

## A perspective from postgraduate education on the process of improvement and professional performance of the specialist in Forensic Medicine

Una visión desde la educación posgraduada al proceso de superación y el desempeño profesional del especialista en Medicina Legal

Uma perspectiva da pós-graduação sobre o processo de aperfeiçoamento e atuação profissional do especialista em Medicina Legal

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### ABSTRACT

**Introduction:** postgraduate training is a conscious and systematic process, essential for fostering innovation in methods and techniques as essential tools for personal and professional development. Through this process, knowledge is refined and developed, along with assertive skills that foster professional growth, resulting in individuals with human and professional qualities, capable of addressing and solving problems in social practice. **Objective:** to analyze the criteria of various authors regarding postgraduate training and its impact on the professional performance of specialists in the field of Forensic Medicine. **Method:** an integrative review was conducted of articles published in the SciELO database and the Google Scholar search engine, in Spanish and English, with no time limit. Keywords present in the health sciences descriptors in Spanish were used. Of the articles and books located, those with free full-text access were selected. Those accessible only through paid access were

excluded. **Results:** postgraduate training for Forensic Medicine specialists should be aimed at perfecting their specific professional skills, strengthening their human values, and developing their capabilities in a lasting way, which will benefit their individual work performance and social contribution. **Conclusions:** criteria from various authors on postgraduate training and its impact on the professional performance of Forensic Medicine specialists were compiled and analyzed. In particular, the authors found the ideas of Bernaza-Rodríguez et al. significant.

**Keywords:** postgraduate training; coroners and medical examiners; professional practice; review literature as a topic



## RESUMEN

**Introducción:** la superación posgraduada es un proceso consciente y sistemático, esencial para fomentar la innovación en métodos y técnicas como herramientas esenciales para el desarrollo personal y profesional. A través de la misma se perfeccionan y evolucionan los conocimientos; las habilidades asertivas que fomentan el crecimiento profesional, lo que resulta en individuos con cualidades humanas y profesionales, capaces de abordar y solucionar problemas en la práctica social. **Objetivo:** analizar criterios de diversos autores sobre la superación posgraduada y su incidencia en el rendimiento profesional de los especialistas en la especialidad de Medicina Legal. **Método:** se realizó una revisión integradora de los artículos publicados en la base de datos SciELO y en el buscador Google Académico, en idiomas español e inglés, sin límite temporal. Se utilizaron palabras clave presentes en los descriptores en ciencias de la salud en español. De los artículos y libros localizados, se seleccionaron aquellos a texto completo y de acceso gratis. Se excluyeron los accesibles solo en la modalidad de pago. **Resultados:** la superación posgraduada de los especialistas en Medicina Legal debe encaminarse a perfeccionar sus habilidades profesionales específicas, reforzar sus valores humanos y desarrollar sus capacidades de forma perdurable, lo cual redundará para bien en su desempeño laboral individual y su aporte social. **Conclusiones:** se compendiaron y analizaron criterios de diversos autores sobre la superación posgraduada y su incidencia en el rendimiento profesional de los especialistas en Medicina Legal. En particular, las ideas de Bernaza-Rodríguez, *et al.* resultaron significativas para las autoras.

**Palabras clave:** superación posgraduada; médicos forenses; práctica profesional; literatura de revisión como asunto

## RESUMO

**Introdução:** o desenvolvimento da pós-graduação é um processo consciente e sistemático, essencial para fomentar a inovação em métodos e técnicas como ferramentas essenciais para o desenvolvimento pessoal e profissional. Por meio dela, o conhecimento é aperfeiçoado e evoluído; habilidades assertivas que promovam o crescimento profissional, resultando em indivíduos com qualidades humanas e profissionais, capazes de abordar e resolver problemas na prática social. **Objetivo:** analisar os critérios de diversos autores sobre a formação pós-graduada e seu impacto na atuação profissional de especialistas na área da Medicina Legal. **Método:** foi realizada uma revisão integrativa de artigos publicados na base de dados SciELO e no buscador Google Acadêmico, nos idiomas espanhol e inglês, sem limite temporal. Foram utilizadas palavras-chave presentes nos descritores em ciências da saúde em espanhol. Dos artigos e livros localizados, foram selecionados aqueles com texto completo e acesso gratuito. Aqueles acessíveis somente mediante pagamento foram excluídos. **Resultados:** a formação de pós-graduação do especialista em Medicina Legal deve ter como objetivo o aperfeiçoamento de suas competências profissionais específicas, o fortalecimento de seus valores humanos e o desenvolvimento de suas capacidades de forma duradoura, o que beneficiará seu desempenho profissional individual e sua contribuição social. **Conclusões:** foram compilados e analisados critérios de diversos autores sobre o desenvolvimento pós-graduação e seu impacto no desempenho profissional de especialistas em Medicina Legal. Em particular, as ideias de Bernaza-Rodríguez, *et al.* foram significativas para os autores.

