

## Cardiology Residencies in Argentina. Current Realities and Challenges

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The residency programs started in our country during the fifties as training and capacitating models in different medical specialties, based on the consolidated experience of university hospitals in the USA.

The residency programs were implemented with innovative education characteristics, considering residents as university graduates participating in a rigorous and systematic program in postgraduate training. (1)

Medical residency program is originally defined as “a system of professional education for graduates from medical schools with full-time capacitating in service, during a determined period of time, with the goal of training for the integral, scientific, technical and social practice of a specialty” [Ministry Resolution (MR) N° 1778/60].

According to this definition, this postgraduate training integrated scientific knowledge and technical capabilities of a specialty with the skills to apply them in a particular health care and social setting. Therefore, residents should receive full time training based on medical practice and during a determined period of time.

The first regulations about the residency programs considered that “the resident position must not be recognized as a job but as the opportunity to take part of a postgraduate course in medical practice” and that “payment to resident does not constitute a wage or compensation for services but a way to provide his/her needs during the training period”. (2)

These statements highlight that the residency program represents an opportunity to train the young professionals, and residents must be paid in order to satisfy their needs during the full-time training period.

Based on these general guidelines, medical residency programs had a great development, firstly in public and university hospital settings, and secondly in private institutions, covering the wide scope of medical specialties and contributing to specialization of the last generations of Argentine physicians.

It is widely accepted in the medical community that residency programs constitute the most adequate postgraduate training system to achieve knowledge and capacitating in a specialty. (3) However, it is necessary to be aware of the important difficulties that have been increasing during the last years for implementing and putting the residency programs in our country in function and hierarchy.

Unfortunately, and despite the increasing offer of new institutions, the number of vacancies and the total capacity of job positions are insufficient. For this reason, an important number of physicians graduating from the university do not gain access to the system and lose the opportunity of being trained in a residency program.

Some discouragement and confusion in the residency system are generated due to the lack of hierarchization and recognition deserved by the physician trained in a residency program, and to the existence of other ways of obtaining the degree of specialist which are generally less exigent and sometimes do not meet the basic standards of training.

Currently, medical residency program functioning, particularly in clinical cardiology, requires deep reflections that should consider the complexity of our health care system, the current crisis of structures of medical and hospital services, the lack of recognition of vocation and teaching activity, the dynamic for change in medical practice and the view and expectations of the new in-training generations.

During the last decades we have witnessed an evident and progressive impairment of the residency programs in the different settings (university, public and private systems). Some causes are common to all systems but others differ.

The different surveys conducted by the National Council of Residents in Cardiology (CONAREC, *Consejo Argentino de Residentes de Cardiología*) in the last 20 years about the status and functioning of the residency programs in cardiology in our country show multiple deficiencies and limitations affecting the performance and qualities of this system. (4, 5)

The last CONAREC survey conducted between the end of 2009 and the beginning of 2010 shows evident data voluntarily provided by 280 residents in cardiology nationwide. (5)

Among survey respondents, 18% do not have chief resident, 25% have ≤ 1 clinical cardiologist dedicated to teaching and training residents, increasing to 45% of cases when the compromise of staff physicians in the different subspecialties is evaluated. More than 10% of the respondents do not have group teaching activities, as bedside rounds and clinical seminars.

In 20% of cases there are no residency programs, or the existent programs are not adequately fulfilled in 44%. About 1/3 (31%) of residents do not have a one-year internal medicine training experience before starting the residency in cardiology.

About 50% of residents make decisions that are not always supervised by a staff physician or do not have the possibility of consulting with a cardiologist on duty.

After analyzing residents' workload and their contractual situation, 32% work more than eighty hours a week and are on duty several times a week. In 44% of cases, they receive ≤ \$ 2000 and 10% earn < \$1000 or do not receive any payment.

In this setting, 63% need another job for an extra income for their personal needs, generally being on duty in other medical center. Thirty four percent of residents have one free day for an extra job: 12%

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during the first year of residency and 25% in the second year. The contractual situation is not adequate in 21% of cases, 14% do not have medical coverage and 34% lack of work accident insurance.

This information shows that the basic principles of the residency system are not fulfilled in a high percentage of centers with residents, with the predictable consequences in the quality of training. However, as this was a voluntary survey with probable biases, these data may not reflect the real magnitude of the problem.

