



Continuing education for forensic medical analysis of the constitutional appeals in Costa Rica

Formación académica continua para el análisis médico forense de recursos de amparo en Costa Rica

Formação acadêmica contínua para análise médico forense de recursos de amparo na Costa Rica

Gretchen Flores-Sandí^{1,2*} orcid.org/0000-0002-5373-7247

1. Departamento Clínico de Medicina Legal, Escuela de Medicina. Universidad de Costa Rica, San José de Costa Rica, Costa Rica.
2. Programa de Posgrado Especialidades Médico Forenses, Sistema de Estudios de Posgrado. Universidad de Costa Rica, San José de Costa Rica, Costa Rica.

Received: Jan 13 - 2022

Revised: Aug 29 - 2022

Accepted: Jul 07 - 2023

Published: Nov 10 - 2023

Citation: Flores-Sandí G. Continuing education for forensic medical analysis of the constitutional appeals in Costa Rica. *Univ. Salud.* 2023;25(3):C18-C22. DOI: [10.22267/rus.232503.314](https://doi.org/10.22267/rus.232503.314)

Abstract

Introduction: Judicially demanding the right to health involves different elements and can lead to changes in continuing education programs. The current trend is to follow this pathway to access low-frequency and high-cost medications. In addition, the Constitutional Court of Costa Rica requests a technical concept from forensic doctors. **Objective:** To raise the need for continuous updating in specific theoretical-practical academic knowledge required by forensic doctors to guarantee the right to health services. **Reflection:** The training of forensic medical doctors is focused on evidence and encourages continuous education. Nevertheless, a commitment is necessary in continuing medical education programs such as literature search strategies, critical assessment of evidence, and academic practices that incorporate particular circumstances comparing them with scientific studies. These programs must take into account prevalent medications and pathologies as well as technical-scientific factors that differ in each service provider. **Conclusion:** A continuing education program about the interpretation and assessment of scientific evidence for proper decision making on health issues would allow medical doctors to judge existing health problems and choose a medication that is the most beneficial for a patient.

Keywords: Jurisprudence; right to health; forensic medicine; curriculum; education, continuing. (Source: DeCS, Bireme).

Resumen

Introducción: La judicialización del derecho a la salud involucra a distintos actores y puede propiciar cambios en programas de educación continua; pues la tendencia actual es recurrir a esta vía para acceder a medicamentos de baja frecuencia y alto costo. Adicionalmente, en Costa Rica la Sala Constitucional solicita el criterio técnico a médicos forenses. **Objetivo:** Plantear la necesidad de actualización continua en conocimientos académicos teórico-prácticos específicos que requiere el médico forense para garantizar el derecho a los servicios de salud. **Reflexión:** El médico forense cuenta con formación basada en evidencias y se incentiva su formación continua, sin embargo, es necesario un compromiso con los programas de educación médica continua: en estrategias de búsqueda de literatura, valoración crítica de la evidencia encontrada y práctica académica que incorpore las circunstancias particulares, comparándolo con los resultados de estudios científicos; tomando en cuenta medicamentos y patologías prevalentes y los factores técnico-científicos de divergencia entre los prestadores de servicios. **Conclusión:** Un programa de formación continua sobre interpretación y valoración de la evidencia científica para la toma de decisiones en salud, permitiría a estos especialistas responder con mejor criterio si un medicamento es el tratamiento más beneficioso para un paciente debido a sus problemas de salud.

Palabras clave: Jurisprudencia médica; derecho a la salud; medicina legal; curriculum; educación continua. (Fuente: DeCS, Bireme).

