HISPANIC

NLN



PROGRESO, PODER, Y PROMESA

Antonia M. Villarruel, Editor and Sara Torres, Co-Editor

HISPANIC VOICES:

PROGRESO, PODER, Y PROMESA

Antonia M. Villarruel, Editor and Sara Torres, Co-Editor



National League for Nursing

TABLE OF CONTENTS

Part Three: Education Innovations

Chapter 7:	Doctoral Studies in Nursing in Mexico: The Impact of Globalization Bertha Cecilia Salazar-González, PhD, RN, MA, BSN, Raquel Alicia Benavides-Torres, PhD, MCE, BSN & Esther C. Gallegos, PhD, RN, MBA, BSN
Chapter 8:	Reflection: A Student's Perspective on Studying in Latin America Carmen Alvarez, PhD, RN, NP-C, CNM
Chapter 9:	The Use of Innovative Technologies as a Strategy to Ensure Hispanic Nursing Student Success Laura Gonzalez, PhD, RN, APRN, CNE & Jean Giddens, PhD, RN, FAAN
Appendix A:	Author Profiles
Appendix B:	Instructional Self-Assessment
Appendix C:	Program Self-Assessment



One of the key recommendations of the Institute of Medicine's Future of Nursing Report (2011) is to double the number of nurses with doctorates by the year 2020. Supporting this recommendation is the realization that expansion of nursing science is essential to providing better patient care, improving health, and evaluating outcomes. In Mexico, while values about research and doctoral education are similar, the development of nursing scientists is in its infancy. The purpose of this chapter is to describe the process of developing and implementing the first doctoral program in nursing offered in Mexico. An overview of graduate education and the position of nursing within higher education will be reviewed. The process followed in planning and conducting the program offered by the Universidad Autónoma de Nuevo León (UANL) is further described, concluding with some considerations on the future of the program in the context of the globalization of higher education.

GRADUATE EDUCATION IN MEXICO

A country's development is directly linked to the educational attainment of its people. In 2011, Mexico's basic educational level was extended from nine to 12 years of education (Secretaría de Gobernación, 2011). Access to and quality of basic education are foundational to undergraduate and graduate university education. According to the population census of 2010, of the children and youth (six to 14 years) who should attend elementary and middle education, 94.7 percent were enrolled in school. Of youth between 15 and 24 years, only 40.4 percent completed college (Instituto Nacional de Geografía e Informatica, 2010). The segment of the population with access to graduate studies in the country is much lower. Data from 2008-2009 show that nationwide enrollment in master's programs was 166,986 students, while in doctoral programs the enrollment was only 18,530 (Asociación Nacional de Universidades e Instituciones de Educación Superior, 2011).

Doctoral education is a critical component in ensuring the human capital needed to advance knowledge and to create technology required to produce goods and services to address the needs of the country. The development of human capital reduces dependence on foreign technology and more readily fosters global collaborative relationships needed to tackle common problems. Likewise, doctoral graduates are the ideal agents to efficiently and effectively position the country in a globalized market, a characteristic of our modern economy. Globalization is a phenomenon that transcends all dimensions of human life, particularly education. Globalization compels us to think about an equivalent basic education to facilitate effective performance of graduates in any setting. Likewise, globalization puts extreme pressure on the need to increase the number of graduate students trained (Chan, 2008).

It is also important to point out the effect of globalization on health, since decisions to create new graduate programs should be consistent with the interaction between health and globalization. However, it is noteworthy that while health is a worldwide priority, distal determinants of health, such as the lack of fuel and food, climate change, and the financial crisis, often remain as underlying issues affecting health (World Health Organization, 2012). Thus, it is necessary to educate professionals capable of addressing health and developing policies that will affect health at all levels (Kupfer, 2011).

In this regard, during the last two presidential terms, the government of Mexico has taken steps to promote graduate studies within and outside the country. Strategies have included offering scholarships to outstanding students in various disciplines and strengthening national institutions of higher education to offer quality graduate programs. The Science, Technology and Innovation Program (Gobierno de Nuevo León, 2012) highlights the co-responsibility of universities and institutions of higher education in promoting research and innovation to support and strengthen economic development in Mexico. In addition to student and institutional support, efforts are also directed to substantially develop the faculty, so they can extend their efforts and expertise beyond teaching, to focus on research, innovation, and the creation of technology. It is believed that these combined efforts and investment in education will in turn lead to improved living standards.

