

Letters to the Editor

Five decades of orofacial cleft management and research in Brazil

Our research team read with interest the article by Best et al.¹ regarding short-term surgical missions for the management of orofacial clefts (OFCs) in South America. We congratulate the authors, but wish to make some observations. The authors stated that Chile has the only health system in South America with government-guaranteed access to surgical care for OFCs, and that the other countries on the continent are left to depend on temporary international or national campaigns or short-term surgical missions. We recognize the immeasurable importance of these surgical missions; however we would like to highlight the five decades of management of OFCs in Brazil, which guarantees by law the free treatment of these conditions.

In Brazil, the first referral centre for the treatment of patients with OFCs was opened in 1967 in the city of Bauru, São Paulo. In the next year, the first study on the prevalence of OFCs was published by researchers at the University of São Paulo^{2,3}. In that study, a total of 13,249 children from primary schools in Bauru were surveyed for the prevalence of cleft lip and/or palate, and a prevalence of 1:650 was described. In 1973, a new system for cleft classification was proposed by Professor Victor Spina. This classification uses the incisive foramen as a reference point to classify clefts into four groups: (1) pre-incisive foramen clefts, (2) trans-incisive foramen clefts, (3) post-incisive foramen clefts, and (4) rare facial clefts.

In 1993, the procedures for the correction of OFCs were included in the list of proce-

dures of Brazil's Unified National Health System. At present, the country has 29 centres accredited by the public health system⁴. These centres include a multi-disciplinary team consisting of oral and plastic surgeons, paediatric dentists, orthodontists, speech therapists, and psychologists. Collaborative investigations have been performed with the aim of identifying genetic factors associated with non-syndromic OFCs⁵.

Despite the great advances in the management of OFCs over the last 50 years, challenges still persist. Data collected from the Brazilian National Live Birth System and Hospital Information System between 2009 and 2013⁶ indicated some disparities in the treatment of patients with OFCs across the federative units and regions of Brazil (Fig. 1). Only 48% of the regions have centres accredited by the public health system. Public funds used

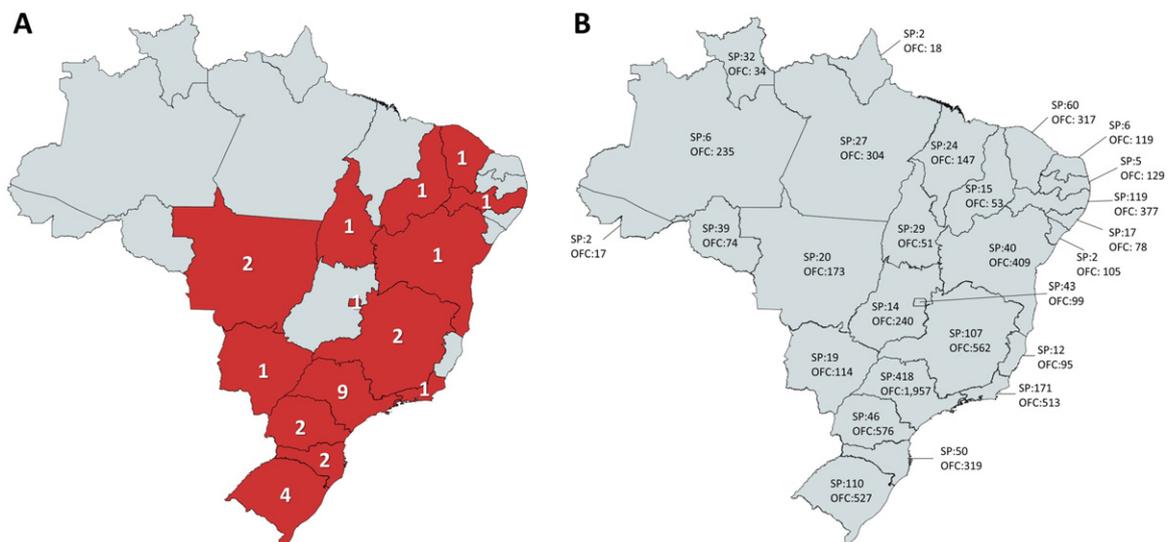


Fig. 1. (A) Number of centres accredited by the public health system of Brazil for the treatment of individuals with orofacial clefts (OFCs). (B) Distribution of infants born alive with OFCs and authorized surgical procedures (SP) across Brazil (data collected from the Brazilian National Live Birth System and Hospital Information System between 2009 and 2013).

for the surgical treatment of clefts during this period amounted to approximately US \$ 670 million; however only 18.9% of live-born infants with OFCs received surgical treatment during this period. There are several possible explanations for the delay or lack of treatment. One major contributing factor is the geographic distance between the nearest reference centre and some of the remote regions, which is associated with high travel costs, leading many families to give up on follow-up treatment⁶. This highlights the need for increased national and international efforts to provide specialized care for individuals with OFCs.

