

Follow-up of Specialist in Cardiology Graduates at University of Buenos Aires. Cosme Argerich Hospital Experience

Seguimiento de graduados de la Carrera de Médico Especialista en cardiología de la Universidad de Buenos Aires. Experiencia del Hospital Cosme Argerich

LUCÍA R. KAZELIAN¹, MTSAC, LEANDRO A. BONO¹, MARIELA E. TOLUSSO¹, HORACIO G. CESTARI¹, RODRIGO I. BLANCO^{*1}, JUAN A. GAGLIARDI¹, MTSAC.

ABSTRACT

Background: Follow-up of graduates in a career is an indicator of educational quality, and their professional and academic work allows evaluating the results of long-term instituted programs Objective: The aim of this study was to explore the perception of graduates from the postgraduate specialist course (PSC) in cardiology at University of Buenos Aires (UBA) Hospital Argerich venue on the quality of training received, how they insert in the professional world, and their engagement in subspecialties.

Methods: A descriptive, cross-sectional study was carried out from January 1 to 31, 2020. A self-administered opinion survey was designed using surveymonkey.com and submitted to 28 graduates of the PSC in cardiology UBA-Hospital Argerich, corresponding to 7 consecutive promotions (2010-2016 years of admission).

Results: The survey was answered by 25 graduates (89.2%). Mean age was 34 years and 14 (56%) were men. The questions explored the global assessment, the evaluation of the scientific and academic activity at the hospital venue as well as that of the Argentine Society of Cardiology Biennial Course of Cardiology. Most of the answers were favorable. All the graduates continue practicing the profession and 76% have received advanced training in a subspecialty.

Conclusions: Graduates from the PSC in cardiology at Hospital Argerich perceive that their training has been very good or excellent and has been essential for their professional development. All the data collected are a source of information to provide feedback and optimize teaching in the training institution.

Keywords: Surveys and Questionnaires - Education, Medical, Graduate - Educational Measurement - Cardiologists - Follow up

RESUMEN

El seguimiento de los graduados es un indicador de calidad educativa y su labor profesional y académica podría ser un indicador para evaluar los resultados de los programas instituidos a largo plazo.

Objetivo: explorar la percepción de los egresados de la Carrera de Médico Especialista en cardiología (CME) de la Universidad de Buenos Aires (UBA) sede Hospital Argerich sobre la calidad de la formación recibida durante la carrera. Conocer su inserción laboral en el mundo profesional, y la realización de subespecialidades.

Material y métodos: estudio descriptivo, de corte transversal, realizado del 1° al 31 de enero de 2020. Se diseñó una encuesta de opinión autoadministrada a través de surveymonkey.com. El universo encuestado fueron 28 egresados de 7 promociones consecutivas (año de admisión 2010-2016) de la CME en cardiología UBA-sede Argerich.

Resultados: Del total de egresados contestaron 25 (89,2%); La edad promedio fue 34 años, sexo masculino 14 (56%). Se realizaron preguntas para la evaluación global, valoración de la actividad científica y académica en la Sede del Hospital, al igual que la valoración del Curso Bianual de Cardiología en la Sociedad Argentina de Cardiología. Las respuestas en su mayoría fueron favorables Los egresados continúan ejerciendo la profesión en un 100%, el 76% se perfeccionó en una subespecialidad.

Conclusiones: Los egresados de la CME en cardiología sede Hospital Argerich perciben que su formación ha sido muy buena o excelente y ha contribuido a su desarrollo profesional de manera esencial. Toda la información recabada genera una fuente de información para retroalimentar y optimizar la enseñanza en la institución formadora.

Palabras clave: Encuestas y cuestionarios - Educación de Postgrado en Medicina - Evaluación Educacional - Cardiólogos - Seguimiento

Abbreviations

PSC	Postgraduate specialist course	CONEAU	Decentralized organism under the Ministry of Education jurisdiction
UBA	University of Buenos Aires		

Rev Argent Cardiol 2022;90:336-340. <http://dx.doi.org/10.7775/rac.v90.i5.20552>

Received: 05/09/2022 – Accepted: 09/14/2022

Address for reprints: Lucía R. Kazelian. Pi y Margall 750 (C1155AHD) CABA, Argentina - E-mail: kazelian@gmail.com

¹ Division of Cardiology, Hospital General de Agudos Dr. Cosme Argerich.

