

Forensic nursing: what is taught in the bachelor's degree in nursing in Portugal

Enfermagem forense: o que é lecionado na licenciatura de enfermagem em Portugal

Enfermería Forense: qué se enseña en el grado de Enfermería en Portugal

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Abstract

Background: Forensic nursing (FN) emerges as a new area of nursing, combining scientific and technical knowledge, for the improvement of nursing care.

Objectives: To analyze if the study plans for the bachelor's degree in nursing include contents related to FN.

Methodology: Qualitative study. Documentary analysis of the various programs of the curricular units of the bachelor's degree in nursing, in Portugal. Eleven institutions were studied, and their programmatic contents were available online. The study plans covered reported to the academic year of 2017/2018.

Results: The study plans cover content related to forensic situations (cases of child and elderly abuse, violence, and care) at the level of mental health.

Conclusion: Topics related to FN are addressed, though insufficient for good practices when delivering care to violence victims. The authors suggest including topics or curricular units in the study plans of the bachelor's degree in nursing.

Keywords: forensic nursing; education, nursing; forensic sciences; graduate

Resumo

Enquadramento: A enfermagem forense (EF) surge como uma nova área da enfermagem, a qual alia o saber científico e técnico, para a melhoria dos cuidados de enfermagem.

Objetivos: Analisar se os planos de estudos do curso da licenciatura em enfermagem incluem conteúdos relacionados com a EF.

Metodologia: Estudo qualitativo. Realizada análise documental dos diferentes programas das unidades curriculares do curso de licenciatura em enfermagem, ministrado em Portugal. Incluídas 11 instituições, os conteúdos programáticos estavam disponíveis *online*. Os planos analisados reportavam-se ao ano letivo 2017/2018.

Resultados: Os planos de estudos abordam conteúdos relacionados com situações forenses (situações de maus tratos de crianças e idosos, violência e cuidados) ao nível da saúde mental.

Conclusão: São lecionadas temáticas relacionadas com EF, no entanto, insuficientes para boas práticas, aquando da assistência a vítimas de violência. Sugere-se a inclusão de temáticas ou unidades curriculares nos planos de estudos da licenciatura em enfermagem.

Palavras-chave: enfermagem forense; educação em enfermagem; ciências forenses; graduação

Resumen

Marco contextual: La enfermería forense (EF) surge como una nueva área de la Enfermería, que combina el conocimiento científico y técnico para mejorar la atención de enfermería.

Objetivos: Analizar si los planes de estudio de la carrera de enfermería incluyen contenidos relacionados con la EF.

Metodología: Estudio cualitativo. Se realizó un análisis documental de los diferentes programas de las unidades curriculares del grado de enfermería, impartido en Portugal. El contenido del programa, que incluía a 11 instituciones, estaba disponible en línea. Los planes analizados se referían al curso 2017/2018.

Resultados: Los planes de estudio abordan contenidos relacionados con situaciones forenses (situaciones de malos tratos a niños y ancianos, violencia y cuidado) en relación con la salud mental.

Conclusión: Se enseñan temas relacionados con la EF, sin embargo, de manera insuficiente para las buenas prácticas en la asistencia a las víctimas de violencia. Se sugiere que se incluyan temas o unidades curriculares en los planes de estudio de la carrera de Enfermería.

Palabras clave: enfermería forense; educación en enfermería; ciencias forenses; graduación

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Received for publication: 27.05.19

Accepted for publication: 08.09.19

Introduction

In recent years, forensic science (FS) has been acquiring greater visibility and interest among the population and society in general, promoted by its newsworthy nature, thus leading to its evolution (Santos, 2013). The literature points out that FS is increasingly relevant in current times, in its collaboration with health professionals in the preservation of forensic evidence, and a symbiotic relationship with justice (Filmlalter, Heyns, & Ferreira, 2018). Hence, the need to equip nursing professionals of competences in the area of forensic nursing (FN). The definition of FN science is the combined application of forensic aspects to health care, in the treatment of trauma victims or death by trauma, perpetrators of violence, criminal activities, and traumatic accidents (Lynch & Duval, 2011).