Considering globalization in the development of human resources, there are aspects such as communication, technology transfer, knowledge of a second language, and other factors that directly or indirectly affect the development of doctoral educational programs. For example, a direct factor impacting quality doctoral education programs are institutional agreements to facilitate student exchange; indirect factors are those related to the country's economy, which facilitate the acquisition of resources for conducting academic programs. In the following section, we describe how these factors influenced the development of the first doctoral program in nursing in Mexico.

THE DOCTORAL PROGRAM IN NURSING SCIENCE

Since 1970, when the first nursing baccalaureate course was developed, nursing in Mexico has been a university program. Since that time, academic programs, students, and faculty members have been involved in the changes promoted by the government through state universities, the Sub-Ministry of Higher Education, and the National Council of Science and Technology (CONACYT). Nursing has also advanced substantial changes in academia and research through its own associations such as the Mexican Federation of Colleges and Schools of Nursing (FEMAFEE) and more recently by groups that accredit and certify institutions and professionals in the field. Unfortunately, nursing faces difficulty in leading and implementing changes that allow substantial advancements to improve community health.

Undergraduate and graduate nursing programs are primarily offered at state universities and supported primarily by federal funds. This support results in low tuition costs for students and provides access to higher education opportunities. The ability of universities

101

to shift their current educational model to focus on research and innovation is hindered by the lack of financial resources available to support this shift. Competing demands present numerous challenges to move from a teaching-centered model to one that gives research equal importance. The transition requires more professors with graduate degrees and an infrastructure that facilitates research, which until recently has not been the focus of many universities.

Nursing schools are confronted with similar challenges because the majority of schools are part of state universities. Compounding the issue is that there is little recognition and respect for nursing as a scientific discipline and thus skepticism about the ability of nurses to carry out research. It is in this context that the first proposal for a doctoral degree in nursing was presented at one of the top-ranked state universities in Mexico — the Universidad Autónoma de Nuevo León (UANL) and its school of nursing, in the city of Monterrey. The development of a doctoral program in nursing was possible after two professors at the UANL School of Nursing completed their doctoral studies in the United States. These two professors were responsible for the development of the doctoral program with the full support of the university and the school of nursing.

Planning Process

There were three different stages in developing a doctoral degree in nursing. The first stage consisted of conducting a needs assessment and the identification of state, federal, and international resources. The second stage focused on the development of a strategic plan that would lead to approval of the doctoral program. The third stage was the development and implementation of an operational plan for the program. Each stage is described.

Needs assessment. The first step at UANL was to establish a doctoral committee. The committee was composed of five professors from the Universidad Autónoma de Nuevo León (three from nursing, one from biology, and one from medicine) and three external advisors from international universities (University of Michigan, School of Nursing; Wayne State University, College of Nursing; and Indiana University, College of Nursing). The committee developed plans and oversaw the implementation of the needs assessment. The needs assessment focused on identifying health problems and trends prevalent in the country, projecting unmet health care needs within the current health care system, and identifying opportunities where nursing could lead efforts in addressing those needs. National and local epidemiological and demographic data were reviewed, as well as the current state of higher education. The committee confirmed that nurses had a limited profile in health, education, and research. For example, within the health sector, nursing actions are primarily delegated, so independent actions and their relation to health outcomes were not possible to discern. Within educational settings, nurses as researchers were rare.

A major source of data for the needs assessment came from the perspectives of Mexican

nurses. A total of 454 nurses and students from 24 states within Mexico expressed having demands in their jobs that exceeded the training they received. Nurses indicated that doctoral studies in nursing were essential for development of the discipline (46 percent), a basic requirement for improving the population's health care (38 percent), and necessary for clarifying the social relevance of the profession. Similarly, nurses reported that doctoral education was the best resource for defining, extending, and innovating nursing practice (79 percent); evaluating interventions (41 percent); advancing professionalization (39 percent); and for identifying issues of interest for the profession (19 percent).