**Palavras-chave:** desenvolvimento de pós-graduação; médicos legistas; prática profissional; literatura de revisão como assunto

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## INTRODUCTION

Cuban graduate education is regulated by Ministerial Resolution 140 of 2019,<sup>(1)</sup> which organizes the process of transmission and appropriation of the content of the profession through the implementation of programs among the agents involved. This linkage is dynamic and harmonious, with alternating cycles of teaching, job placement, research and extension work. It is based on the conjunction of instruction, education and professional development.

In relation to theory, formal teaching, the academic environment and the social pedagogical context, postgraduate education develops a series of formative processes and promotes exchanges with other institutions of higher education.

In the 1990s, Cuban higher education assumed the objective of instructing and training professionals through the continuous development of skills and knowledge, by means of a conscious and systematic educational process formulated by Bernaza-Rodríguez et al.<sup>(2)</sup>, which bases its essence on the creative appropriation of the historical, social and cultural experience accumulated by humanity in each of these contexts. For this purpose, its specific features and particularities are taken into account in each case, with the aim of reverting this appropriation in an empowered way to the concrete society.

In accordance with the above, the researchers consider that this theory highlights the importance of postgraduate training as an intentional and organized procedure, which is essential to promote innovation in methods and techniques as fundamental tools for personal and professional development. Postgraduate training should promote education and personality development through the creative appropriation of historical, social and cultural experience.

The above approach is of vital importance, since it recognizes that each individual and each society have unique contexts that influence their learning and development. When the need to take into account these particularities is assumed, it is underlined the importance of contextualized education, which takes into account the specific realities and needs of the forensic specialist. This enriches the work environments and enhances the capabilities of individuals so that their social contribution starts from the approach of a continuous, inclusive, relevant and meaningful education.

According to Bernaza-Rodríguez et al.<sup>(3)</sup> higher education should be seen as an educational level in which competent professionals are trained, as well as critical and responsible citizens, capable of contributing to the social development of the country; hence, teaching methods should encourage the active participation of students. In this regard, it is essential to integrate information and communication technologies with pedagogical approaches.

From this point of view, postgraduate education can be defined as a pedagogical process in which knowledge is renewed and resized, where the graduate learns to identify and solve the new problems of his profession, of his social practice, relying on information and communication technologies and collaborative learning<sup>(4)</sup>.



This definition summarizes several significant aspects. Postgraduate training is a social, integral, systematic, continuous, permanent, organized, planned, active, developmental and meaningful process, through which knowledge and assertive skills promote personal and professional development, leading to individuals with human and professional qualities, capable of solving various problems in social practice.

Within the medical sciences, forensic medicine is a discipline that merges medical and legal knowledge; therefore, these specialists play an important role in the administration of justice. Forensic physicians perform autopsies and issue expert reports, through which they act as a bridge between science and law. Thus, it is ensured that medical truth serves as a basis for legal decisions. For this, these specialists must possess specific skills to perform their work and perfect them through a process of postgraduate professional development.

At the “Dr. Antonio Luaces Iraola” General Teaching Provincial Hospital in Ciego de Avila, specialists in Legal Medicine recognize the importance of improving their skills through postgraduate training. Because of this interest, this article aims to analyze the criteria of different authors on postgraduate training and its impact on the professional performance of specialists in Forensic Medicine.