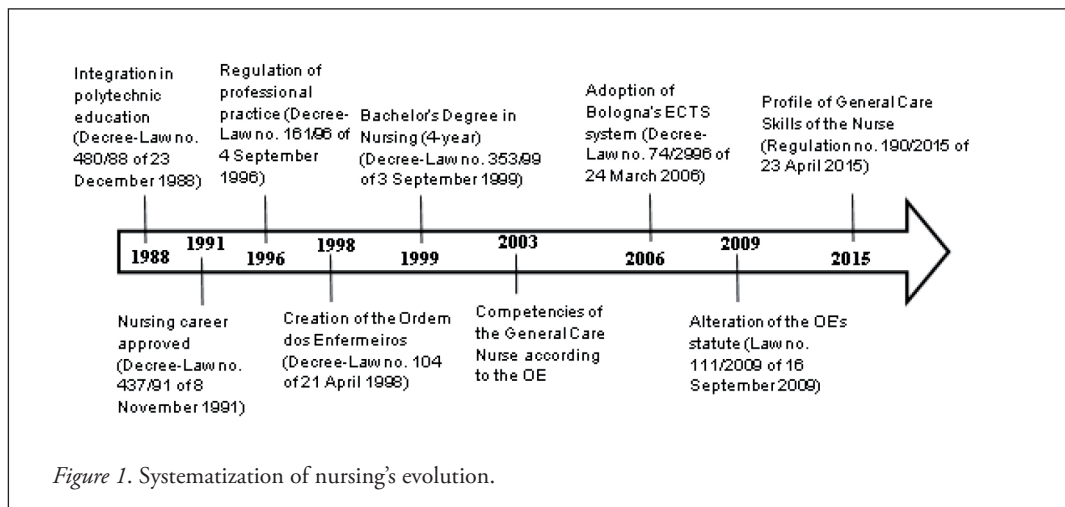
The investment in this area, particularly by nurses, is a response to the code of ethics, in which “nursing interventions are performed to defend the freedom and dignity of the human person” (Ordem dos Enfermeiros, 2009, p. 61). The same document states that the nurse is responsible “for the decisions he/she makes and the actions he/she undertakes or delegates”, while defending “the human person against

practices which are contrary to the law, ethics, or the common good” - duty to protect against illegal, illicit actions, or against the common good (Ordem dos Enfermeiros, 2009, p. 79). Training in FN for nurses will be a valuable resource to improve care delivery to victims of crime, increasing aid to forensic services and nursing care more adapted to each victim (Lynch, 2011; Camilo, 2017).

Nursing schools should play a central role, particularly in the inclusion of curricula content that addresses FN. This is essential to prepare professionals for the current and daily challenges of the profession, mainly at the level of violence and criminal cases (Santos, 2013). Therefore, the objective of this study is to analyze whether the study plans for a bachelor's degree in nursing include FN-related content.

Background

Nowadays, we live in the era of science and technology, and the daily life of populations has undergone several changes (Patel, Singh, Paresh, & Verma, 2018). Training in nursing has adapted accordingly, as the profession and education in this area evolve, in order to integrate nursing as a science. Figure 1 systematizes this evolution.



Currently, nursing schools have the task of preparing professionals capable of acting in a volatile, versatile, and changeable society, which imposes on them constant and demanding challenges. The European directives (Lei n.º 9/2009 de 4 de março) for nursing education include a theoretical and practical aspect, which should only be regarded as a guideline, as curricula need to evolve and be improved, according to the autonomy of educational institutions. Concomitantly, the Bologna Process was introduced as a change in the educational paradigm and enabled the organization of courses, based on the European Credit Transfer and Accumulation System. It is a model based on skill development, where the experimental and project component plays a more significant role (Decreto-Lei n.º 74/2006 de 24 de março, 2006). Thus, this model introduces a new dynamic in educational institutions, still guiding nursing's education, without eliminating the autonomy of the institutions.