Specialist course in cardiology at the Buenos Aires University School of Medicine, Hospital Argerich venue.

MTSAC Full Member of the Argentine Society of Cardiology

*to apply as full member

INTRODUCTION

“Dr. Cosme Argerich” hospital is a historical reference center of cardiology training. The medical cardiology residency created in 1996 by Dr. Carlos Bertolasi was one of the first cardiology residencies of the country. This residency depends on the City of Buenos Aires Government which grants the specialist certificate after its completion, allowing professional practice in the Autonomous City of Buenos Aires. (1)

Training of specialty physicians through university courses has the purpose of improving the healthcare of the population. Within this context, the University of Buenos Aires (UBA) created the post-graduate specialty course (PSC) in 1988, through the Superior Council Resolution N° 3334/88. (2)

The PSC at the Hospital Argerich Cardiology Division was under the direction of Professor Dr. Alberto Ramos from its beginning until 2003, continued by Dr. Ricardo A. Sarmiento and is currently directed by Dr. Lucía R. Kazelian since 2016. (3)

This venue was accredited by the National Commission for University Evaluation and Accreditation (CONEAU), a decentralized organism under the National Ministry of Education jurisdiction through resolution N° 119/99 and 048/11. (4,5)

More than 30 promotions of university cardiologists have been trained since the beginning of the PSC in cardiology at Hospital Argerich, which grants a university license to practice the specialty both within and outside the country. In our case, the PSC articulates with the cardiology residency.

The objective of monitoring graduates is to improve the processes of institutional effectiveness of the university or higher education institution, through the analysis of information on the professional and personal performance of graduates. (6). The monitoring of graduates is an indicator of educational quality, according to national and international program accreditation organisms. (7)

Graduate professional and academic work could be an indicator to evaluate the long-term outcomes of the educational programs. (8)

The graduate survey is an appropriate instrument to assess satisfaction with the training they are receiving, and find areas for improvement. It does not measure the training quality, but it is a means to improve it (9)

OBJECTIVE

The aim of the study was to explore the perception of UBA PSC in cardiology graduates at Hospital Argerich on the quality of training received and the impact of its theoretical aspects: scientific and academic activity, classes, monography writing, insertion in the professional world, and training in subspecialties.

METHODS

This was a descriptive, cross-sectional study carried out from January 1 to 31, 2020.

A graduate was defined as any professional who had completed the PSC in cardiology at Hospital Argerich, obtaining the title of UBA university cardiologist.

The PSC is inserted in the medical, teaching and research activity of Hospital Argerich Cardiology Division. It lasts three years and is ruled by the last resolution N°6159/16. (3)

CME students carry out healthcare activities at our venue, with the corresponding rotations in the different subspecialties. In addition, they participate in theoretical classes, bibliographic seminars, central seminars of the service and courses taught by professionals belonging to the Cardiology Division, such as semiology, Doppler echocardiography, electrocardiography, hemodynamics, nuclear magnetic resonance, coronary heart disease in women, research methodology and statistical analysis, primary prevention, etc.

As part of the PSC theoretical aspect, they also assist to the Argentine Society of Cardiology Biennial Course of Cardiology. (10)

The surveyed universe consisted of seven promotions of UBA PSC in cardiology graduates at hospital Argerich who started the course from 2010 to 2016.

A self-administered survey was designed through www.surveymonkey.com. For the assessment, a scale was used where they could answer: a lot, quite a bit, little and not at all. Messages were sent to all graduates via e-mail and WhatsApp with the link to the survey, which was available during the previously indicated period.

The questionnaire included 44 questions grouped in six sections:

1. General data
2. Global assessment
3. Evaluation of the scientific activity at the Hospital Venue
4. Evaluation of the academic activity at the Hospital Venue
5. Evaluation of the Argentine Society of Cardiology Biennial Course of Cardiology
6. Venue recommendation. Observations and suggestions (free field)
7. Current professional activity

RESULTS

A total of 28 graduates from 7 consecutive promotions between 2010 and 2016 were invited to participate, and 25 (89.2%) answered the survey.

