiro Barcelos, 2492

90035-004 - Porto Alegre/RS Brazil