An additional component of the needs assessment was to understand the characteristics of the potential applicants to the doctoral program. Thus, we analyzed the 33 nursing degree programs and 11 master's programs offered by university schools of nursing in Mexico. Among baccalaureate programs, we found a heterogeneous number of courses or subjects (24-64), highly medicalized content (e. g., medical-surgical, pediatrics, obstetrics, internal medicine, and psychiatry) with varying foci on direct care, nursing procedures (fundamentals of nursing), management (finances), administration (supervision and nursing administration), teaching, and research. An assessment of program objectives revealed the limited scope and complexity of the programs. We analyzed both master's in nursing programs, as well as those offered outside the discipline. The focus of the majority of master's nursing programs was on functional roles (e.g., administration and teaching), as opposed to clinical specialty or research. Few master's' nursing programs, however, were research-oriented and required the development of a thesis.

An assessment of resources was conducted by examining the infrastructure within UANL, the process for the development of doctoral degrees in the country, and the advancement of the nursing discipline in developed countries. Since the 1990s, UANL has supported the policy of creating doctoral programs in schools that have sufficient infrastructure to offer a program at the doctoral level. The school of nursing had both a solid infrastructure and a national reputation of excellence. The school of nursing at UANL at that time had offered the nursing baccalaureate degree for over 40 years and a master's degree for over 30 years. Moreover, during the last 10 years, the master's program, in part because of the distance education capacity, was an important resource for training nursing professors throughout the country. Because of these factors, the proposal received extensive support from the university president's office, including providing the resources necessary for the planning phase.

As part of the needs assessment, doctoral programs offered by UANL and other universities in the country and internationally were analyzed and compared. This analysis was necessary to develop a program that met national and professional standards and was consistent with curricular approaches in doctoral education in both related and unrelated disciplines. The assessment of international programs focused on four of the best doctoral programs in nursing — one in the United States, one in Canada, and two from Brazil. In this part of the process, the growth and development of these academic programs was assessed. Site visits and interactions with colleagues from other countries also served to initiate contacts that would later result in cooperative agreements. The review of doctoral programs within and outside of the discipline affirmed the importance of the following: (a) a research-focused versus teaching-focused doctoral program, and (b) a solid infrastructure for research as a component of doctoral education.

Strategic planning. Based on the needs assessment, the second step in our process was to develop a strategic plan for the doctorate in nursing program at UANL. This part of the process involved developing strategies to strengthen the substantive areas within the school of nursing to increase the probability of developing a program of excellence in doctoral studies. Specific areas that were identified included: (a) strengthening the research capacity of master's-prepared professors, and (b) developing and supporting programs of research. To address these areas, we conducted a series of faculty workshops on thesis advising, the use of biomarkers in research, and instrumentation. In addition, we examined the various research projects both completed and in progress in the school. We sought an inclusive theme from which research could be developed and, importantly, would serve as a basis for doctoral education. We initially defined our programs of research as Prevention and Reduction of Risk Factors in Chronic Disease and Exercise as a Nursing Intervention.

A strategic initiative, combined with the previous one, was the decision to educate Mexican faculty in PhD programs abroad. This was a valuable strategy to ensure we would have additional resources at UANL to sustain doctoral education. We recruited interested students who were fluent in English, had a strong statistical base of training, and who had a master's of science in nursing. While this was an important strategy, it is not one we have been able to sustain because funding for studying abroad is scarce.

Development and implementation. The approach to curriculum development of the doctorate in nursing was consistent with the regulatory framework of the UANL for designing doctorates. We also enlisted the support of three academics with extensive experience in doctoral education at Indiana University, the University of Michigan, and Wayne State University. Colleagues from these institutions offered their time and expertise to discuss with the planning team critical aspects and program elements necessary for doctoral education in nursing. With this basis, the doctorate in nursing sciences was established requiring a master's degree in the discipline or related field to be admitted. Discussions with external consultants clarified substantive issues and helped to guide decisions about appropriate models of education, as well as specific content.

