



LETTER TO THE EDITOR

Training of head and neck surgeons in Brazil: biannual evaluation by the Brazilian Society of Head and Neck Surgery

Leandro Luongo Matos^{1*}, Marco Aurélio Vamondes Kulcsar²

¹Scientific Director, Sociedade Brasileira de Cirurgia de Cabeça e Pescoço (mandate 2021-2023), São Paulo, SP, Brasil

²President, Sociedade Brasileira de Cirurgia de Cabeça e Pescoço (mandate 2021-2023), São Paulo, SP, Brasil

Financial support: Sociedade Brasileira de Cirurgia de Cabeça e Pescoço.

Conflicts of interest: No conflicts of interest declared concerning the publication of this article.

Submitted: July 07, 2023.

Accepted: July 09, 2023.

The study was carried out at Sociedade Brasileira de Cirurgia de Cabeça e Pescoço (SBCCP), São Paulo, SP, Brasil.

How to cite: Matos LL, Kulcsar MAV. Training of head and neck surgeons in Brazil: biannual evaluation by the Brazilian Society of Head and Neck Surgery. Arch Head Neck Surg. 2023;52:e20230008. <https://doi.org/10.4322/ahns.2023.0008>

Editorial

Dear Editor,

The Brazilian Society of Head and Neck Surgery (SBCCP) was established in 1967, with one of its primary goals being to encourage the growth of this medical specialty and promote its improvement and dissemination, in line with its Bylaws. In fulfilling this role, there is a need to train high-quality specialists to meet the demands of the population throughout the country, given the variety of benign and malignant diseases addressed by the specialty.

It was only in the 1980s that Head and Neck (H&N) Surgery was recognized as a medical specialty and became a part of the Brazilian Medical Association. From that point on, there began the accreditation of services for training specialists. Initially, the training centers were few and varied, lacking specific regulations. The first inspections conducted by the SBCCP occurred in the 1990s and the early 2000s. These inspections involved a standardized form that aimed to assess and re-accredit services, ensuring a consistent training of specialists across different health services in the country.

Only in 2017 did the National Commission for Medical Residency (CNRM) request that specialty societies discuss the minimum requirements for the training of medical residents in each area. On December 2, 2017, the Forum on Education in H&N Surgery was held at the São Paulo Medical Association's headquarters, with participation from the heads of training services and specialists from all over Brazil. The purpose of this meeting was to discuss the current status of H&N Surgery education at both the undergraduate Medicine level and within Medical Residency. This event presented the current profile of the specialist, an overview of training services in the country – including the number of available positions and the shortage of applicants, the teaching of H&N Surgery in Brazilian medical schools and their curriculum foundations, as well as the role of education in preventing head and neck cancer in the regional Brazilian context.



Copyright Matos et al. This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Furthermore, prerequisites for internships or residencies in H&N Surgery in Brazil were established. At the end of the event, a new competency matrix for Medical Residency Programs in H&N Surgery in Brazil was drafted. This document was presented, discussed, and approved in a plenary session of the CNRM on February 20, 2018, in Brasília. These competencies became compulsory for all services accredited by the SBCCP and/or the Ministry of Education and Culture (MEC) following their publication in the Federal Official Gazette on April 8, 2019.

The minimum requirements for new accreditation or maintenance as “Training Services” by the SBCCP were established as follows: (1) not having vacancies in the total number of offered positions for two consecutive years; (2) employing at least two specialists accredited by the SBCCP, except in remote areas with a shortage of specialists, assessed individually; (3) having a high-volume specialized outpatient clinic that assists at least 800 new and follow-up patients annually, offering comprehensive care to patients of the specialty; (4) providing multi-professional care to oncology patients; (5) having in-house or referenced services for radiotherapy, clinical oncology, radiology, nuclear medicine, and pathology service; (6) availability of rigid and/or flexible endoscopy for locoregional examination; (7) performing at least 50 surgeries per resident/intern annually, with at least 20% being major surgeries, by the end of the two-year training period; (8) holding regular clinical and scientific meetings; (9) encouraging the development of scientific research and publications.

In this context, the Teaching Commission—a standing committee established when the Bylaws of SBCCP were revised in 2019—drafted a new document detailing the aspects to be checked in training services. Additionally, they developed ranking criteria based on three pillars: (1) infrastructure provided by the service, (2) scientific production, and (3) quality of the graduate, evaluated according to the approval rate in the Specialist Title Exam over the last two years. These requirements and the structured form were approved by the Board and the Deliberative Council of the SBCCP, mandating biannual assessments.

