# Original Article

# **Current Perspectives in Surgical Oncology Medical Residency**

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### **Abstract**

Objective: The process of teaching a medical specialty still presents a great challenge nowadays. We are still trying to arrive at an ideal model of a Medical Residency Program that both has an active teaching role as an academic Institution and is able to prepare high-quality individuals for medical practice in their specific area. This paper presents a brief research conducted with previous medical residents of Erasto Gaertner Hospital with the main goal of evaluating their present status as specialists as well as their level of satisfaction concerning the specialty they have chosen. This information will also be used to determine whether the residency program and its teaching model have been conducted satisfactorily. Material and Methods: A form was mailed to former medical residents, graduated in the last 20 years, from Surgical Oncology Residency Program at Erasto Gaertner Hospital. The form had questions concerning their perspectives in the beginning of work as specialists, their current jobs, academic education, titles, relationship of work with their personal lives, their opinions regarding the methodology and types of exam during their residency as well as their level of satisfaction with the program and their present quality of life. Collected data was analyzed. Results: The number of residency positions offered by the Department has been increasing along the years. A decreasing number of specialists had difficulties finding a job along the years. All residents graduated in the last past years work exclusively as Oncologists. About 70% of graduated residents have University appointments and 50% of them have academic activities. Conclusions: the great majority of graduated residents in Surgical Oncology Residency at Erasto Gaertner Hospital are now working exclusively as specialists and they show a high satisfaction rate with their post-graduate education.

Keywords: Intership and Residency; Medical Oncology; Education Medical, Graduate.

#### Introduction

The search for an ideal method of teaching new physicians has been a concern for a very long time. In the nineteenth century, Bernhard Von Langenbeck created a teaching method that probably became the basis for the Residency model we have today. He started to direct new physicians towards a more complete and updated medical knowledge. Halsted, in 1904, had a leading role

integrating Medical School and Hospitals and, for most authors, he is the creator of Medical Residency.<sup>1</sup>

In Brazil, this integration took about half a

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century more in order to be implemented. It began in 1948, when "Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo" and "Hospital dos Servidores do Estado no Rio de Janeiro" created their first Medical Residency Programs. The first model was educative and progressive, with no predefined ending. Physicians were categorized as "Junior Resident", "Senior Resident" and "Assistant Resident", being "Junior Resident" the lowest level and "Assistant Resident" the highest one. Based on acquisition of skills, they would upgrade level.

Brazilian Official regulations for Residency purposes only became available in 1981 with law number 6932/81, which considers Medical Residency as a form of post-graduate education and characterizes it as "in-service training". The last available resolution in Surgical Residency became available in August 2005, establishing the basis for an Advanced Program in this field.<sup>2</sup>

The way Medical Residency Programs were conceived in the beginning gradually changed along the years in order to be adapted to new demands imposed by society as well as medical and academic communities. Initially they were based in full attention and commitment from professionals. Today, residency programs became highly practical, with an "in-service training" approach. As medical knowledge expands, it is logically expected that we observe a concomitant increase in Residency Programs length. Although this was expected, it was not observed in Brazil, since governmental projects tend towards a reduction in this time, allowing residents to start working as specialists sooner than before. Due to market demands, obtaining a certifying diploma became a key step in the process of job admission. Sometimes the extent of this education can be flexible in order to allow an adequate integration of new professionals into their work.

Educational activities in Surgical Oncology at Erasto Gaerter Hospital started in 1985. The following year the Surgical Oncology Course was started, but still with some organizational issues to be solved. In 1992, with the development of a more elaborated and well-planned program, the Surgical Oncology Course started to increase its importance.

In 1994, a Ministry of Education (MEC) Commission officially recognizes the Residency Program. In 1997, the Hospital sponsors the I Residency Seminar. In 1998, an Official Program, Changes and Quality Control are implanted. In 2001, the II Residency Seminar is organized. The year 2002 the hospital conducted a Residency Program Adequacy, and in 2005 the Latest Residency Program Review is carried through.

With the purpose of solving some questions regarding the future of our medical residents, an objective research was performed trying to identify their professional status after graduation.