## METHOD

A study with an educational perspective was carried out at the General Teaching Provincial Hospital “Dr. Antonio Luaces Iraola”, in Ciego de Avila, during the period 2023-2024, with the purpose of presenting a concise synthesis on the development of postgraduate training and professional performance of specialists in Legal Medicine.

In order to comply with the stated objective, an integrative review was developed combining theoretical methods, such as the system approach, and documentary analysis as an empirical method. These methods facilitated the organization, extraction and analysis of pertinent information, based on the vast review of articles on the subject that supported the argumentation and its transcendence.

Articles published in the SciELO database and in the Google Scholar search engine were analyzed, in Spanish and English, with no time limit. Keywords present in the health sciences descriptors in Spanish were used. Of the articles and books located, full-text and free access were selected. Those accessible only for payment were excluded.



## RESULTS

In any society, higher education plays a vital role in training and developing specific skills in professionals. In this field, the exchange of knowledge and experiences makes possible to acquire suitable preparation, responsibility, sense of commitment and skills to face the challenges that society will pose when practicing the profession<sup>(5)</sup>. It follows that the postgraduate training of specialists in forensic medicine should be aimed at perfecting their specific professional skills, reinforcing their human values and developing their capacities in a lasting way; which will benefit their individual work performance and their social contribution.

This improvement should be adapted to the technological advances present and projected for the future of the medical-legal branch in the country, so that the specialists acquire the practical skills to assume them in due time, as well as to develop in the current conditions. At this point, it should be taken into account that there are several criteria on the concepts of performance and improvement, with different meanings: academic, sports, labor, social, emotional, professional or in the specific work place, among others.<sup>(5)</sup>

The authors of this review agree with Bernaza-Rodríguez, et al.<sup>(2)</sup> that the profession is much more than just a job, because the professional is committed to continuous self-improvement, to respect ethics and to assume his or her specific social responsibility. The dignity of the professions is essential for the construction of a just society and the political context of a country; without it, it is impossible to face the challenges involved in fruitful professional performance.

According to Bonal Ruiz et al.<sup>(5)</sup> and Rojas-Rodríguez et al.<sup>(6)</sup>, the profession is a specific type of occupation, which requires a specific set of skills, knowledge and training. Social recognition and the norms and standards that regulate it ensure the quality of the services or work performed.

It is significant that with respect to the originally Cuban theory of integral education, applied in educational practice, Bernaza-Rodríguez et al.<sup>(3)</sup> consider that performance integrates technical, ethical and contextual aspects, highlighting the importance of continuous training and a holistic approach to evaluate and improve professional performance. According to these authors<sup>(3)</sup> in the context of professional development, clear goals are identified and established, focused on the formative relationship and integral development of individuals. Their goal is the development of all dimensions of the professional (competencies, skills, and ethical values) in all areas of his or her life (personal, professional, community, economic and moral).

It should be taken into account that the objective of the studies supporting integral education theorists is the professional and human development of the subject, which is determined by self-knowledge, critical reflection, and commitment to personal growth in all its dimensions (intellectual, physical, and spiritual). The positive transformations resulting from this process are both individual and social, and result in the construction of a more conscious and balanced society.<sup>(2)</sup>



Integral education, as a pedagogical doctrine, implies the existence of a direct relationship between personal and professional growth in a dynamic world. Therefore, it integrates the updating, complementation and deepening of knowledge. In this way, individuals achieve professional excellence in their working environment.<sup>(6)</sup>

Professional training and professional development train individuals for optimal performance in their work, regardless of the specific difficulties of each task. To this end, they make use of holistic elements of professional development, referring both to work skills and to human and professional ethics.

From this point of view, the theory of integral education conceives the development of the whole person. It therefore takes into account the cognitive, emotional, social, physical, and ethical aspects of individuals. It is based on the idea that education should prepare people to face life in a complete and balanced way.<sup>(7)</sup>

Professional development also aims at the intellectual and practical development of individuals from a scientific and technological point of view, so that innovation, rationalization, and scientific collaboration are enhanced. The positive social impact of professional performance can be seen in the work efficiency and ethical attitude of individuals who put their skills and knowledge into practice in different work environments.

