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Medical Residency Training in Clinical Pathology/ Laboratory Medicine at the Paulista School of Medicine, Federal University of São Paulo

Residência médica em Patologia Clínica/Medicina Laboratorial na Escola Paulista de Medicina da Universidade Federal de São Paulo

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ABSTRACT

Teaching and learning in medicine has its own characteristics, requiring from their actors, in addition to intellectual skills, great dedication and personal commitment. The object of study, learning and practice is a person, punctually placed in the position of a patient, that is, someone who must be attended to at the exact moment of his need, making the attendance and the consequent learning opportunity to occur in unconventional moments. This characteristic led, since the beginning of the creation of medical schools, the more dedicate teachers and students to remain at the places of care almost full time, including at night, generating the concept that some of them "lived" in the Hospital, becoming identified as residents.

Keywords: graduate education; higher education institutions; clinical pathology.

RESUMO

O ensino e o aprendizado da medicina possuem características próprias, exigindo dos seus atores, além das competências intelectuais, muita dedicação e empenho pessoal. O objeto de estudo, aprendizado e prática é uma pessoa, pontualmente colocada na posição de paciente, ou seja, alguém que deve ser atendido no momento exato de sua necessidade, fazendo com que o atendimento e a consequente oportunidade de aprendizado ocorram em momentos não convencionais. Essa característica fez com que, desde o princípio da criação das escolas médicas, professores e alunos mais dedicados permanecessem nos locais de atendimento quase em tempo integral, inclusive em horários noturnos, gerando o conceito de que alguns deles "moravam" no Hospital, passando a serem identificados como residentes.

Unitermos: *educação de pós-graduação; instituições de ensino superior; patologia clínica.*

RESUMEN

La enseñanza y el aprendizaje de medicina poseen características propias, exigiendo de sus actores, además de las capacidades intelectuales, gran dedicación y compromiso personal. El objeto de estudio, aprendizaje y práctica es una persona, puntualmente colocada en la posición de paciente, es decir, alguien que debe ser atendido en el momento exacto de su necesidad, haciendo que la atención y la consiguiente oportunidad de aprendizaje ocurran en momentos no convencionales. Esa característica hizo que, desde la creación de las escuelas médicas, profesores y alumnos más dedicados se quedaran en los puntos de atención casi a tiempo completo, incluso en horarios nocturnos, generando el concepto de que algunos de ellos vivían en el hospital, pasando a ser identificados como residentes.

Palabras clave: *educación de postgrado; instituciones de enseñanza superior; patología clínica.*

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Teaching and learning medicine have their own characteristics, demanding from their actors, besides the intellectual skills, great dedication and personal commitment. The object of study, learning and practice is a person, punctually placed in the position of the patient, that is, someone who must be attended at the exact moment of their need, so that the attendance and the consequent learning opportunity occur in unconventional moments. This characteristic meant that since the beginning of the establishment of the medical schools, teachers and more dedicated students remained almost full-time in care facilities, including overnight, giving rise to the concept that some of them "lived" in the Hospital, and then they were identified as "Residents".

The creation of the Medical Residence, as we recognize it today, however, is credited to the American surgeon William Halsted (September 23, 1852 – September 7, 1922), in 1889, thus completing this year 130 years. Following, a similar program was implemented by the Canadian clinician William Osler (July 12, 1849 – December 29, 1919), in 1890, for the Medical Clinic.

Dr. Halsted, as head of the Surgery Department at Johns Hopkins Hospital, ascertained that four newly graduated doctors would continue to work at the hospital for another four or six years, assuming progressively more complex responsibilities in the assistance of surgical patients. It is interesting to note that at this time the John's Hopkins School of Medicine had not yet been established, which occurred only in 1893.

Dr. Osler, as chief physician of the Medical Clinic at the Johns Hopkins Hospital, stood out for his charisma, compassion and optimism, but also for his method of teaching medicine, which included visits to the wards. He proclaimed that contact with the patient was essential for medical training. Two of his aphorisms are: "To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all" and "The student begins with the patient, continues with the patient and ends his studies with the patient, using books and lectures as tools as means to an end"[1].

In 1917, the American Medical Association recognized the importance of this type of complementing medical education, but only in 1927 the Accreditation for Medical Residency Programs began. This movement was consolidated in 1933, when Residency became a prerequisite for practicing medicine in the United States.

As with other forms of teaching and learning, over the years, the contents of the Residency Programs have been and continue to be modified in order to adapt to new demands in view of the revolutionary technological advances that change medicine, the changes in students' expectations and pressures from the market and the wider community.

The first Brazilian Medical Residency Program was Orthopedics, which began in 1944, at the Hospital das Clínicas of the School of Medicine of the University of São Paulo[2]. From the creation of this Program, advantages were identified and others Programs were emerging.

Bevilacqua[3] describes the existence of four relevant periods in the Brazilian Medical Residency over these 75 years:

• romantic-elitist period, from 1944 to 1955 – when only a very small number of professionals sought this additional training. As most of the time there was no official financial allowance, only people with great idealism and those who had the additional resources to stay a few more years in medical schools could afford to attend Residency;

• consolidation period, from 1956 to 1970 – when the Residency was handed to be regarded as a postgraduate proficiency required to complement medical education;

• expansion period, from 1971 to 1977 – when a large number of public and private medical schools were created. To get a sense of this growth, it is important for us to remember that from 1808 to 1958 (150 years) 27 medical schools were set up in Brazil; between 1960 and 1970 (10 years) 44 more medical schools were authorized. The creation of so many schools led to a significant increase in the number of applicants for residency programs then available, so that in the 1970s alone, 479 new programs were implemented, nearly doubling the number of the existing ones. We are concerned that we have 336 Medical Schools in the country today, 136 of which were established in the last 6 years[4].