Table 1 shows general data of graduates.

Mean age was 34 years (range 30 to 41 years). Fourteen (56%) respondents were men, 11 (44%) were married, and among this last group, 9 were men. Ten (40%) graduates had children, and among them only 3 were women. In 52% of cases, graduates came from other provinces for the PSC and 28% returned to their place of origin.

Two Argentine graduates are currently in Spain (both in Barcelona), one doing the subspecialty and the other a doctorate in basic clinical cardiology.

The 22 Argentine graduates obtained their medical title in Argentina, and the foreign graduates studied medicine in their country of origin (Table 1).

Seven of the surveyed respondents were chiefs of residents (one for each promotion).

Table 2 shows the questions and the results of the global evaluation, assessment of the scientific and

academic activity at the Hospital Argerich venue, as well as that of the Argentine Society of Cardiology Biennial Course of Cardiology expressed as percentages.

They were also asked if they would recommend the Hospital Argerich site to a doctor in training in cardiology, and 100% answered that they would, based on the quality of the training, specifically on topics such as ischemic heart disease and heart failure, the competence of the professionals, with references in all areas, the number of academic activities and the updating of the bibliography, the diversity of pathologies and the emphasis on clinical judgment by teachers.

All respondents (100%) actively continue in their profession, and among them, 70 % followed a subspecialty: 13 in Doppler echocardiography (all trained at Hospital Argerich), 4 in hemodynamics [2 at Hospital Argerich, 1 at Hospital El Cruce (Buenos Aires province) and 1 at a hospital in Barcelona, Spain], 1 in diagnostic imaging in Madrid, Spain and 1 in Sportology at Universidad Católica Argentina. A graduate is doing his doctorate in Spain.

Regarding the total number of graduates surveyed who attended patients, 84% developed their care activity in several public and private institutions.

It is interesting to observe that 40% are still associated to Hospital Argerich as staff physicians, some as emergency room cardiologists, and others doing their subspecialty.

DISCUSSION

Graduates' follow-up is the way that universities have to assess educational quality and analyze their insertion in the labor market to improve their teaching and training offer, and surveys are the instrument to carry it out. That's why it's so important to conduct adequate surveys.

All graduates from the study period were contacted and the survey response rate was high. (8)

A similar gender distribution was found, with slight male predominance in accordance with the growing feminization of enrollment in medicine both at a national and international level. (11)

At the time of the survey, all participants were young adults. Less than half were married and had children, but with a clear dominance of men in this condition. This situation probably agrees with current statistical data of our country and the Western world showing a lower proportion of marriages and parenthood postponement related to the feminization of the medical career and the difficulty to exert the profession for women with a family and children. (12,13)

It is interesting to observe how the foreign students returned to their country, while very few of those from other cities of Argentina returned to their place of origin. Perhaps the decision to remain in Buenos Aires is due to a greater working opportunity, greater complexity of healthcare centers, the possibility of following a subspecialty, as well as the difficult inclusion in the medical colleges of the different provinces of our country.

All surveyed graduates considered very highly the training received in the PSC in cardiology at Hospital Argerich. The medical care and teaching areas were the ones in which they perceived greater development. This could be justified by the fact that one of the central tasks of medicine is patient care, so it is expected that medical care has been the one in which the greatest influence and the character of the service was perceived, where training of new cardiologists has always been a priority.

Some respondents requested greater participation in research projects. We consider it an interesting demand as our service is a center with constant development of research studies and PSC students are always invited to participate, each year with greater response.

When consulted about the professional activity at the time of the survey, we observed that 40% of graduates are associated to our hospital through their professional activity. Moreover, 76% has done some subspecialty, and remarkably, 14 out of 19 who did a subspecialty, followed it at our PSC venue.

Both the academic activity at our venue and the Argentine Society of Cardiology Biennial Course of Cardiology were highly valued.