In general, the information provided by this and other surveys indicates an important heterogeneity in the functioning of the residency programs that progressively deteriorates the system: insufficient programming, lack of teaching activity, inadequate supervision of medical practice and poor interrelation between the physician in charge of training residents and the residents. Even more, high workload in medical practice affecting education and study hours is aggravated by low payment and the need of increasing working hours in other institutions. All these issues affect and dilute the main goal of training.

It is evident that there are active residency programs in cardiology in centers with scarce or absence of compromise in training residents. The training institution is responsible for this lack of compromise: absence of creating the necessary conditions and of providing the essential resources for the functioning of the system. This responsibility is also shared by the staff physicians who should train residents and by those in charge of the program in each institution.

Undoubtedly, the absence of policies necessary for training competent human resources in the health care setting, and the lack of a single official center for the regulation and quality control of the residency programs nationwide have contributed to the progression of a process of changes, emphasizing the inequality in the quality of the training centers and the general decline of the system.

The accreditation of residency programs regime of the Post-Graduate Cardiology University Course of the University of Buenos Aires and Associated Residency Programs developed by the Argentine Society of Cardiology since 2001 has contributed to maintain and improve the quality standards in the participating centers. However, the usefulness of this course is insufficient due to its voluntary nature and limited capability to demand the necessary changes required in some institutions.

The recent National System for the Evaluation and Accreditation of of the Medical Residency Programs of the Ministry of Health has designated the Argentine Society of Cardiology as the evaluating entity in clinical cardiology nationwide which started in 2009 (MR N° 450/06, MR N° 1342/07, file N° 2002-18398/08-09). This accreditation process evaluates in field different criteria related with the characteristics of medical practice and hospital equipment, skills and availability of faculty members, programming and fulfillment of training activities, and resident's

working conditions. In this way, it may possible to establish the necessary corrective measurements for the adequate functioning of the residency program.

Several parameters may be used for the evaluation of a residency program; however, each training center should fulfill certain conditions and basic and essential requisites: availability of facilities, equipment, qualified medical and paramedical staff to provide intermediate or high-complexity cardiac care; a residency program covering training in cardiovascular diseases in the theoretical background and medical practice. The program should include one year rotation in internal medicine and 3 years of clinical cardiology with internal or external (in another center) rotations in all the subspecialties. Training should be based on a programmed and gradual medical practice with decision-making supervised by staff physicians. The program must count with a responsible residency program director, one chief resident and a basic core of staff physicians in clinical cardiology and subspecialties responsible for the rotations, compromised with and available for training activity; group and multidisciplinary teaching activities with participation of all staff physicians (bedside rounds, clinical seminars, etc.) are also essential. Each resident should sign a contract with the institution which allows the resident salary to be paid, ensuring full-time dedication of the resident with the system and the possibility to focus on his training period.

Undoubtedly, the gap between the original conditions, the basic requisites of a residency program and the particular functioning of our system is wide. Improving this reality represents a challenge to all the sectors involved: health regulatory authorities, scientific societies, training centers and faculty physicians compromised. Several measurements should be carried out to recover the essence of the medical residency programs: an extensive debate about this issue with the participation and contribution of residents, the development of functioning guidelines and standards, the regulation and centralized control of the residency programs, and the compromise and coordinated work of all the actors.

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## BIBLIOGRAPHY

1. Borrell Bentz MR. La educación médica de posgrado en Argentina: el desafío de una nueva práctica educativa - Organización Panamericana de la Salud - OPS, Buenos Aires 2005; cap. 3 p. 103.
2. Fernández Villamil E. Una experiencia argentina sobre residencias en cirugía. *Revista de la Asociación Médica Argentina* 1960;74:14.
3. Consenso de Educación Médica en Cardiología de la República Argentina. Sociedad Argentina de Cardiología. *Rev Argent Cardiol* 2000;68(Supl V).
4. Carballido R, Ayala Paredes F, Amarilla A, Salazar C, Masoli O, Iglesias R. Estado actual de las residencias de cardiología. *Encuesta Nacional de Residentes* 1997. *Rev Argent Cardiol* 1998;66:269-76.
5. Realidad de las Residencias de Cardiología 2009-2010. *Rev Argent Cardiol* 2011;79:167-178.