Some of the guiding principles for program development included the following:

- 1. The ultimate goal of generating and applying knowledge is to improve the health care of the population.
- 2. The development of knowledge for the discipline of nursing must be linked to the epidemiological and demographic profiles of the country.
- 3. The disciplinary knowledge of nursing can guide the development of basic and clinical science, but it is important to consider the knowledge generated in other disciplinary and geographical contexts (universal knowledge).
- 4. The research problems are grounded in nursing practice.

In addition, advisors confirmed the need for a sufficiently developed infrastructure to be in place before accepting students. Critical components of that infrastructure included existing and robust programs of research and professors prepared to conduct research at the doctoral level. Throughout this process, continued communication and interaction with university graduate authorities was maintained. After a year and a half of uninterrupted work on the project, the program was approved by the University Council.

The doctoral program in nursing had the following characteristics:

Purpose of the Program. To train scientists and intellectuals capable of creating and conducting original research and creative work independently to advance nursing knowledge.

Graduate Profile. The graduate will be able to do the following: (a) systematically advance knowledge relevant to the nursing profession's goal of promoting overall health and reducing the risk of illness and complications in individuals, groups, and society in general and, (b) exert and provide leadership in research, health and social services systems, and human resources training.

Curriculum. The design of the curriculum was based on two basic concepts — health promotion and risk reduction. Both concepts are fundamental to improving the health and welfare of the Mexican population and reducing individual and environmental factors that threaten human health. Potential study phenomena were identified from these two constructs. From the perspective of health promotion, study phenomena include the determinants of health related to human biology, the environment, lifestyle, and the organization of health services. The perspective of prevention and risk reduction included phenomena related to reducing risk factors, protection, early detection, treatment, rehabilitation, and prevention of relapse within population groups or in specific social or health conditions.

Under this framework, four areas or integrating components of the discipline of nursing were identified:

Theoretical. Relevant models and theories of nursing, health promotion, prevention and risk approach, and psychosocial theories.

Substantive. Essential nursing knowledge.

Methodological. Advanced qualitative and quantitative research methods.

Public Policy. Concepts and theories that enable formulation and evaluation of social and health policies.

Cognate. Interdisciplinary perspectives relevant to specific phenomena and related methodological approaches.

Considering these areas and potential candidates admitted to the program, we developed the curriculum (Facultad de Enfermería, UANL, 2001).

Implementation. The curriculum development process culminated in approval by the Honorable University Council (September 2001). The approval took into consideration not only the curriculum design, but also the existence of an infrastructure to guarantee success of the program. We proposed and developed admission criteria and a selection process, a student handbook which included substantive program information from admission through graduation, and performance standards to support program operation. We also designed a curriculum evaluation scheme comprised of outcome and process indicators consistent with quality standards set by the National Council of Science and Technology (CONACYT).

A key part in the program preparation process was the availability of research faculty to support program development. Initially, the most effective way to attain and develop this human resource was through collaborations with research-intensive universities and well established doctoral programs. Thus, exchange and collaborative agreements were established with five universities in the United States and one in Brazil. Short-term collaboration involved obtaining adjunct status for three professors. These faculty gave seminars and served as dissertation advisors and committee members. In addition, five faculty members served as research mentors during students' residence in research in their respective countries.

One of the most difficult aspects in beginning the doctoral program at UANL was the need to develop and conduct externally funded research. Funded research implies that the research is of high quality, significant in its scope, and deemed important to advance science. Through a personal contact with a Mexican-American researcher, we had the opportunity to work collaboratively in a National Institute for Nursing Research-funded randomized controlled trial to test the efficacy of a sexual risk reduction intervention for parents and adolescents. The intervention, named ¡Cuidate! or Take Care of Yourself was developed by Dr. Antonia Villarruel at the University of Michigan and tested with U.S. Latino adolescents, and the purpose of the project was to test it with Mexican adolescents (2001-2008).