The analysis of monography preparation revealed dissimilar results. Although 20 out of 25 answered

Table 1. Graduate characteristics

	N
Graduate profile	25
Age (years)-(range)	34 (30-41)
Male gender	14
Married status	11
Children	10
Country of origin/ current residence	
Argentina	22/20
Spain	0/2
Ecuador	2/2
Bolivia	1/1
Medical Degree	
Argentina	22
UBA	13
UNT	4
USAL	3
UCES	1
Fundación Barceló	1
Ecuador	2
Universidad de Guayaquil	1
Universidad Católica Santiago de Guayaquil	1
Bolivia	1
Universidad Privada del Valle	1

UBA: Universidad de Buenos Aires, UNT: Universidad Nacional de Tucumán USAL: Universidad del Salvador, UCES: Universidad de Ciencias Empresariales y Sociales

Table 2. Questionnaire and answers expressed in percentages

	Very much	Enough	Little	Nothing
GLOBAL ASSESSMENT				
How much has the PSC satisfied your expectations?	24	68	8	0
How much has the PSC been an important complement in your training during your residency/in training attendance?	40	48	12	0
How much has the PSC been an opportunity to interact with colleagues?	40	44	16	0
How much has the PSC been a stimulus to search for different sources of information?	40	48	12	0
How much has the PSC been a stimulus for the review/ analysis of conducts applied in your center?	40	11	16	0
Activity at the Hospital Argerich venue				
Was it useful to attend bibliographic seminars?	68	32	0	0
Was it useful to prepare and present bibliographic seminars?	76	24	0	0
Was it useful to attend central seminars?	92	8	0	0
Was it useful to prepare and present central seminars?	84	16	0	0
Were you encouraged to perform any scientific study?	20	36	40	4
Were you encouraged to present any scientific study or case report in meetings, congresses?	24	36	40	0
Were you encouraged to publish any case report or scientific study?	12	48	40	0
Were the classes useful?	60	36	4	0
Were classes preparation and presentation useful to incorporate knowledge?	64	32	4	0
Were the courses (semiology, diagnostic imaging, statistics) imparted by the teaching staff useful?	24	64	12	0
Was the monography preparation useful?	32	48	12	8
How much did the residency train you to develop clinical criteria in your medical practice?	84	16	0	0
Theoretical biennial course of cardiology (Argentine Society of Cardiology)				
Quality of the theoretical teaching program. Interest of the topics developed in the 8 modules	24	72	4	0
The proposed exercises/activities (bibliographic seminars, case report presentations) were interesting, related with the professional activity, contributed to affix the main concepts	32	40	28	0
Recommended literature (updated and available)	16	64	20	0
The exams at the end of each module helped to affix concepts.	12	60	28	0
Would you recommend this PSC venue to a colleague?	100	0	0	0