Resumo

Introdução: A judicialização do direito à saúde envolve diferentes atores e pode promover mudanças nos programas de educação continuada; porque a tendência atual é recorrer a esta via para ter acesso a medicamentos de baixa frequência e alto custo. Além disso, na Costa Rica, o Tribunal Constitucional solicita critérios técnicos aos médicos forenses. **Objetivo:** Levantar a necessidade de atualização contínua em conhecimentos acadêmicos teórico-práticos específicos que o médico forense necessita para garantir o direito aos serviços de saúde. **Reflexão:** O médico forense tem formação baseada em evidências e sua formação continuada é incentivada, porém é necessário o compromisso com programas de educação médica continuada: em estratégias de busca bibliográfica, avaliação crítica das evidências encontradas e prática acadêmica que incorpore as circunstâncias particulares, comparando-o com resultados de estudos científicos; levando em consideração medicamentos e patologias prevalentes e fatores técnico-científicos de divergência entre prestadores de serviços. **Conclusão:** Um programa de formação contínua sobre interpretação e avaliação de evidências científicas para a tomada de decisões em saúde, permitiria a estes especialistas responder com melhores critérios se um medicamento é o tratamento mais benéfico para um paciente devido aos seus problemas de saúde.

Palavras chave: Jurisprudência; direito à saúde; medicina legal; curriculum; educação continuada. (Fonte: DeCS, Bireme).

*Corresponding Author

Gretchen Flores-Sandí
e-mail: grettchenflores@gmail.com

Introduction

In Costa Rica, approximately 25% of the annual budget for the purchase of Social Security medicines is allocated to obtain high-cost products for a small number of patients, many of whom receive them after presenting a plea to the Constitutional Court. According to Vidal *et al.*⁽¹⁾ judicial demands to ensure and guarantee access to medical supplies constitutes one of the most effective strategies to ensure compliance (or to rectify the violation) of the right to health, which is related to other fundamental human rights such as the right to life or physical integrity. It is important to highlight that Judiciary has the duty to comply with and apply the Constitution as well as to follow the limits and parameters established therein. In these processes, the judges have largely relied on an individual vision where failure to respect the right to health would constitute a violation of the right to life⁽¹⁻²⁾.

Another aspect to consider is that biomedical advance has incorporated bioeconomic interests in the techno-scientific practice of the medical field. Pharmaceutical companies have managed to transform (i) the relationship between science and the market, (ii) the definition of conditions of normality and disease, and (iii) the medication process⁽³⁾. To this respect, in Costa Rica, the social security system covers the entire cost of medications, with no direct payment required by insured patients. The Constitutional Court has upheld the thesis that the lack of budget (financial and material resources or qualified personnel) is not an excuse when a person's right to health is at stake⁽⁴⁾.

In reference to the results of the sentences of protection proceedings against the Costa Rican Social Security System (CCSS), 61.1% of the 1831 sentences that included the word medicine pronounced between 2009 and 2018 were successful, whereas 32.6% were not granted, 4.4% were declared partially valid, in 1% of the cases the appeal for protection was withdrawn, and 0.9% were rejected. With respect to the type of medication, 46% of the total of these cases corresponded to antineoplastic medications⁽⁴⁾.

Another point to consider is that, although judicially demanding the right to health can be a risk for social security, it can also lead to changes. This must be understood as a process that involves different public and private elements, which play different roles at the specific stage of the litigation process in which they are involved, and at the same time they determine its effect⁽⁵⁾.

Contemporary circumstances

In Costa Rica and based on the Third Report on the State of Justice/2020, during the last decade the Constitutional Court of the Supreme Court of Justice has received a large number (20.1%) of litigations to guarantee the right to health, which are second after judicial processes related to work issues (24%). The main reasons for these complaints include waiting lists, request for medications, and access to Basic Health Care Center (Ebais). According to the First Report on the State of Justice/2015, constitutional appeals for accessing medicines presented by insured

people against the CCSS is a circumstance that results from the marked different criteria from the group of health specialists where patients are being treated, and the criteria of the Central Pharmacotherapy Committee of the CCSS. The characteristics of the problem have changed over time, such as certain medications not being included in the Official Medication List of the CCSS as well as all types of medications not being dispensed in a timely manner⁽⁶⁻⁷⁾.

