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Abstract

**Aim:** A new training program for French nurse anaesthetist respond to the guidelines issued at the Bologna agreements. One of the major changes is the establishment of a theoretical and practical teaching unit dedicated to research. From now on, the new program includes theoretical and research methodology units completed with a clinical work placement in Clinical Research Unit of an Anaesthesiology Department.

**Materials and Methods:** To date, thirteen Clinical Research Units have participated in the management of two successive classes. As part of the ongoing training evaluation system, a survey was conducted among 146 students. It consisted of issues on different topics including the impact of research activity on the representations of the students and the transferability of research internship in their future practice.

The return rate of the questionnaires was 100%. Data analysis was performed using Excel™.

**Results:** In terms of methodological knowledge, students reported having progressed mainly in evaluating the research subject relevance, in understanding chronology, in the analysis of an appropriate bibliography and in the mastering the statistical and computer's tools. Besides, they emphasize the acquisition of a specific vocabulary and progress in terms of graph's analysis and interpretation of results.

**Introduction**

The new training program for French nurse anaesthetist, established in 2012 [1], respond to the guidelines issued at the Bologna agreements, establishing European harmonization of Certificate (License-Master-Doctorate) [2]. The academic character of the studies and obtaining a master degree require changes in the nature of the knowledge taught. One of the major changes initiated by the new program is the establishment of a theoretical and practical teaching unit dedicated to research.

In the nurse anaesthetist's course, lessons about research refer to the "competence 7": "To research, to treat and to produce professional and scientific data in the fields of anesthesia, intensive care, emergency and analgesia." The requirements of such an approach is the need to subscribe to a continuous development of knowledge, to ensure the scientific validity of our practices bya strengthened and close collaboration with anaesthetists, to submit our worksto a critical judgment of thescientific and professional communitiesand finally, to have a cross-disciplinary vision by developing research programs that promote interdisciplinary skills while enhancing the specificity of the nurse anaesthetist's skills.

So, the new program(equal to a total of 125 hours, or 14% of total theoretical contributions of training, includes theoretical and research methodology units, commented analysis of scientific articles, statistics, computer science and English foreign language.

This is completed with a clinical work placement, for four weeks, and carried out during the 3rd or 4th semester of training in Clinical Research Unit of an Anaesthesiology Department. Supervised by a professor recognized for his commitment to research, it involves reading and understanding the entire research's process, contributing to one or more stages of the current protocol and acquiring transferable methodological rigor of reasoning in their later professional activity.

**Materials and Methods**

To date, thirteen Clinical Research Units have participated in the management of two successive classes or 146 students;
research by nurse anaesthetist teams, the number of publications in the safety and quality of care in favor of the patient. The ultimate anaesthetist, working closely with invested nurses, will lead to gain: the nurse anaesthetist will demonstrate new skills and the development of paramedical research works. Each party has much to critically analyze scientific literature, students can see the application in the field of care. With the ability to read, to understand through better understanding of its meaning and interest, via a direct acquired during their training. Research is now a less abstract domain activity through the concrete application of theoretical contributions of this discipline. This change firstly requires a down-scaling of this research, all students noted a profound change in their perception of this discipline. This change firstly requires a down-scaling of this activity through the concrete application of theoretical contributions acquired during their training. Research is now a less abstract domain through better understanding of its meaning and interest, via a direct application in the field of care. With the ability to read, to understand and to critically analyze scientific literature, students can see the opportunity to take part in this activity defined as “an evolving part” of their profession. In addition, students emphasize the unifying mission of this activity through improved interaction anaesthetist and nurse anaesthetist gathered around a common project. Overall, an appropriation of research’s methodology and an active and supervised involvement during their internships allowed students to discern the necessity of a permanent questioning of our care and their evaluation. Improving our practices undoubtedly requires the development of paramedical research works. Each party has much to gain: the nurse anaesthetist will demonstrate new skills and the anaesthetist, working closely with invested nurses, will, will lead to new collaboration and source of synergy and efficiency. The ultimate and clearly identified objective for this approach resides in improving the safety and quality of care in favor of the patient. 

In the Future

It will be necessary to evaluate the amount of initiated or invested research by nurse anaesthetist’s teams, the number of publications in scientific, journals, the formalization of time dedicated to this activity field to ensure that the enthusiasm induced by this training continues and to highlight potential obstacles in daily practice in order to resolve them as much as possible. Furthermore, compared to expressed earnings, it seems essential to organize training sessions for nurse anaesthetists who haven’t received the new training reference (certificated before 2012) in order to take an active part in this part of our profession. It is essential for the teaching staff to give support to our profession: to contribute to the production of collective knowledge, to an ongoing improvement in the quality of care, and to actively participate in the development, support and enhancement of a doctoral pathway for nurse anaesthetists.

Competing Interests

The authors declare that they have no competing interests.

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References

1. Arrêté du 23 Juillet 2012 relatif à la formation conduisant au diplôme d’état infirmier anesthésiste
2. Décret n°2002-482 du 8 Avril 2002 portant application au système français de la construction de l’espace européen de l’enseignement supérieur
3. Annexe V de l’arrêté de formation du 23 juillet 2012