
International Perspectives on CV Nursing

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The American Heart Association-Council on Cardiovascular Nursing and European Society of Cardiology-Council on Cardiovascular Nursing and Allied Professions Postdoctoral Mentoring Program in Cardiovascular Nursing: Developing Cardiovascular Nursing Research in Lebanon

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The nursing discipline is currently witnessing an intriguing paradox. There is an international shortage of practicing nurses and nursing faculty. At the same time developments in nursing, involving advanced practice roles, graduate level education, and the significant knowledge development through research, is at its earnest. Needless to say that such developments vary substantially among countries, where in some nursing education is just starting to move beyond technical training and into university levels to the most developed countries where doctorally prepared nurses are making breakthroughs in research and theory development.

Some argue that globalization, with the significant mobility of nurses, advent of electronic information, and the World Wide Web, makes it imperative that nurses aim to improve global health through their research.¹ Although high priority health problems may vary among countries, there are more similarities than differences in terms of the health needs of various populations. Transcultural research and knowledge development became a more pressing situation given the diversity of cultures that live within some countries as a result of migration that we are witnessing worldwide.² With the advent of student and faculty

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exchange programs between developed and developing countries and the ease of distant communication through the internet, programs of research that address health issues in various cultures have expanded our knowledge of nursing phenomena in these populations and ways to promote health, prevent illness, and maintain health using culturally sensitive interventions.³

Doctoral education is the mainstay for preparing nurse researchers. Doctoral programs are expanding in countries in all continents but are still lacking in many others. Data from the International Network of Doctoral Education point to doctoral programs in 31 countries,⁴ with the majority of the programs offered in the United States, compared with <10 programs in the Middle East and North Africa region. Thus nurses from developing countries often travel to more developed countries to pursue doctoral study. Moreover, whereas doctoral graduates are provided during their

education with the skills needed to initiate and conduct research, launching a research career is often facilitated through postdoctoral training.⁵ Postdoctoral training provides further training related to practical aspects of planning research, as well as allowing trainees the opportunities to network with scholars in their area of interest through attending conferences and scientific meetings. For those nurses who do their doctoral study in their own countries, postdoctoral training is possible once an appropriate seasoned mentor is identified with matching research interest and adequate funds. The challenge remains for those who travel long distance to get their doctoral education but cannot stay longer for postdoctoral training, for they have to go back to their country to meet their professional commitments for the government or organization that sponsored their study. These novice researchers, who are often placed in academic positions, get immersed in

their teaching and administrative duties, thus delaying the launching of their research careers. Once settled in their positions and willing to catch up with their research, the need for postdoctoral training surfaces. Many challenges face nurse scholars from developing countries, namely restricted funds available for quality research, the lack of research mentors in their country and the limited time available to pursue research.

Avenues for funding research in the Middle East region for example are limited, and priorities do not necessarily focus on nursing research. In fact most countries do not even have national nursing organizations that could provide research support. A postdoctoral fellowship comes a long way in supporting the development of a research program by novice researchers working in environments with limited resources. I was the lucky recipient of such a fellowship last year and will describe below my experience.

CARDIOVASCULAR NURSING RESEARCH IN LEBANON

Lebanon is a small country in the Middle East region bordering the Mediterranean Sea, with a population close to 4 million. There are 12 nursing programs that offer a bachelor's degree in nursing and 3 universities have recently started Masters in Nursing. Some programs follow the American model and others follow the French model of education, with an impact of Canadian universities on some recent programs. There are no doctoral programs of study in nursing and there are only 12 doctorally prepared nurses in the country who work in academic settings. Nursing research occurs mostly in universities, and addresses mostly nursing workforce issues like nursing shortage, migration and retention; palliative care; and mental health. These research programs came through in response to the effects of the long civil war that overcame the country, with its effect on mental health and the migration of nurses, as well as the rising prevalence

of cancer with its subsequent palliative care needs. Funding for these studies comes from the universities in which they are conducted, and from the World Health Organization's Eastern Mediterranean Regional Office. At the national level, the Lebanese Council for Scientific Research provides funding if the submitted proposal fits within their priority areas, with a preference to fund multidisciplinary or multisite studies. Otherwise studies in the form of performance improvement projects are done in hospitals such as on nosocomial infection, pressure ulcer rates and the like, and are funded by the respective organizations. Although heart disease is the leading cause of mortality and morbidity in Lebanon,^{6,7} cardiovascular nursing research is not developed yet, with only 1 published nursing study till 2006 that tested the effect of an educational intervention on postoperative anxiety in cardiac surgery patients.⁸

MY RESEARCH TRAINING

After completing my doctoral study in the United States, I came back to my Alma Mater to contribute in academia the knowledge I gained abroad. After a couple of years of adjusting back and exploring the research area to pursue considering my area of specialty and the local needs, I realized that 1 national medical study on hospital mortality of myocardial infarction (MI) patients identified delay in seeking care for MI to limit the patients' benefiting from effective treatment.⁹ The delay phenomenon is rather universal and has been studied in many countries with many predictors identified.¹⁰ Some factors are amenable to intervention, such as lack of knowledge of MI symptoms, whereas others are not, such as demographic or socioeconomic factors. Nevertheless, published intervention studies did not achieve their outcome of reducing delay so far. I started with a descriptive study on predictors of delay in Lebanese patients.¹¹ The findings were similar to what is reported in the literature, with some cultural variation

such as the tendency of patients to tell someone they know as a first response to their symptoms rather than seek emergency care. The median delay time was 4.5 hours, which is a barrier to effective treatment. The findings suggested lack of cardiac knowledge among patients, so a second study targeting a community sample examined their beliefs and knowledge about cardiac illness. Knowledge deficit was suggested by the findings, in addition to cultural beliefs about the causes of heart disease, which stem from the unstable situation in Lebanon that prevailed for many years and to which most ailments are reflected back. After that, I decided it may an opportune time to start thinking about an intervention study, but knew that I needed more training to develop such a study, so I decided to go for postdoctoral training.