## **Material and Methods**

In order to analyze current educational and work perspectives of graduated residents in Surgical Oncology, data was collected from previous residents of Erasto Gaertner Hospital. Surgical oncology residents graduated in the last 20 years were evaluated. A form was mailed and their feedback analyzed. The form had questions concerning their perspectives in the beginning of work as specialists, current job, academic education, titles, relation of work with their personal lives, their opinion regarding the methodology and types of exams during their residency as well as their level of satisfaction with the program and their current quality of life. In order to categorize data, four distinct periods were established:

1985-1993  $1^{st}$  Stage – Initiation / Official Program

1994-2001 2<sup>nd</sup> Stage - Development 2002-2005 3<sup>rd</sup> Stage - Recent

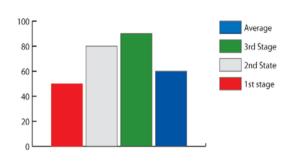
Pertinent literature concerning new concepts and directions of Medical Residency education was reviewed.

#### Results

A total of thirty-eight ex-residents answered the forms that were mailed, which means feedback from 87.4% of them. Residency positions offered by the Department in the beginning were only partially filled (57%) and in the last stage (2002-2005) no vacancies were

observed (100%). Only two residents prematurely left residency without its completion during the whole history of the program. Difficulties finding a job after graduation were reported by 50% of physicians from the first stage of the program (1985-1990) as opposed to only 10% of them in the last stage. As regards medical practice, there is a clear tendency towards a practice exclusively as specialists, as shown in Figure 1.

Only 66% of physicians graduated in the



**Figure 1** – Distribution of former residents working exclusively as oncologists

first stage of the program are certified in their specialty as opposed to 90% of them in the last stage. Higher rates were also observed in the last stage concerning approvals in Board Certification Exams when compared to the earlier periods. This rate was 33% in the beginning and reached 90% at the last stage of the program. The number of professionals interested in "academic career" has also increased along the years; it was reported by 50% of all interviewed physicians, as demonstrated in Figure 2.

The term "academic career" was defined

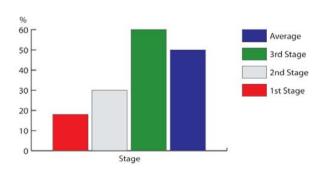
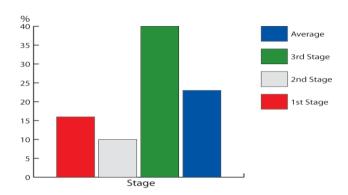


Figure 2 - Distribution of fellow with academic career

as any teaching or research activities regardless of the Institution they were performed. On the other hand, University appointments were characterized as official admissions into these institutions as specialists or professors.

A higher number of University appointments were observed in the group of physicians graduated in the last stage when compared to the others (Figure 3).

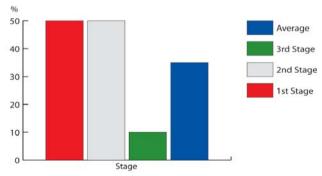
Admissions of former residents into the



**Figure 3** – Percentage of former residents with current university appointments

teaching hospital as part of the staff are not constant within the years (Figure 4). An average 36% joined the staff. This variation is explained by changes in departmental needs along the years.

Among complains pointed out by graduated physicians two are noteworthy: difficulties for being admitted in health insurance plans as referring physicians (reported by 50% of all interviewed physicians) and little support by the teaching institution after graduation (reported by 46% of them).



**Figure 4** – Percentage of former residents joining the Erasto Gaertner staff

According to analyzed data, 71% of all former residents have their own private clinic and 90% work in Oncology-related services. Another important fact is that many graduated residents refer that new Oncologists are needed in their place of work.

The great majority of interviewed physicians (71%) declared to work in Philanthropic Institutions (Table 1).

Table 1 – Types of institutions where former residents work

Type of Institution	%
Public hospital	28.57%
Philanthropic hospital	71.43%
Private practice that also admits	
patients from SUS*	7.14%
Private practice	42.86%

\*SUS - "Sistema Único de Saúde" (Unified Health Care System) – Health care provided by Brazilian government to all citizens

Former residents' marital statuses are as follows: 64% are married, 29% single and 7% divorced. About their earnings, 64% refer to earn more than 1500 dollars monthly. In average, this value usually is achieved after 18 months of practice as specialists.

When asked to express their opinion about Erasto Gaertner Hospital, the majority of former residents demonstrated to be aware of pros and cons of the Institution (Table 2).