In 1982, the CCSS established the Official List of Medications (LOM) and the Institutional Regulations for the Prescription of Medications. Both the LOM and the Regulations function as mandatory regulations and were approved by executive decree. They describe procedures for requesting and purchasing of medicines as well as therapeutic indications for their prescription. Also, the LOM explains the processes to follow for including and excluding medications from the list, a task carried out by the Central Pharmacotherapy Committee of the CCSS⁽⁸⁾. It is important to highlight that this Committee is a collegiate body, of a permanent nature, with advisory roles, and ascribed to the Medical Direction Office of the CCSS. The Central Pharmacotherapy Committee is responsible for making decisions related to medications and pharmacotherapy policies at the institutional level, which emphasize that the treating doctor's recommendations must be supported by high quality scientific evidence. Furthermore, such evidence must be extrapolated to the case of each particular patient in order to be valid. Regarding the constitutional appeal, when the CCSS is requested to endorse the use of a medicine that is not included in the LOM, its Central Pharmacotherapy Committee must assess the request for each medication based on the information that the treating physician provides, after being approved by the medical board of the facility where the patient is being treated. Then, the Central Pharmacotherapy Committee issues its criterion as an institutional technical body, which, in case of being negative, is the concept that motivates the protection plea before the Constitutional Court⁽⁴⁾. The current tendency is to judicially demand the right to health in order to get access to low-frequency and high-cost medications that are not included in the LOM⁽⁹⁾.

In reference to the increase in constitutional appeal due to the aforementioned reason, Vidal and Di Fabio in 2017⁽¹⁾ indicated that between 1999 and 2008 in Costa Rica, 2,524 requests for protection were registered to claim access to medicines, which is lower than the number of requests (178) presented during the 1989-1998 period. The analysis of the sentences issued by the Constitutional Court of Costa Rica during the 2009-2018 period shows that the amount of resolutions for constitutional appeals related to medications increases each year⁽⁴⁾.

Given such an increment and the fact that specialized technical criteria are key to making legal decisions, the Constitutional Court requests technical criteria from the forensic doctors who work in the Judiciary branch. They must balance the benefits and negative effects of the medication in question on the patient's health and respond clearly whether or not the use of

a specific medication is the most beneficial treatment in accordance with the patient's health condition⁽⁴⁾.

Since 2006, the criterion of the Forensic Medical Clinic has a fundamental role since it provides an impartial opinion that helps the Constitutional Court to decide how to resolve cases^(4,10). For instance, according to databases containing sentences issued by the Constitutional Court of Costa Rica⁽⁴⁾, the criteria of the Forensic Medical Clinic was consulted

in 48% of the cases in 2016, whereas this percentage increased to 80% and 80.5% in 2017 and 2018, respectively. Likewise, the number of medical-legal cases initiated for the same reason has gradually increased in recent years. For example, Figure 1 shows the number of new constitutional appeal cases analyzed by the Forensic Medical Clinic of the Department of Legal Medicine between 2016 and 2020.

