Cardiovascular Research: New Model of Collaborative Training Program

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The clinical research has a critical importance for the advancement in medical practice, being the vital component to convey discoveries from basic science to clinical practice. Cardiology is a clinical field that has seen a rapid advancement in clinical care, partly due to the intensive clinical research in this field. In fact, the number of randomized clinical trials in cardiology has increased from 2,689 to 4,718, when comparing two periods (1990 to 2000 and 2000 to 2009)¹, an increase of almost 43%. In spite of this rapid advancement in clinical research, one important issue to be considered is that methodology in clinical research is not easy to master. With the development of the medical curriculum, space for clinical research methodology training during graduation is limited and physicians are often not prepared to understand the concepts, methods, and pitfalls of the research process. The result is that MDs applying for clinical research grants have often reduced chances when compared to PhDs applying for basic science grants.

The task force in training in cardiovascular research emphasizes the importance, for every cardiovascular trainee, of direct participation in the research. General standards of training involve the training institution and the faculty. In addition to a skills training program such as in statistics and epidemiology, a successful training program should also involve practical training, such as carrying out mentored clinical research so that the trainee can acquire the capacity to carry out intellectual inquiry and responsibility to effectively prepare and conduct research protocols².

Although methodology and clinical research training programs might be similar across different medical specialties, it is also critical to have the methodology adapted to the nuances of clinical research in cardiology¹. It is clear that a large number of research pathways are possible; however, the solid understanding of the process concepts is necessary, as well as how fast or how effectively physicians will acquire and apply the knowledge for the benefit of patient care.

Key words
Research; research design; biomedical research; education.

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Manuscript received October 19, 2009; revised manuscript received March 15, 2010; accepted March 15, 2010.
is the principle of collaborative learning, in which participants build the knowledge together by discussing the course topics in a course forum. It usually sparks a wide variety of comments and viewpoints. This method fits not only researchers, but also physicians at postgraduate courses in specialized fields or areas at the universities, including reviewers from peer-review journals interested in improving their skills in clinical research and physicians interested in learning evidence-based medicine to keep updated with clinical practice. Such method can improve the quality of the postgraduate courses, develop clinical research centers and provide high-quality clinical research, which will benefit patient care.

In conclusion, all efforts and strategies are worthwhile and vital to the improvement and maintenance of the quality of clinical research now and in the future on behalf of the welfare of patients with cardiovascular diseases.

References


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