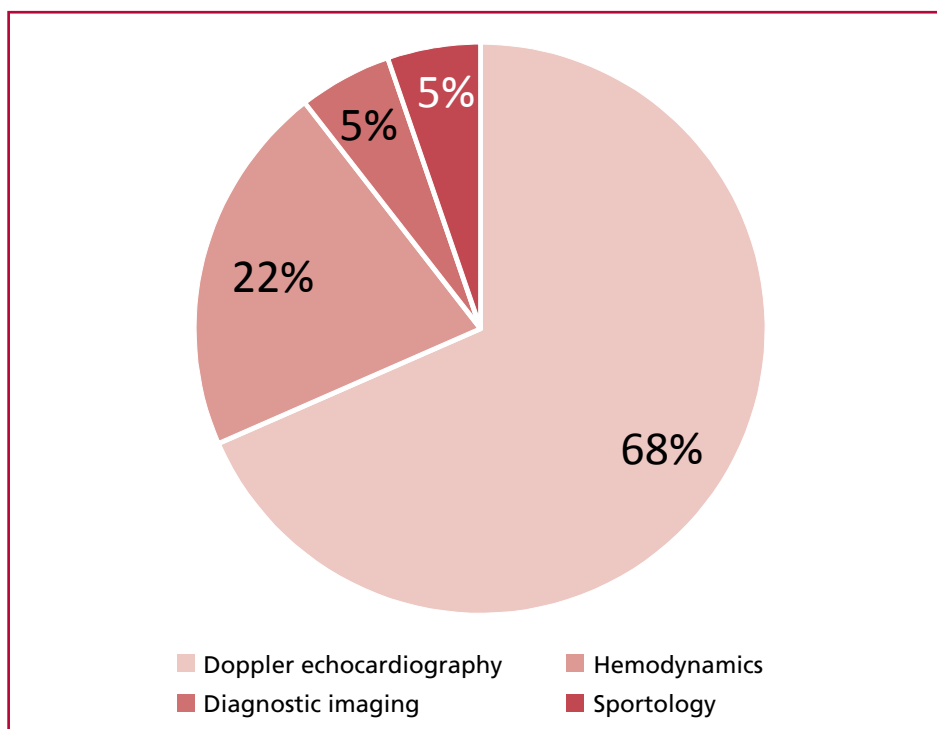


Fig. 1. Distribution of subspecialties followed by graduates

that it was quite useful or very useful, different from other items consulted, 5 responded the scarce usefulness derived from it, despite they chose the subject to be developed, which is not imposed by the course authorities.

Use of social networks, a new tool incorporated in the last decade, allows the permanent contact with the graduates both personally and institutionally, as academic activities carried out in the service are published daily, allowing their continuous remote participation.

CONCLUSIONS

Graduates from the PSC in cardiology at the Hospital Argerich venue perceive that their training has been good or excellent and has essentially contributed to their professional development. All the information collected about graduate satisfaction regarding training quality and their subsequent professional performance generates a source of information to feedback and optimize teaching in the training institution. This survey generated a bond between the graduates and the Service which persists and grows through the social networks.

Conflicts of interest

None declared.

(See authors' conflict of interests forms on the web/Additional material.)

Ethical considerations

Not applicable.

Acknowledgement

To Amanda Gally, BA, for critical reading of the manuscript.

REFERENCES

1. Ley 23.873/90. Habilitación para la obtención del certificado de especialista con residencia completa. En Infoleg. Disponible en línea: http://www.infoleg.gob.ar/infolegInternet/verNorma.do?jsessionid=E_2A3E5D456AD2C5ACD34B59081231195?id=273 Acceso: 22 de diciembre.
2. https://www.uba.ar/posgrados/medicina/medicina_ad/CS%201988%203334.pdf
3. <https://www.fmed.uba.ar/carreras-de-especialistas/ofertas-de-carreras-de-especializacion>
4. <https://www.coneau.gob.ar/archivos/resoluciones/Res119-99c2077.pdf>
5. <https://www.coneau.gob.ar/archivos/resoluciones/Res048-11C20250.pdf>
6. Manual de instrumentos y recomendaciones sobre el seguimiento de egresados. Red GRADUA2/Asociación Columbus. 2006
7. Eyman A, Carrio S, Durante E. Rev. Hosp. Ital. B.Aires Vol. 29 Nº 1, junio 2009. Seguimiento de Graduados de las Residencias del Hospital Italiano <https://www.hospitalitaliano.org.ar/docencia/biblioteca/attachs/7-educacion-eymann.pdf>
8. Moreno, SM. Diseñando una encuesta para residentes de formación sanitaria especializada sobre la satisfacción con la docencia. Experiencia en la Comunidad Autónoma del País Vasco (2009-2018). Educación Médica 2021;22:163-71 <https://doi.org/10.1016/j.edumed.2020.09.002>
9. Katz FM. Pautas para la evaluación de programas de personal de salud. Washington: Organización panamericana de la Salud; 1981.
10. Curso Bianual de Cardiología de la Sociedad Argentina de Cardiología. <https://www.sac.org.ar/cursos/bianual/>
11. Bickel J. Women in academic medicine. J Am Med Womens Assoc. 2000;55:10-2, 19.
12. <https://www.telam.com.ar/notas/202006/475776-casamiento-union-civil-divorcios-provincias-argentina-ley-vincular.html>
13. Gulati M, Korn R, Wood M, Sarma A, Douglas PS, Singh Toniya, et al. Childbearing Among Women Cardiologists. J Am Coll Cardiol 2022;79:1076-87. <https://doi.org/10.1016/j.jacc.2021.12.034>