For Bernaza, this is an integral process of personal development that is based on meaningful social relationships; it seeks to achieve positive results for both the individual and his or her work and social environment, by focusing on improving work skills and fostering practices that promote a satisfying and high quality work experience.<sup>(2)</sup>

A theoretical approach to this topic requires understanding what professional performance is from different facets. For Bustamante-Alfonso et al.<sup>(8)</sup> this should be seen as the precision of directing research towards the solution of specific social problems. If professional development as an educational model contributes to a positively transform of individuals from the professional, labor, political, ideological and ethical points of view, this will be evidenced in their future professional performance.

From this point of view, professional performance should be another way that, together with professional development, makes it possible for professionals to assume their specific social role; in the case of the health sector, guaranteeing the quality of medical and nursing care at different levels and in different specialties. For this purpose, permanent and constant improvement is essential, associated with the socio-labor environment of the specialists.<sup>(9)</sup> Due to the characteristics of their work, for specialists in Forensic Medicine, the updating and deepening of their knowledge should be inextricably linked to the development of their communicative skills.



Updating as a pedagogical process is not reduced to the teaching-learning process. It includes other formative and developmental processes, closely linked to the present or future work activity of the professional who accesses its various organizational forms<sup>(10)</sup>. Therefore, the authors consider that the pedagogical process has a holistic approach that transcends the acts of teaching and learning, because it focuses on training competent and committed professionals, capable of adapting to the changing demands of their work environments, and contributing positively to the continuous personal and professional development of each one.

Work performance is directly related to the professional's own ethical behavior; this approach focuses on how ethical values influence work decisions and behaviors.<sup>(7)</sup> Professional performance is multifaceted and involves the quality of the work performed, the individual's skills, his or her adaptation and learning abilities, interpersonal skills and ethical commitment.

According to Céspedes Moncada,<sup>(10)</sup> the professional's performance and suitability go hand in hand. The latter is expressed in "a set of pedagogical skills necessary for efficient and effective professional practice."<sup>(11)</sup> Therefore, professional performance is inseparable from the execution of responsibilities and the personal commitment of the subject as a professional. As a process, it is active, social, energetic, decisive and enterprising. Its essential components are the individual's performance and the objectives to be achieved in his or her working life.

In general, the improvement of professional performance is conceived from preparation, improvement, training and instruction activities. This is because it takes into account the levels of universalizing and unification that are indispensable for improvement, based on the specific and precise spaces in which it takes place.<sup>(6)</sup>

The interaction between professional development and professional performance implies that both processes are associated with scientific and technical progress, based on the cognitive renewal of professionals; in the case of specialists in Forensic Medicine, their professional development should include research, training and administrative skills, together with communication skills. The unity of these capacities is an essential quality in Cuban health professionals. It is also an example and prototype of the interrelation of study and work, as an essential condition for the qualitative development of Cuban medical education.<sup>(7)</sup>

## CONCLUSIONS

Criteria of several authors on postgraduate education and its incidence on the professional performance of specialists in Forensic Medicine were summarized and analyzed. In particular, the ideas of Bernaza-Rodríguez et al. were significant for the authors because it was possible to identify how educational theory connects with the professional practice of the specialist in Forensic Medicine. The study highlights the need for continuing education with emphasis on the fact that professional performance depends not only on theoretical knowledge, but also on practical and ethical skills.