Funding

This work was financially supported by the Brazilian National Council for Scientific and Technological Development (CNPq) and the Coordination for the Improvement of Higher Education Personnel (CAPES). J. L.G.C. Monteiro and J.A.A. de Arruda are receiving a master's scholarship.

Competing interests

The authors declare no conflict of interest.

Ethical approval

Not applicable.

Patient consent

Not applicable.

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References

1. Best DL, Gauger TL, Dolan JM, Donnelly LA, Ranganathan K, Ulloa-Marin C, Sung-Hsieh HH. Orofacial cleft management by short-term surgical missions in South America: literature review. *Int J Oral Maxillofac Surg* 2018;(June). <http://dx.doi.org/10.1016/j.ijom.2018.05.025>. [Epub ahead of print].
2. Nagem Filho H, Moraes N, Rocha RG. Contribuição para o estudo da prevalência das máis formações congênitas lábio-palatais na população escolar de Bauru. *Rev Fac Odontol Univ São Paulo* 1968;6:111–28.
3. Spina V. A proposed modification for the classification of cleft lip and cleft palate. *Cleft Palate J* 1973;10:251–2.
4. Almeida AM, Chaves SC, Santos CM, Santana SF. Care for cleft lip and palate patients: modeling proposal for the assessment of specialized centers in Brazil. *Saúde em Debate* 2017;41:156–66. <http://dx.doi.org/10.1590/0103-11042017s12>.
5. Brito LA, Bassi CF, Masotti C, Malcher C, Rocha KM, Schlesinger D, Bueno DF, Cruz LA, Barbara LK, Bertola DR, Meyer D, Franco D, Alonso N, Passos-Bueno MR. IRF6 is a risk factor for nonsyndromic cleft lip in the Brazilian population. *Am J Med Genet A* 2012;158A:2170–5. <http://dx.doi.org/10.1002/ajmg.a.35526>.
6. Sousa GF, Roncalli AG. Orofacial clefts in Brazil and surgical rehabilitation under the Brazilian National Health System. *Braz Oral Res* 2017;31:e23. <http://dx.doi.org/10.1590/1807-3107BOR-2017.vol31.0023>.

<https://doi.org/10.1016/j.ijom.2018.09.007>

Response to comments on “Orofacial cleft management by short-term surgical missions in South America: literature review”

We thank the authors of the letter entitled “Five decades of orofacial cleft management and research in Brazil”¹ for their comments on our article regarding short-term surgical missions for the management of orofacial clefts (OFCs) in South America². It was certainly not our intention to minimize the efforts of the Brazilian cleft team; we are truly glad for the advancements they have made since 1967. We agree that there is a need to increase

national efforts in South America and international collaborative support to provide specialized care for patients with OFCs. Therefore, the aim was to review the literature describing OFC surgical missions in South America and to provide an insight into and explanation for the existence of surgical missions to assist local OFC patients.

We appreciate the information provided regarding the guarantee of OFC surgeries and management under Brazilian law. In fact, Brazilian health coverage resembles that in Chile. Both countries offer similar constitutional healthcare rights, albeit with some differences, one being that Brazilian OFC coverage, based on a decentralized regional network, results in regional disparities in public resource distribution³. Consequently, only 18.9% of live-born infants with OFCs in Brazil received surgical treatment under Brazilian public funds during 2009–2013⁴. On the other hand, Chile covers OFC surgeries through their Plan of Explicit Health Guarantees (GES/AUGE), a special health benefits package. This plan guarantees access, quality, opportunity (within a maximum waiting time), and financial protection to all National Health Fund and private health insurance OFC affiliates^{5,6}.

Funding

None.

Competing interests

None.

Ethical approval

Not required.

Patient consent

Not required.

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