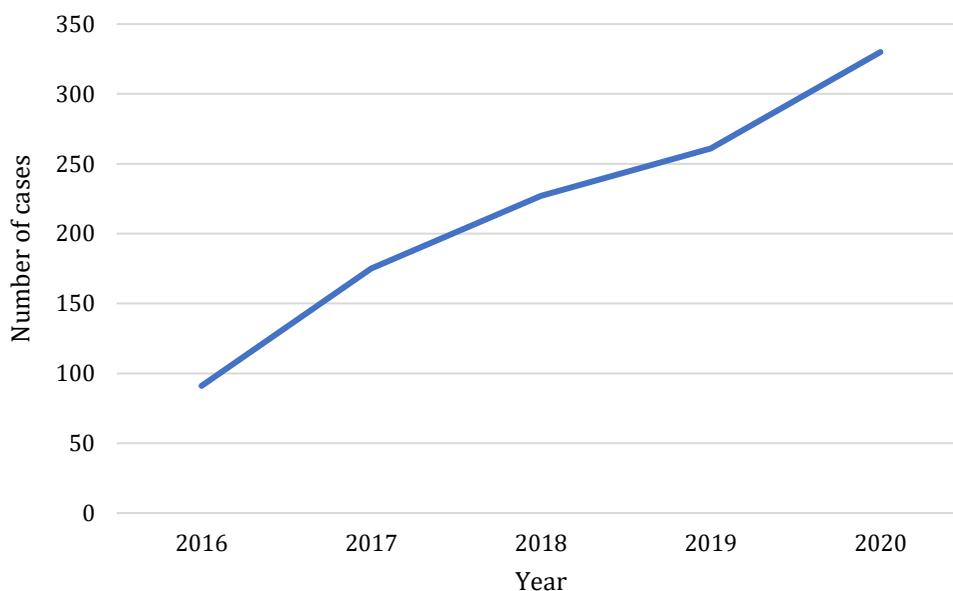


Figure 1. Number of protection appeals and the year when the cases were assessed by the Forensic Medical Clinic, Judiciary. Costa Rica. 2016-2020.

In this clinic, the assessment of these cases is assigned randomly to all specialized medical doctors, according to a pre-established role and the order of arrival. Given that a request for medical-legal assessment of a case responds to a technical-medical requirement, it is understood that the conclusion reached by a forensic doctor should not include administrative or budgetary matters. And it is precisely here where the undergraduate and postgraduate university academic training of the forensic medical expert should allow him/her to conduct an effective analysis and reach conclusions in a more objective manner to facilitate the administration of justice⁽¹¹⁾.

On the other hand, the CCSS always questions forensic medical analysis due to the fact that forensic medicine specialized physicians do not require specific training in evidence-based medicine and the evaluation of health technologies to practice their profession within the Judiciary. Therefore, the objective of this reflection is to highlight the need for continuous training in specific theoretical-practical academic aspects that may be required for forensic medical doctors to analyze these appeals.

Reflections on the academic training required by a forensic medical expert

The specialty of forensic medicine began with the need of physicians to participate in the administration of justice, advising Courts to resolve medical-biological issues that arise in the field of law enforcement⁽¹²⁾. Clearly, one of the most important components in the analysis of protection appeals to access medications is the understanding of evidence-

based medicine, which has been proposed to be part of the transversal axis of general medicine university programs⁽¹³⁾. Furthermore, postgraduate programs in forensic medicine for physicians are based on evidence-based learning, which requires a critical analysis of the information contained in different sources, the exhaustive search of information, and constant study in order to provide advice and contribute to the various judicial processes with scientifically valid conclusions on complex facts of technical nature. These are key contributions and technical knowledge that judicial authorities do not have but are essential for them in order to reach an objective and fair conclusion. In other words, it is essential for forensic training to focus on the development of skills such as (i) the interpretation of epidemiological and statistical results, (ii) how to obtain access to relevant and the most updated biomedical information, and (iii) how to conduct an adequate assessment and interpretation of data from various sources, maintaining a critical point of view of the information contained therein. Likewise, a forensic expert must know how to identify the applicability of complementary diagnostic methods (e.g. laboratory diagnostic techniques and medical images) and the possibility of consultations with other specialists, according to each particular case, offered by the Department of Forensic Medicine⁽¹⁴⁾. Thus, these capabilities are key for the analysis of medical-forensic cases and must be part of the forensic training process.

The forensic physician must perform an assessment of the health status of the person, which involves a detailed analysis of data from the hospital clinical

care, the physical assessment as well as an exhaustive review of the available clinical evidence. On the one hand, the forensic expert must analyze the criterion of the treating medical doctor and the hospital service session that approved a treatment, and, on the other hand, this expert must analyze the point of view of the Central Pharmacotherapy Committee, and these concepts are normally in opposition. This analysis must be carried out in a very short period of time that does not affect the health of the people who require the medication⁽⁴⁾.

The evidence from the last decades shows a significant increase in evidence-based clinical research as a fundamental support for decision-making processes involved in health care. Indeed, the World Federation of Medical Education (WFME) has recognized the importance of continuous professional development through continuing medical education⁽¹⁵⁾.