THE AHA-CCVN AND ESC-CCNAP POSTDOCTORAL MENTORING PROGRAM IN CARDIOVASCULAR NURSING

My plan for the postdoctoral fellowship was to gain skills in the planning and conduct of a research program culminating in an intervention study aimed at reducing delay in seeking care. I applied to the fellowship offered by the Cardiovascular Council of Nursing and Allied Professions (CCNAP) of the European Society of Cardiology (ESC) and the Cardiovascular Nursing Council of the American Heart Association (AHA). This fellowship was awarded for the first time 2008. I was granted the very first fellowship, which I spent at the University of California San Francisco. Upon discussions with my mentor, Dean Kathleen Dracup and following an in-depth review of the literature, we realized that more work is needed before being able to identify an effective and culturally sensitive intervention, especially with the lack of published studies in Middle Eastern populations on this topic that could guide development of the intervention trial. A mixed methods study exploring decision-making

processes to seek care and related factors using a qualitative approach, and a quantitative survey of specific knowledge of MI symptoms and response to them, was planned to gain a more comprehensive understanding of the context and the experience of a heart attack and related response of Lebanese patients.

During the fellowship, I met cardiovascular nursing scholars from the United States and Europe and we discussed what needs to be done in this area, in addition to other cardiovascular research-related topics. Innovative intervention methods such as motivational interviewing and the need to revisit the outcomes to be targeted in intervention studies were entertained, because psycho-educational interventions so far failed to achieve the ultimate outcome, namely reduction in delay in seeking health care in this

patient population. Cross-cultural research collaboration is a possible outcome of these discussions that I am hoping to achieve. Research on this topic in various cultures and contexts will enrich our understanding of this challenging clinical problem. The mixed methods study findings are hoped to enrich our understanding of aspects relevant to the Lebanese culture that may be at the core of the delay phenomenon, after which intervention modalities will be explored with expert cardiovascular nurse researchers in the United States.

CONCLUSION

This experience has been very enriching and an eye opener. Developing a research career with limited resources can be very challenging, so the postdoctoral fellowship was a blessing. Despite differences in the circum-

stances surrounding nurse researchers in various countries, similar issues and challenges are also experienced. Collaborating with other researchers can pave the way to developing cardiovascular nursing research through sharing experiences and developing an extant body of knowledge needed to provide the evidence for interventions geared to promote cardiovascular health. In this globalization age and in the quest to achieve the millennium development goal of combating disease,¹² international collaboration in research is recommended. Novice nurse researchers from developing countries can benefit from postdoctoral fellowships to enhance their research training, then contribute to the development of knowledge to promote health and nursing care.

REFERENCES

- 1 Schultz AA. Role of research in reconstructing global healthcare for the 21st century. 2004. *Nurs Admin Q.* 2004;28(2):133–143.
- 2 Leininger M. Transcultural nursing research to transform nursing education and practice: 40 years. *Image: J Nurs Scholarsh.* 1997;29(4):341–347.
- 3 Freda MC. International nursing and world health: essential knowledge for the 21st century nurse. *MCN: Am J Matern Child Nurs.* 1998;23(6):329–332.
- 4 Ketefian S, Davidson P, Daly J, et al. Issues and challenges in international doctoral education in nursing. *Nurs Health Sci.* 2005;7:150–156.
- 5 Wysocki AB. Launching your research career through postdoctoral training opportunities. *Nurs Res.* 1998;47(3):127–128.
- 6 Nawfal H. *Resident Issues in Lebanon Ten Years After the World Conference on Residents and Development: the National Report.* Beirut, Republic of Lebanon: Dar El Koutoub; 2004.
- 7 Department of Statistics: Ministry of Public Health. *Statistical Bulletin.* Beirut, Lebanon: Department of Statistics: Ministry of Public Health; 2007.
- 8 Deyirmenjian M, Karam N, Salameh P. Preoperative patient education for open-heart patients: a source of anxiety? *Patient Educ Couns.* 2006;62(1):111–117.
- 9 Sawaya JI, Jazra C, Farhat F, et al. In-hospital mortality after acute MI in Lebanon: incidence, associations and influence of newer treatment regimens. *J Med Liban.* 2000;48(2):63–69.
- 10 Caldwell M, Dracup K. Patient delay in seeking treatment for cardiac symptoms. In: Moser D, Riegel B, eds. *Cardiac Nursing: A Companion to Braunwald's Heart Disease.* Missouri: Saunders Elsevier; 2008:737–742.
- 11 Noureddine S, Adra M, Arevian M, et al. Delay in seeking health care for acute coronary syndromes in a Lebanese sample. *J Transcult Nurs.* 2006;17(4):341–348.
- 12 United Nations. Millennium Development Goals. Available from: <http://www.un.org/millenniumgoals/>. Accessed March 20, 2009.