The implementation of this research in Monterrey provided invaluable training and learning opportunities in conducting all aspects of a randomized trial — from design, to analysis of results, to dissemination, including publications (Gallegos, Villarruel, Loveland-Cherry, Ronis, & Zhou, 2008). Importantly, the opportunity for nursing faculty and students to participate in research was a component that served as a motivating factor to pursue graduate studies (mainly doctoral education). In addition, the impact of this research was not limited to Monterrey. Supplemental funding supported replication of the research to a semi-rural community in the state of Oaxaca. Faculty took a lead role in implementing the study. To date, a UANL nursing professor has continued to build and expand this program of research.

In addition to infrastructure development at UANL, a program to prepare future professors abroad was simultaneously started to develop nurse researchers who could support the UANL doctoral program. This program involved several strategies. First, we identified and recruited potential candidates. We conducted interviews with outstanding undergraduate students who aspired to pursue graduate studies. Once they were selected, we provided institutional support to prepare them as possible candidates for graduate studies abroad. For two years, they worked to advance their English language, communication, and technology skills. They also enrolled in the master's program in Nursing Sciences at UANL. This provided an opportunity for to become involved in existing programs of research and served as a basis for doctoral studies. Importantly, we were able to secure resources from local and federal institutions to support doctoral studies abroad.

Sending students to obtain their PhDs abroad brought other benefits as we were developing our own doctoral program. For example, one of our professors studied and obtained her PhD at the University of Texas at Austin. Her successful completion can in part be attributed to the fact that she had a specific phenomenon of interest (reducing adolescent sexual risk behavior) prior to the start of her doctoral program. As a result, her focus provided the opportunity to take advantage of more targeted courses and related research activities. Just as valuable was the learning experience in another country, which informed our program development, specifically related to prevention approaches, interdisciplinary learning, and strengthening the link of research to practice and policy.

Barriers and Strategies to Program Development and Implementation

There have been six cohorts of students admitted since the doctorate in nursing sciences started, and by 2011, 12 students have graduated. Eleven Mexican alumni have returned to their home institutions in different states of Mexico, and a Chilean graduate is working

in a nursing school in the U.S. One graduate has become the dean of the nursing school of Universidad de Pachuca, Hidalgo; another one is the chief nurse of the health department in the state of Tabasco. Two other graduates are responsible for the research or graduate studies, and one graduate is in charge of the international mobility program. All continue to teach baccalaureate students. One has been accepted as candidate in Mexico's National System of Researchers. Several other graduates have been awarded national research awards.

Since 2010, we have conducted a comprehensive analysis of the program, including evaluations from faculty and students. As a result of the assessment and in the context of other university and federal requirements and available resources (Secretaría de Investigación, Innovación y Posgrado, 2011), we have made changes. These changes align the program with current advances in science and with changes in educational standards and pedagogy.

While we have had many successes in the program, there are several challenges we are seeking to address. A major issue has been the English proficiency of our students and faculty. Despite overall improvements in English proficiency, it remains one of the most challenging barriers that limits the understanding and dissemination of research in publications and presentations and limits exchange with faculty colleagues from other countries. It has further limited the availability of research experiences and residencies to Spanish-speaking countries or Brazil. We have developed a plan to provide opportunities for English intensive courses during the summer in the U.S. or Canada, but financing such opportunities remains a challenge. One successful strategy that we have employed is to invite international researchers as visiting faculty to expose faculty and students to different perspectives in conducting and presenting research.

The most critical area, however, remains the need to develop human capital in research. For many students, finding expertise in certain areas of science (e.g., genetics) is limited. Thus, the depth of knowledge, resources, and support needed to conduct research at the doctoral level is limited. Further, the numbers, availability, and skill of nursing faculty with doctoral training remain scarce. Some recent graduates have not been able to advance their own programs of research and are not qualified to guide students in their dissertations. There are few opportunities for post-doctoral studies and many faculty members are not able to develop a program of research because the expectations and opportunities for research within their institution are not available.