Currently, the Forensic Medicine Department is implementing a quality system based on the ISO 17020:2012 and ILAC G19 guidelines in order to be certified⁽¹⁴⁾. Thus, it is important to identify training needs and verify competencies through standardized periodic evaluations, which would require an annual training plan. Although there is a collaborative structure in the institution in order to improve the performance of forensic physicians that work for the Forensic Medicine Department through continuing education programs, there is no defined program which involves evidence-based medicine.

Then, it is relevant to discuss specific academic aspects required by the continuing education of forensic medical experts for them to improve their performance in the analysis of these cases without being obsolete. The medical knowledge as well as biomedical research and technology have been progressing rapidly and permanently, which have facilitated the development and implementation of new protocols for the clinical and therapeutic management of patients, since they provide useful tools for the development of various biomedical disciplines⁽¹⁶⁾. This implies that the forensic medical field must keep updating knowledge through continuing medical education programs, which should include relevant topics such as:

- Improvement of literature search strategies in order to identify key evidence that responds to the request made by the Constitutional Court.
- Critical assessment of the analyzed evidence, in terms of its validity, impact, and usefulness.
- Academic practice to strengthen the expert opinion, incorporating critical assessment of the particular circumstances of each patient and comparing clinical data with systematically obtained and validated results from reliable scientific studies.

Consequently, evidence-based medicine implies the association of external evidence that comes from reliable systematic research with the clinical skill of the physician. In addition, decisions, perceptions, and needs of the patient represent a third element to be considered by the forensic expert⁽¹⁷⁾.

Given the fact that a continuing education program is not static and that competencies decrease progressively without it, feedback from participants is fundamental to improve the significance and depth of the learning contents, which should take into account aspects such as: prevalent medications and pathologies in their consultations; the technical-scientific factors that differ from the Central Pharmacotherapy Committee of the CCSS to the actual health service; the difficulties in the interpretation of scientific evidence, which they can identify as a weakness of the training they received for the resolution of these cases; the need to implement forensic medicine action protocols; and differences in terms of existing pathologies among forensic medicine care users from the various geographic regions of Costa Rica. These topics can constitute additional research lines.

Conclusions

Currently, the World Health Organization has recognized that the right to health includes the timely, appropriate, and affordable access to high quality health care services. Thus, health coverage as well as availability and accessibility to human resources represent strategies to guarantee universal access to health in a population. Other key factors are the appropriateness, relevance, and competence of that human resource. Therefore, the adequate management of human talent is essential in health care institutions and, consequently, continuing medical education represents a successful strategy to strengthen and improve their resolution capacities and the quality of their performance within integrated health care networks.

Nevertheless, the importance of continuing medical education is not limited to healthcare physicians, but as mentioned, forensic physicians are other key specialists who can participate in the health care process by assessing the health status and care needs of patients. These criteria are more relevant when the patient's right to health is involved. Therefore, establishing a continuous training program which involves the interpretation and assessment of scientific evidences for health decision-making instances can improve the skills of forensic physicians in the technical-scientific analysis of constitutional appeals for access to medication. Also, these skills would allow the forensic experts to judge with a better reasoning whether or not a medication is the most beneficial treatment according to the patient's health condition. Thus, a relevant and adequate updating of forensic physicians is essential to strengthen their decision-making capacities before judicial authorities and, ultimately, their judgment will have an impact on a person's health.

Conflict of interest: none declared by the author.