Services were stratified into three levels: B, A, and A+. Services ranked as B meet only the minimum established requirements, had an approval rate <50%, or had no candidates registered for the Specialist Title Exam in the last two years. Level A services are those that had an approval rate $\geq 50\%$ in the Specialist Title Exam in the last two years, produced at least one scientific paper per year for each accredited residency or internship position over the last two years, and offer the following additional services: palliative care, pain management, ultrasound for resident or intern training, frozen section biopsy, and a specialized team for laryngeal microsurgery. Services classified as A+ had an approval rate $>70\%$ in the Specialist Title Exam over the last two years, offered the same additional aforementioned services, produced at least two scientific articles per year for each accredited residency or internship position over the last two years, provide an internship, at least optionally, in oncology, radiotherapy, and/or pathology services, and offered at least two of the following additional activities: robotic surgery in the specialty, reconstructive microsurgery, neurosurgery service for joint craniofacial surgeries, or an optional internship abroad.

In addition, the following criteria were established for non-accreditation or non-renewal: (1) previously accredited services that do not meet the minimum requirements will have their accreditation suspended until they comply with them within a two-year period; otherwise, the service will be automatically disaccredited; (2) services that do not have a resident or intern for two consecutive years will have their accreditation automatically rendered inactive. To reactivate the accreditation with the SBCCP, the head of the service must schedule a new inspection before the announcement of the official notice/competition. Accreditation will only be reactivated when the first resident or intern enters the service, provided the service complies with the current rules; (3) services that do not achieve a minimum 50% approval rate of their graduates or do not have candidates for the Specialist Title Exam for two consecutive years will undergo a new inspection for accreditation review.

This, all 41 services accredited in 2022 by the SBCCP underwent on-site inspections carried out by a small team of directors to ensure a uniform assessment. During this assessment, three services requested to be disaccredited at the time of the inspection scheduling. Therefore, the results include the 38 services that were assessed and re-accredited, as shown in Tables 1, 2 and 3.

Table 1. Service characteristics.

	N	%
Academic affiliation		
<i>Non-university</i>	22	57.9
<i>University</i>	16	42.1
Type of institution		
<i>General Hospital</i>	21	55.3
<i>Tertiary oncological Hospital</i>	17	44.7
Type of administration		
<i>Municipal</i>	3	7.9
<i>State</i>	7	18.4
<i>Federal</i>	5	13.2
<i>Private</i>	4	10.5
<i>Foundation</i>	14	36.8
<i>Others</i>	5	13.2
Does the service have its own Study Center?	34	89.5
Research Ethics Committee	36	94.7
Percentage of postgraduates in the service staff		
<i><20%</i>	13	34.2
<i>21-60%</i>	18	47.4
<i>>61%</i>	7	18.4

Table 2. Characteristics of the Training Service regarding structure.

	N	%
Rigid telescope	38	100.0
Nasofibroscope	34	89.5
Ultrasonography for resident training	32	84.2
Intraoperative frozen section examination	36	94.7
Robotic surgery	9	23.7
Microsurgical reconstruction	29	76.3
Neurosurgery for craniofacial approach	34	89.5
Laryngeal Microsurgery	38	100.0
Tumor bank	16	42.1
Weekly theoretical classes	38	100.0
Incentive for scientific production	30	78.9
Oncology, radiotherapy, and pathology internship	27	71.1
Palliative care (on spot)	37	97.4
Pain Clinic (on spot)	36	94.7
Vacancy for 2 consecutive years	5	13.2
At least two SBCCP holders	38	100.0
Large volume outpatient clinic	38	100.0
Integral Multi-professional Service	38	100.0
Clinical oncology service	38	100.0
Radiotherapy service	38	100.0
Full image service (at least X-ray, US, CT-scan)	38	100.0
Nuclear medicine service	38	100.0
Pathology service	38	100.0
At least 50 surgeries / resident / year	38	100.0
At least 20% of major surgeries	38	100.0
Promotes periodic scientific meetings	38	100.0
Motivates scientific production	31	81.6
Meets the competency matrix criteria	38	100.0
Re-accreditation	38	100.0
Availability of at least two additional services	26	68.4

Table 3. Characteristics of the Training Service regarding the number of cases.