Table 2 – Opinion about Erasto Gartner Hospital after graduation

Opinion	%	
Indifference	7.14%	
Optimism	21.43%	
Aware of pros and cons	71.43%	

#### Discussion

The current scenario of Medical Residence in Brazil and in most world countries shows that medical residency is not only needed but also essential for medical practice. Regardless of their specialty, physicians without medical residency are usually labeled by society as lower quality professionals when compared to graduate ones.<sup>1</sup>

American Universities are starting to question the education provided by medical residencies due to an increasing number of fellowships. Some authors believe that "post-residency" education is more job-oriented than really necessary as part of the learning process. They also state that what have been taught in medical residency is "the science of surgery" and not the science of surgical practice. For those authors, essential learning only begins when surgeons come to practice a subspecialty along the years and acquire experience with procedures.<sup>3</sup> Besides, although fellowships may be a good alternative to departments by increasing the staff without additional costs, from the fellow perspective, it may postpone the beginning of his/her career without bringing any proven benefits.<sup>3</sup>

In 2001, a huge research related to surgical education was conducted in North America. Results obtained were disappointing: only 6% of medical students were interested in surgical careers and admissions to Surgical Residency Programs reduced by 30%.<sup>4</sup> Among the reasons why students are not choosing surgical careers are the long time it takes to graduate, bad work environment, a progressive decrease of payment amount for surgical procedures and poor quality of life of those professionals.<sup>5-7</sup> Some authors attribute an increase in quality of life of medical residents to the work of assistant physicians, whose work would increase resident's resting hours.<sup>4</sup>

To guarantee the future of the surgical specialty, a thorough analysis of its teaching methods is needed. A tendency to increase the number of exams for evaluating, certifying and revalidating surgeon licenses has been observed. The reason is the need to assure high professional quality of graduated physicians. There is a general agreement that good learning conditions have to be provided to those physicians.<sup>8</sup>

The Residency Review Committee states that "a resident is considered to be a surgeon when he or she can document a significant role in the determination or confirmation of the diagnosis, provision of preoperative care, selection and accomplishment of the appropriate operative procedure, direction of the postoperative care, and accomplishment of sufficient follow-up to be acquainted with both the course of the disease and the outcome of its treatment." This is a failed model, since program

directors are not able to evaluate deeply residents regarding all those aspects and most of the time it is not of his/her interest to point out program's deficiencies.<sup>9</sup>

Supervised surgical education is what matters. The isolated act of performing procedures transforms residents into no more than technicians. Work hours executed by residents are also a great concern. A recent study showed that reducing resident's work hours would improve quality of life as well as grades obtained in exams. 10

An alarming fact was pointed out by American studies. Due to professional uncertainties, workload and duties, medical residents were presenting depressive symptoms, increased cynicism and decreased humanism.<sup>11</sup>

There is no doubt that medical residents have to execute medical procedures instead of passively watch them. For this to occur in an suitable manner, it has to be done under supervision. On the other hand, what concerns program directors nowadays is theoretical knowledge, ethics, humanism and integrity.<sup>9-11</sup>

According to multiple studies performed, it is easy to understand why we are now facing a period of changes, which is called by some as "Halsted two". Although this is a real concern, we were able to evaluate surgical oncology residents and demonstrate the importance they assign to their Teaching Institution as part of their educational development. Based on this research

we believe Surgical Oncology gives good job perspectives to specialists in this field. These professionals are needed as part of medical teams and can achieve relatively good salary rates. It is also clear that certification and constant license revalidation are increasingly needed as part of a high quality medical practice.

# References

- 1 Simões JC. Thirty years of medical residency of HUEC. Rev Med Res 2005:7:4:92
- 2 Resolução nº 11 e 12 de 10 de agosto de 2005 Diário Oficial da União nº 154 Seção 1 em 10/08/2005
- 3 Ferguson CM. The arguments against fellowship training and early specialization in general surgery. Arch Surg 2003;138:915-6
- 4 Victorino GP, Organ Jr CH. Physician assistant influence on surgery residents. Arch Surg 2003;138:971-6
- 5 Meyer AA, Weiner TM. The generation gap: perspective of a program director. Arch Surg 2002;137:268-70
- 6 Craven, JE. The generation gap in modern surgery: a new era in general surgery. Arch Surg 2002;137:257-8
- 7 Henningsen, JA. Why the number are dropping in general surgery: the answer no one wants to hear – lifestyle! Arch Surg 2002;137:255-6
- 8 Russel TR. What is the future of surgery? Arch Surg 2002;138:825-31
- 9 Silen W. Surgical education: In need of a shift in paradigm. Surgery 2003;134:399-402.
- 10 Barden CB, Specht MC, McCarter MD, Daly JM, Fahey TJ. Ill effects of limited work hours on surgical training J Am Coll Surg 2002;195:531-8.
- 11 Collier, VU, McCue, JD, Markus, A, Smith, L. Stress in Medical Residency: Status Quo after a Decade of Reform? Ann Intern Med 2002;136:384–390.