References

1. Vidal J, Di Fabio JL. Judicialización y acceso a tecnologías sanitarias: oportunidades y riesgos. *Rev Panam Salud Pública* [Internet]. 2017;41:e137. DOI: 10.26633/RPSP.2017.137
2. Borota de Oliveira LG, Lippi MC. Judicialization and judicial activism toward Brazilian public health demands. *Rev Der Estado* [Internet]. 2020;45:245-274. DOI: 10.18601/01229893.n45.09

3. Mayernyik M de A, Franco TB. La judicialización de la salud: La biopolítica y los parámetros éticos en la microjusticia de medicinas en el estado de Rio de Janeiro, Brasil. *Rev Lat Am Bioet* [Internet]. 2021;21(1):31-44. DOI: 10.18359/rlbi.4788
4. Arias-Mora F. Análisis de los recursos de amparo relativos al acceso de medicamentos ante la Sala Constitucional de Costa Rica. *Cad Ibero Am Direito Sanit* [Internet]. 2020;9(4):89-101. DOI: 10.17566/ciads.v9i4.718
5. Cobo-Armijo F, Charvel S, Pelcastre-Villafuerte BE. La judicialización del derecho a la protección de la salud desde la óptica de los actores clave. *Salud Publica Mex* [Internet]. 2021;63(2):308-313. DOI: 10.21149/10491
6. Gestión de la Sala Constitucional se concentra en recursos de amparo. Tercer informe Estado de la justicia. San José (CRI): Programa Estado de la Nación; 2020. Disponible en: https://estadonacion.or.cr/wp-content/uploads/2020/06/PEN_Estado_Justicia-2020-Completo.pdf
7. Román Forastelli M. Judicialización de la salud: revisión de los recursos de amparo relacionados con medicamentos. Primer informe estado de la justicia. San José (CRI): Programa Estado de la Nación; 2015. Disponible en: <https://repositorio.conare.ac.cr/handle/20.500.12337/1041>
8. Chavarría A, Aguirre A. Usos, contexto regulatorio y ético de la talidomida en Costa Rica. *Acta Med Costarricense* [Internet]. 2019;61(2):73-76. DOI: 10.51481/amc.v61i2.1030
9. Jiménez HL. El acceso a medicamentos en Latinoamérica, una mirada al caso de Costa Rica. *Rev Cubana Salud Pública* [Internet]. 2019;45(4):e1635. Disponible en: <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=94856>
10. Carpio-Alvarado C, Arias-Mora F. Análisis del caso del Riociguat en la justicia constitucional costarricense. *RDyS* [Internet]. 2021;5(6):19-30. DOI: 10.37767/2591-3476(2021)02
11. Cervantes L, Zamora K, Porras K, Calderón F. Recurso de apelación y consulta del Dictamen Médico Legal ante el Consejo Médico Forense: Herramientas para la defensa. *Rev Jud* [Internet]. 2019;(127):91-104. Disponible en: https://escuelajudicialpj.poder-judicial.go.cr/images/DocsRevista/revistajudicial_127.pdf
12. Aramany J, Grijalba M, Garrido E, Perea B, Galtés I, Baena S, et al. La especialidad de Medicina Legal y Forense en España: La consolidación por el sistema de residencia. *Rev Esp Med Legal* [Internet]. 2020;46(4):159-161. DOI: 10.1016/j.reml.2020.09.001
13. Guerra-Ferrada C, Carrasco P. Educación médica y de ciencias de la salud basada en evidencia: perspectivas y desafíos. *ARS Med* [Internet]. 2021;46(4):66-70. DOI: 10.11565/arsmed.v46i4.1848
14. Flores-Sandí G. Especialidades médico forenses de la Universidad de Costa Rica: fortalezas y desafíos. *AMC* [Internet]. 2021;63(1):56-60. DOI: 10.51481/amc.v63i1.1154
15. Galli A, Soler C, Flichtentrei D, Mastandueno R. Estrategias de educación médica continua. *FEM* [Internet]. 2015;18(4):247-251. DOI: 10.4321/S2014-98322015000500005
16. Manucha W. La importancia de la investigación científica en medicina. *Med UIS* [Internet]. 2019;32(1):39-40. DOI: 10.18273/revmed.v32n1-2019006
17. Navia M. Medicina basada en evidencia apreciación crítica de la literatura médica parte I. *Cuad Hosp Clín* [Internet]. 2021;62(2):87-89. Disponible en: http://www.scielo.org/bo/scielo.php?script=sci_arttext&pid=S1652-67762021000200012