FS involves various scientific disciplines that act harmoniously in aiding justice and in medical-legal situations (Gomes, 2014). FN emerges as a new nursing practice, combining scientific and technical nursing knowledge with FS principles, which makes the nurse a crucial element in the justice system (Lynch & Duval, 2011; Gomes, 2014). The practice of FN is based on enriching the education of nurses and on the nursing process of caring for individuals, families, and communities affected by violence and trauma (Ellis & Alexander, 2017; Simmons & Grandfield, 2013). Thus, FN is an area of nursing that has been developed and applied in various clinical contexts, particularly psychiatry (Ellis & Alexander, 2017) and extra-hospital and emergency settings (Simmons & Grandfield, 2013). As regards psychiatry, studies show that health units admit mentally ill offenders; however, they lack professionals with specific training to supervise and treat these patients. In this case, the nurse with knowledge of FN allows for more specialized and customized monitoring, as well as for the promotion of reducing the team's work overload (Cyr & Paradis, 2012).

The task of the nurse is to promote a safe environment, while "seeking to know accurately his/her field of action, using strategies of quality assurance and risk management" (Ordem dos Enfermeiros, 2012, p. 19). The nurse should possess the necessary knowledge to identify signs of violence (Lynch, 2011), provide specialized care to victims and ag-

gressors, and implement therapeutic attitudes in individuals with physical, psychological, or social traumas. The correct preservation of evidence is also crucial to prevent alterations thereof (Santos, Lucas, Ferro, Marques, & Santa Rosa, 2017).

Different authors were interested in operationalizing the FN construct and drew up a scale with different dimensions: a) Concept of FN, b) Forensic situations, c) Forensic evidence, d) Communication and documentation), and General FN care, f) Preservation of evidence. Forensic situations include primarily situations of violence against elderly people, children, or conjugal), homicides and suicides, trauma, traffic accidents, sexual assault. Communication and documentation are more directed at the existing legislation, as well as at the importance of hospital records. General nursing care explain the role of the forensic nurse, particularly at the level of his/her actions and competencies. Finally, the preservation of evidence clarifies how the nurse should proceed in collecting and preserving medical-legal evidence (Lynch & Duval, 2011; Sheridan, Nash, & Bresee, 2011).

Research question

Do the study plans for bachelor's degrees in nursing address FN?

Methodology

This study used a qualitative methodology approach. It is a documentary analysis of the study plans of the bachelor's degree in nursing, whose participants included the nursing and health schools that provide the bachelor's in nursing in Portugal, totaling 38 institutions (Direção-Geral do Ensino Superior, 2018). The following were considered for inclusion in this study: public and private institutions that made available the curricular unit descriptions for electronic consultation. Eleven institutions met this criterion, thus making up the entire sample. The curricular unit descriptions were consulted in November 2018, referring to the contents addressed in the academic year of 2017/2018.

After this information was collected from the available descriptions, a "body of analysis" table was built. The content analysis was based on the steps proposed by Bardin (2008) in three stages: pre-analysis, material exploration and treatment of

results, inference and interpretation. The categories were defined in advance, taking into account the contents about FN recommended by Lynch and Duval (2011) and Sheridan et al., (2011).

Results and Discussion

The study plans and their curricular descriptions of 11 institutions were analyzed. A letter from A to K was assigned to preserve the anonymity and

confidentiality of information. Table 1 includes the curricular units as designated in the study plan, the year in which they are taught, and the content transcribed in full from the study plan of the respective curricular unit.

According to the content analysis in Table 1, it is evident that the study plan programs for general care nurses do not include explicitly content about the concept of FN or FS.