Assessed characteristic	Result
Number of active professionals	
<i>Minimum - maximum</i>	3-37
<i>Mean ± standard deviation</i>	8 ± 6
<i>Total</i>	299
Weekly available surgical rooms	
<i>Minimum - maximum</i>	3-32
<i>Mean ± standard deviation</i>	11 ± 7
<i>Total</i>	423
Number of annual outpatient care	
<i>Minimum - maximum</i>	800-25000
<i>Mean ± standard deviation</i>	6404 ± 4840
<i>Total</i>	243340
Number of new cases assisted annually	
<i>Minimum - maximum</i>	100-3000
<i>Mean ± standard deviation</i>	1154 ± 842
<i>Total</i>	43856
Number of surgeries per year	
<i>Minimum - maximum</i>	170-2057
<i>Mean ± standard deviation</i>	803 ± 567
<i>Total</i>	30507
Percentage of major surgeries	
<i>Minimum - maximum</i>	20-90%
<i>Mean ± standard deviation</i>	37% ± 20%
Academic production (2021-2022)	
<i>Minimum - maximum</i>	0-172
<i>Mean ± standard deviation</i>	12 ± 32
<i>Total</i>	458
Total number of residency positions (R1+R2)	
<i>Minimum - maximum</i>	0-12
<i>Mean ± standard deviation</i>	3 ± 3
<i>Total</i>	118
Total number of SBCCP internship positions (I1+I2)	
<i>Minimum - maximum</i>	0-6
<i>Mean ± standard deviation</i>	1 ± 2
<i>Total</i>	50
Number of graduates in the past 10 years (2012-2021)	
<i>Minimum - maximum</i>	0-52
<i>Mean ± standard deviation</i>	12 ± 11
<i>Total</i>	452
Average annual number of surgeries performed by the resident or intern	
<i>Minimum - maximum</i>	50-800
<i>Mean ± standard deviation</i>	249 ± 175
<i>Total</i>	9460
Approval rate in the Specialist Title Exam (past 5 years)	
<i>Minimum - maximum</i>	0-100%
<i>Mean ± standard deviation</i>	86% ± 38%

***Correspondence**

Leandro Luongo Matos
Sociedade Brasileira de Cirurgia de
Cabeça e Pescoço
Av. Brigadeiro Luís Antônio, 278,
6º andar, Sala 05, Bela Vista
CEP 01318-901, São Paulo (SP), Brasil
Tel.: +55 (11) 3107-9529
E-mail: lematos@gmail.com

Authors information

LLM and MAVK - MD; PhD.

Most of the services are non-university general hospitals linked to the public health system and staffed by a trained and qualified team. Most of them provide material for locoregional examination, ultrasound, and availability of intraoperative frozen section examination. The presence of a specialized team in microsurgical reconstruction and neurosurgery for combined approaches is also quite common. All services conduct regular scientific and academic activities, and the majority encourage scientific production by residents or interns. The availability of internships in clinical oncology, radiotherapy, and pathology, in addition to palliative care services and pain clinics, is also common in most centers. Approximately 23.7% of the centers were classified as A+, another 23.7% as A, and the remaining or majority, 52.6%, were classified as B, mainly because of a lack of candidates for the Specialist Title Exam and/or low scientific production.

In the assistance of specialty patients, nearly 300 professionals are involved in specialist training. In Brazil, there are over 400 surgical room positions available weekly, and over 240,000 patients are assisted annually by the 38 training services, which perform over 30,000 surgeries a year. On average, each resident or intern performs approximately 500 surgeries during their training, and approximately 37% of these are major surgeries. The approval rate for the Specialist Title Exam is high, reaching 86% for the graduates of these services. During 2021 and 2022, these centers published 458 articles, and have trained 452 specialists over the past 10 years. Combined, the services have 168 accredited residency or internship positions.

However, despite the significant number of available positions at the national level, many services still face the need for additional internship positions to accommodate the lack of candidates for medical residency. It is estimated that the vacancy rate is approximately 46%, considering the number of professionals that could be trained against the number of available positions. Excluding the internship positions needed to accommodate the remaining positions from the medical residency program, the estimated idle position rate is about 33%.

Qualitatively, in interviews with the heads of the services, all reaccredited services stated that they provide high-quality training, overcoming the inherent adversities of the Unified Health System (SUS). Likewise, in general, residents and interns are satisfied with the training received, and praise the technical ability of the teams and the large number of cases.

With these results, the SBCCP presents society with a clear, objective, and uniform overview of the training of H&N Surgery specialists in Brazil, and it is confident that it has been training competent professionals capable of treating patients in the specialty, regardless of the region of Brazil or the service. However, it is necessary to motivate interest in the specialty to reduce the rate of idle positions.