The creation of a large number of programs not accompanied by a rigid formal evaluation process, with no standardization and absolutely with no official control, led to a significant decrease in the quality of education, including deviations from the objectives of the Programs. In response to this state of play, the Residents themselves get organized before the government to take responsibility for regulating the Medical Residency Programs. It is noteworthy that were the Residents themselves who were responsible for the outbreak of the first strike of doctors in the country, which resulted in the creation of the Brazilian National Commission of Medical Residency [Comissão Nacional de Residência Médica (CNRM)] linked to the Brazilian Ministry of Education and Culture.

The fourth period, which begins in 1977 and continues to the present day, corresponds to the time when there is national regulation of the Medical Residency Programs, remuneration definition, workload and type of work to be developed by the Residents, mandatory qualified supervision and continuous quality improvement and relevance of available scenarios evaluation with relevance and interest[5].

With the creation of the CNRM, the Residency Training, as established in the first article of the decree n. 80.281/77 that regulates it, has become considered "*modality of postgraduate education for doctors in the form of a specialization course, characterized by in-service training, on an exclusive dedication basis, operating in university health institutions or not, under the guidance of highly qualified and ethical medical professionals*" [6].

From its initial regulation to the present day, many changes have taken place, especially in relation to the covered areas, exclusive service, labor law, and remuneration conditions, making the Residents, today, considered almost as workers ruled by the Consolidation of Labor Laws.

The Paulista School of Medicine of the Federal University of São Paulo [Escola Paulista de Medicina da Universidade Federal de São Paulo (EPM/UNIFESP)] was one of the pioneer medical schools to implement Medical Residency Training Programs in Brazil, following the same conception of programs developed in the early twentieth century, in the United States under the inspiration of Halsted and Osler. Since 1957, EPM/UNIFESP has maintained and constantly seeks to improve and modernize its Medical Residency Training Programs, in accordance with medical advances and the needs of society.

In the 1960s, EPM/UNIFESP Medical Residency Training Program was three years of study, composed of two basic cycles lasting two years: the clinical and the surgical, in which twenty newly graduated doctors were distributed, 10 clinicians and 10 surgeons. Specialties began only in the third year. Over the years, the Residency Program has grown and adapted to the demands, currently consisting of 100 Specialty Training Programs, covering practically all areas of medical practice.

The Regulation of Medical Residency Training Program, with uniform standards throughout the national territory, was developed by the Brazilian National Commission of Medical Residency, created in 1977. This Commission is responsible for establishing the standards and accreditation of Medical Residency Training Programs in the country.

Particularly in relation to the Medical Residency Training in Clinical Pathology/Laboratory Medicine, it began at EPM/UNIFESP in 1994. The program currently developed lasts 3 years, and the first year is fully used for clinical training. The practical scenarios of the Residency Training are developed, besides the University Hospital/São Paulo Hospital [Hospital Universitário/Hospital São Paulo (HU/HSP)], in other Hospitals, Public Care Centers and other affiliated University Institutions.

In the first year of Residency Training, the Resident has hardly contact with the laboratory, except for the request for examinations and interpretation of results that they perform as an integral part of the care of the Institution's patients in the different areas in which they worked. Their schedule and timetable are exactly the same as those of other first-year Medical Clinic Residents, rotating by the same areas, namely: Medical Clinic ICU, Male and Female Wards, Outpatient Clinics, Pulmonology, Hematology, Nephrology, Cardiology, Infectious Diseases, Hospital Infection Control Committee, Emergency Room.

For the next two years, the Resident becomes part of the HU/HSP Central Laboratory team, participating in the performance of routine examinations, always under the supervision of medical preceptors Clinical Pathologists. The second year is devoted to major areas, namely Hematology, Immunochemistry and Microbiology, staying three months in each of them. The remaining two months are occupied by activities in more specific sectors, such as Management, Examination Material Collection, Quality Assurance, and Medical Informatics. From this year, the Resident actively participates in the meetings of the Clinical Medicine/Laboratory Medicine discipline and continues to participate in the visits to the wards.

In the third year, the Resident attends laboratories external to the Central Laboratory, within or outside the Institution, upon the conclusion of specific agreements. With this participation, the Resident has the opportunity to have contact with exam routines not performed by the Central Laboratory, techniques such as molecular biology, mass spectrometry, myelogram, fertility assessment tests, among others. These stages generally takes from two to three weeks and the most frequently included laboratories are those in specialties where there is a strong participation of examinations in clinical decisions such as Endocrinology, Cardiology, Gastroenterology, Nephrology, Rheumatology, Neurology and Urology.

In addition to these activities, the Resident spends some time, also in the outpatient clinics of these specialties, accompanying the respective Residents in patient care, interpreting results, participating in the clinical meetings of each of them. At the same time, they continue to following activities at the Central Laboratory. In the third year, the Resident has the so-called optional month, in which he/she may return to an area already attended or undertake an internship elsewhere, including abroad, in an area of special interest.

One month each year is earmarked for a well-deserved vacation.

With this program, we are convinced that the Residency Training Program of the Clinical Pathology/Laboratory Medicine Program of the EPM/UNIFESP complements their medical training with a solid clinical basis, which enables them to effectively develop advisory and consultancy activities in different professional forums, including pharmaceutical area, clinical trials and diagnostic centers.

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