Table 1

Information on FN-related content of the study plans of the bachelor's degree in nursing, in Portugal

School	Curricular Units	Course year	Content
A	Parenting	1 st year	Abuse.
	Behavior and interpersonal relationships	1 st year	Individuals with aggressive behavior (self- or heteroaggression), self-mutilation, attempted suicide; Victims of aggressive behavior: violence (physical, psychological, emotional, financial,...) over the life cycle (against children, domestic, against elderly people); Conjugal/domestic violence.
B	Methodology of Communication Applied to Nursing	2 nd year	Nurse's communication suitable to the situation/action (children, aggressiveness...).
	Nursing and the Person with Mental Health Changes	3 rd year	Ethics and legislation in mental health.
C	Clinical Practice – Fundamentals of Nursing	2 nd year	Ethical and legal principles.
	Mental Health and Psychiatric Nursing	3 rd year	Ethical and legal topics.
	Emergency Nursing	4 th year	Assessment, reanimation, and primary care in special populations (mental illnesses, maltreatment, abuse and negligence, substance abuse) in the emergency unit.
D	Intervention in the Patient with Heightened Vulnerability	2 nd year	To be a child or youth: maltreatment (negligence, abuse, and violence in the child and adolescent), cluster of support to the child and youth in risk and existing legislation. To be a woman: gender vulnerability violence. To be elderly: violence and abuse against the elderly.

School	Curricular Units	Course year	Content
E	Youth Health Nursing	1 st year	Child and youth abuse and negligence – Nursing and multidisciplinary prevention and intervention.
	Nursing and the Law	4 th year	The responsibility of the nurse; nurse's action in generating responsibility; types of responsibility: disciplinary, civil, and penal.
F	Child and Pediatric Nursing	3 rd year	The maltreated child.
G	Child and Pediatric Nursing	3 rd year	The neglected and abused child.
	Gender and Intimate Partner Violence	3 rd year	National and international legislation.
H	-----	----- ---	-----
I	-----	----- ---	-----
J	-----	----- ---	-----
K	-----	----- ---	-----

Note. A, B, C, D, E, F, G, H, I, J, and K = Higher education institutions.

As the FN approach is scarce, the researchers sought to understand which approach is taught in the courses. Table 2 shows the distribution

of content covered by nursing schools by main FN categories.

Table 2

Distribution of content by FN categories in the institutions that teach FN topics

Categories	A	B	C	D	E	F	G	H	I	J	K
Concept of forensic nursing											
Forensic situations	X	X	X	X	X	X	X				
Forensic evidence											
Communication and documentation		X	X					X			
General FN care					X						
Preservation of evidence											

Note. A, B, C, D, E, F, G, H, I, J, and K = Higher education institutions.

It can be observed that the most covered category is Forensic Situations, followed by Communication and documentation and General FN care. The Forensic Situations category encompasses five subcategories: Conjugal violence,

Violence against children, Violence against the elderly, negligence and bad practices, and violent death. Table 3 shows the frequency of coverage of the respective forensic situations.

Table 3

Analysis of forensic situations covered by the different curricular units of the educational institutions

Curricular Units/ Institution	Forensic Situations	Conjugal Violence	Violence against Children	Violence against the Elderly	Negligence and Bad Practices	Violent Death
Behavior and Interpersonal Relationships (1 st year) - A		X	X	X		
Emergency Nursing (4 th year) - C		X	X	X	X	
Intervention in the Patient with Heightened Vulnerability (2 nd year) - D		X	X	X		
Youth Health Nursing (1 st year) - E			X			
Child and Pediatric Health Nursing (3 rd year) - F			X			
Child and Pediatric Health Nursing (3 rd year) - G			X			
Methodology of Communication Applied to Nursing (2 nd year) - B			X			

The Communication and documentation category comprises two subcategories: Ethics and

Legislation. Table 4 shows the frequency of coverage concerning the ethics and the law.

Table 4

Analysis of the content on communication and documentation covered by the different curricular units of the educational institutions

Curricular Units/ Institution	Communication and documentation	Ethics	Legislation
Mental Health and Psychiatric Nursing (3 rd year) - C		X	X
Clinical Practice – Fundamentals of Nursing (2 nd year) - C		X	X
Gender and Intimate Partner Violence (3 rd year) - G			X
Nursing and the Person with Altered Mental Health/Status (3 rd year) - B		X	X

Analyzing the content of the curricular units allowed noting that institution E is the only one that addresses content related with the General FN care category, integrating the legal responsibility of the professional nurse in the “Nursing and the Law” curricular unit (4th year).