## BIBLIOGRAPHIC REFERENCES

1. Ministerio de Educación Superior (Cuba). Resolución No. 140 de 2019. Reglamento de la Educación de Posgrado de la República de Cuba [Internet]. Gaceta Oficial No. 65 Ordinaria. 5 Sep 2019 [cited 10 Ene 2023]. Available at: [https://www.gacetaoficial.gob.cu/sites/default/files/goc-2019-o65\\_0.pdf](https://www.gacetaoficial.gob.cu/sites/default/files/goc-2019-o65_0.pdf)
2. Bernaza-Rodríguez GJ, Troitino-Díaz DM, López-Collazo ZS. La superación profesional: mover ideas y avanzar más [Internet]. La Habana: Editorial Universitaria; 2018 (cited 24 Ene 2022). Available at: <https://acortar.link/4DY0DN>
3. Bernaza-Rodríguez GJ, Aparicio-Suárez JL, De la Paz-Martínez E, Torres-Alfonso AM, Alfonso-Manzanet JE. La educación de posgrado ante el nuevo escenario generado por la COVID-19. Educ Med Super [Internet]. 2020 [cited 24 Ene 2023]; 34(4):e2718. Available at: <http://scielo.sld.cu/pdf/ems/v34n4/1561-2902-ems-34-04-e2718.pdf>
4. Bernaza-Rodríguez GJ, De la Paz-Martínez E, Del Valle García-M, Borges-Oquendo LC. La esencia pedagógica del posgrado para la formación de profesionales de la salud: una mirada teórica, crítica e innovadora. Educ Med Super [Internet]. 2017 [cited 24 Ene 2021]; 31(4). Available at: [http://scielo.sld.cu/pdf/ems/v31n4/a20\\_1062.pdf](http://scielo.sld.cu/pdf/ems/v31n4/a20_1062.pdf)
5. Bonal Ruiz R, Valcárcel Izquierdo N, Roger Reyes MA. De la educación médica continua al desarrollo profesional continuo basado en competencias. Educ Med Super [Internet]; 2020 [cited 20 Ene 2024]; 34(2):e2160. Available at: [http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S0864-21412020000200024](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-21412020000200024)
6. Rojas-Rodríguez Y, Rocha-Vázquez M, Mur-Villar N. La superación profesional del Licenciado en Enfermería para la práctica quirúrgica. Conrado [Internet]. 2023 [cited 15 Ene 2024];19(93):538-42. Available at: <http://scielo.sld.cu/pdf/rc/v19n93/1990-8644-rc-19-93-538.pdf>
7. Feriz-Otaño M, Rodríguez-Rodríguez R, Echevarría-Ceballos O. La superación profesional del docente sobre la prevención educativa del trabajo infantil. Rev Mendive [Internet]. 2022 [cited 24 Ene 2023]; 20(3):953-69. Available at: <http://scielo.sld.cu/pdf/men/v20n3/1815-7696-men-20-03-953.pdf>
8. Bustamante-Alfonso LM, Pineda-Fernández C, Gómez-Mirabal JM, Báez-Rodríguez AM. La virtualización de la superación profesional para el mejoramiento del desempeño pedagógico durante la COVID-19. Educ Med Super [Internet]. 2022 [cited 22 febrero 2023];36(2):e3478. Available at: <http://scielo.sld.cu/pdf/ems/v36n2/1561-2902-ems-36-02-e3478.pdf>
9. Carrera Morales M, Mesa Carpio N, Padilla Cuellar Y. Metodología para evaluar el impacto de la educación de posgrado. Transformación [Internet]. 2022 [cited 24 Ene 2023]; 18(1):53-69. Available at: [http://scielo.sld.cu/scielo.php?pid=S2077-29552022000100053&script=sci\\_arttext&tln\\_g=pt](http://scielo.sld.cu/scielo.php?pid=S2077-29552022000100053&script=sci_arttext&tln_g=pt)
10. Céspedes-Moncada A, González Solares M, Marañón Cardonne T, Fernández Duarte J. Proceso de superación y desempeño profesional de los especialistas en Coloproctología. Maestro y Sociedad [Internet]. 2020 [cited 22 Feb 2023]; (Número Especial): 200-211. Available at: <https://maestroysociedad.uo.edu.cu/index.php/MyS/article/view/5227>
11. Imamura-Díaz JI, Morales-González M, Pérez García C. Metodología para la evaluación de impacto de la superación en la Educación





Técnica y Profesional. Ing Ind [Internet].  
2022. [cited 24 Ene  
2023];43(1):e4302.Available  
at:  
[http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S1815-59362022000100013](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1815-59362022000100013)

**Conflicts of interest:**

The authors declare that there are no conflicts of interest.

**Author contributions:**

Lisbet Sanchez Alfaro: conceptualization, data curation, formal analysis, supervision, research, methodology, validation, original draft-writing, drafting-revising and editing.

Danni Morell Alonso: acquisition of funds, research, methodology, visualization, writing-revision and editing

Dunia Sotolongo Díaz: conceptualization, research, methodology, project management, resources, writing-revising and editing.

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