It can be observed that institutions B and C cover legal contents, in an area of application of FN - Mental Health, in the curricular units

of Nursing and the Person with Altered Mental Health/Status (3rd year) and of Mental Health and Psychiatric Nursing (3rd year). Finally, institutions H, I, J, and K do not cover any content associated with the forensic area. Studies reveal the importance of implementing forensic care in the context of mental health (Cyr & Paradis, 2012).

The results confirm that the nursing schools

address some content related to forensic situations, directing its teaching at situations of child and elderly abuse, violence, and mental health care, as well as legislation and ethical principles. The curricula do not explain the concept of FN, Forensic Evidence and its preservation, and General FN Care.

It is known that the emergency nurse is daily confronted with trauma victims, often resulting from crime. Although the preservation of evidence is essential, the multidisciplinary health team works together in a primordial attempt to save the victim's life. However, here the nurse has a preponderant role in the preservation of evidence (Santos, 2013).

The nurse is often the first health professional to establish contact with the victim (of physical, sexual, religious, and social violence), thus taking on a unique and privileged position, not only in the care process, but also in the promotion and implementation of the preservation, collection, and documentation of medical-legal evidence (Lynch, 2011; Filmlalter et al., 2018). The appropriate intervention of the nurse is essential to preserve medical-legal evidence for the court ruling, especially in violent crimes (Santos, 2013).

The nurse has to provide differentiated care for violence victims (Lynch, 2011; Coelho, Cunha, & Libório, 2016). In addition to the direct care delivery, it is necessary to have a detailed medical-legal documentation, including descriptive notes of each injury as to the size, color, shape, location, characteristics of the surrounding skin, presence of foreign bodies in the injury or surrounding it; the condition for admission of the patient (when and how); anatomical description and identification of the site for conduction of invasive procedures. This description should preferably be accompanied by a body map and a photographic record (do not forget that this photographic record requires the victim's consent). The photographic record, whenever possible, should occur before the treatment of injuries (Lynch & Duval, 2011; Sheridan et al., 2011). It is fundamental that the nurse performs this recording since it can be applied in justice and be a source of information for the medical-legal investigation. The nurse should record faithfully everything he/she observes and performs (Ordem dos Enfermeiros, 2012). As criminal proceedings can

take months or years to reach the courts, these records are increasingly important and should be the most detailed, accurate, and thorough as possible (Lynch, 2011; Sheridan et al., 2011; Gomes, 2014).

In this perspective, it is important to provide nurses with skills, particularly in the area of preservation and identification of forensic evidence, conservation and documentation of forensic evidence, as well as in other areas that make up FN.

The studies also indicate that the professionals themselves, during their practice, identify and refer to shortcomings at the level of basic training, in which concerns FN (Gomes, 2017).

This study was limited by the methodology used and the fact that the collection of information was carried out by means of internet search and descriptions of curricular units.

Conclusion

This study began by analyzing if nurses' basic training covered FN-related content. The results showed that the study plans, for general care nurses, do not include explicit content about the concept of FN. The addressed contents focus, mainly, on forensic situations: situations of abuse, violence, and mental health care.

This analysis noted a limited coverage regarding the contents related to FN, basically the concept of FN, forensic evidence and its preservation, and general FN care.

Thus, it becomes imperative to incorporate, in curricula of bachelor's degrees in nursing, contents related to FN situations, mainly within the emergency and extra-hospital contexts. Only a good collaboration between justice and health can respond to the needs of violence victims and their aggressors. Consequently, an investment should be made in nursing curricula adjusted to the new contexts and reality. The dissemination of the results of this study aims to encourage the institutions that teach nursing undergraduate courses to integrate FN-related content in their curricula, to adapt them to the challenges that nursing has been facing in the 21st century.

This research was conducted under the Master's Degree in Forensic Medicine, of the University of Porto.

References

- Bardin, L. (2008). *Análise de conteúdo*. Lisboa, Portugal: Edições 70.
- Camilo, L. (2017). Preservação da cena de crime pelo enfermeiro no serviço de atendimento móvel de urgência: Uma revisão integrativa. *Caderno de Graduação-Ciências Biológicas e da Saúde*, 4(2), 184. Retrieved from <https://periodicos.set.edu.br/index.php/cadernobiologicas/article/view/4602>
- Coelho, M., Cunha, M., & Libório, R. (2016). Impacto da formação em ciências forenses. *Servir*, 59(1), 27-33. Retrieved from <http://repositorio.ipv.pt/handle/10400.19/4068>
- Cyr, J., & Paradis, J. (2012). The forensic float nurse: A new concept in the effective management of forensic delivery in a forensic program. *Journal of forensic nursing*, 8(4), 188-194. doi:10.1111/j.1939-3938.2012.01145.x
- Decreto-Lei n.º 74/2006 de 24 de Março. *Diário da República nº 60, I série*. Ministério da Ciência, Tecnologia e Ensino Superior. Lisboa, Portugal.
- Direção Geral do Ensino Superior. (2018). *Escolas de Enfermagem de Portugal*. Retrieved from <http://www.dges.gov.pt/guias/indcurso.asp?curso=9500>
- Ellis, H., & Alexander, V. (2017). The mentally ill in jail: Contemporary clinical and practice perspectives for psychiatric-mental health nursing. *Archives of Psychiatric Nursing*, 31(2), 217-222. doi:10.1016/j.apnu.2016.09.013
- Filmalter, C., Heyns, T., & Ferreira, R. (2018). Forensic patients in the emergency department: Who are they and how should we care for them? *International Emergency Nursing*, 40, 33-36. doi:10.1016/j.ienj.2017.09.007
- Gomes, A. (2014). *Enfermagem forense*. Lisboa, Portugal: Lidel.
- Gomes, C. (2017). *Preservação dos vestígios forenses: Conhecimentos e práticas dos enfermeiros do Serviço de Urgência e/ou Emergência* (Master's dissertation). Universidade de Coimbra, Faculdade de Medicina, Portugal.
- Lei n.º 9/2009 de 4 de Março. *Diário da República n.º 44/2009, Série I*. Assembleia da República. Lisboa, Portugal.
- Lynch, V. (2011). Forensic nursing science: Global strategies in health and justice. *Egyptian Journal of Forensic Sciences*, 1(2), 69-76. doi:10.1016/j.ejfs.2011.04.001
- Lynch, V., & Duval, J. (2011). *Forensic nursing science* (2nd ed.). St. Louis, MO: Elsevier Mosby.
- Ordem dos Enfermeiros. (2012). *Regulamento do perfil de competências do Enfermeiro de Cuidados Gerais*. Retrieved from https://www.ordemenfermeiros.pt/arquivo/publicacoes/Documents/divulgar%20-%20regulamento%20do%20perfil_VF.pdf
- Ordem dos Enfermeiros. (2009). *Código deontológico do enfermeiro*. Retrieved from <https://www.enfermagem.edu.pt/images/stories/CodigoDeontologico.pdf>
- Patel, J., Singh, H., Pares, M., & Verma, C. (2018). Forensic odontology in the era of computer and technology. *International Journal of Medical and Dental Sciences*, 2(1), 59-64. doi:10.18311/ijmids/2013/19823
- Santos, C. (2013). *Contributos para a implementação da enfermagem forense em Portugal*. (Master's dissertation). Universidade de Coimbra, Faculdade de Medicina, Portugal.
- Santos, M., Lucas, G., Ferro, M., Marques, C., & Santa Rosa, M. (2017). Atuação e competência do enfermeiro forense na preservação de vestígios no serviço de urgência e emergência. In *Congresso Internacional de Enfermagem (Vol. 1, No. 1)*.
- Sheridan, D., Nash, K., & Bresee, H. (2011). *A enfermagem forense na urgência*. In P. K. Howard, R. A. Steinmann, S. Sheely: *Enfermagem de urgência: Da teoria à prática*. (6^a ed., pp. 189-201). Loures, Portugal: Lusociência.
- Simmons, B., & Grandfield, K. (2013). Focus on forensic nursing education. *Journal of Emergency Nursing*, 39(6), 633-634. doi:10.1016/j.jen.2013.06.010