GLOBALIZATION IN DOCTORAL EDUCATION IN NURSING

In summary, doctoral education in nursing in Mexico is in its infancy, and we have a long road ahead to ensure we make the impact we know we can make in improving the health of the population. While we have much to do, we also recognize we have accomplished a great deal. We were successful in developing and implementing a doctoral program in nursing. We have been successful in graduating several cohorts of students who are well prepared to conduct independent research and lead health policy changes. Importantly, we have raised the stature of nursing through recognition of our program within CONACYT and also acceptance of many of our PhD graduates and faculty as part of the National System of Researchers.

Our long-term goal is to expand our graduates' area of interest beyond nursing, allowing them to make connections with colleagues from other areas and parts of the world. These connections are facilitated by strong collaborations with international colleagues who were a part of our program development from the beginning and who continue to support the research residence of our students. These opportunities expose students to contexts in which they observe the role of expert researchers, participate in interdisciplinary exchanges, learn advanced methodology, and have access to unlimited published research. This experience further provides an opportunity to network with colleagues from other countries and different areas to create collaborative networks to address issues that are common within our discipline and ultimately address issues that benefit communities in our respective countries.

While we share in the same vision for a bold future of nursing, specifically in the area of development of PhDs, our strategies are different. We remain committed to learning and sharing with colleagues across the border to improve the health of our communities.

REFERENCES

Asociación Nacional de Universidades e Instituciones de Educación Superior. (2011). Población escolar total según nivel educativo [Student population by educational level]. In *Asociación Nacional de Universidades e Institutos de Educación Superior.* Retrieved on July 9, 2011, from http://www.anuies.mx/servicios/e_educacion/docs/web_2008_2009/ GENERAL2009-1.xls

Chan, M. (2008). *Globalización y salud*. Retrieved from World Health Organization website: http://www.who.int/dg/speeches/2008/20081024/es/

Gallegos, E. C. (2001, February 6). P*ropuesta de programa de Doctorado en Ciencias de Enfermería.* [Proposal for a Ph.D. program in Nursing Science]. Secretaría de Programas de Doctorado, Facultad de Enfermería, Universidad Autónoma de Nuevo León.

Gallegos, E.C., Villarruel, A.M., Loveland-Cherry, C., Ronis, D.L., and Zhou, Y. (2008). Intervención para reducir riesgo en conductas sexuales de adolescentes: Un ensayo aleatorizado y controlado [Adolescent sexual behavior risk reduction intervention: a randomized and controlled study]. *Salud Pública de México, 50*, 1-10.

Gobierno de Nuevo León. (2012). Programa estratégico de ciencia, tecnología e innovación: programa especial: plan estatal de desarrollo 2010-2015 [Strategic program for science, technology, and innovation: Special program: state development program 2010-2015]. In *Instituto de Innovación y Transferencia de Tecnología*. Retrieved on July 9, 2012, from http://www.mtycic.com.mx/docs/ped.pdf

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health.* Washington, DC: The National Academies Press.

Instituto Nacional de Estadística y Geografía (INEGI). (2010). Principales resultados del censo de población y vivienda 2010. [Main results from the population and housing census 2010]. In *INEGI* website. Retrieved April 18, 2012 from : http://www.censo2010. org.mx/

Kupfer, A. (2011). Towards a theoretical framework for the comparative understanding of globalisation, higher education, the labour market and inequality. *Journal of Education and Work, 24*(1-2), 185-208.

Secretaría de Educación Pública. (2011). Articulación de la educación básica (Acuerdo número 592). [Articulation of basic education (Agreement No. 592)]. In *Secretaría de Gobernación* website. Retrieved April 18, 2012 from: http://basica.sep.gob.mx/reformasecundaria/doc/sustento/Acuerdo_592_completo.pdf

Secretaría de Investigación, Innovación y Posgrado, Universidad Autónoma de Nuevo León. (2011). *Modelo académico de posgrado: Primera actualización* [Post Baccalaureat Academic Model: First Update]. In Universidad Autónoma de Nuevo León. Retrieved on March 12, 2012, from http://www.uanl.mx/sites/default/files/Modelo.Academico. posgrado.pdf

World Health Organization. (2012). *Globalization and health*. Retrieved from http://www. who.int/trade/glossary/story044/en/index.html



PROGRESO, PODER, Y PROMESA

Antonia M. Villarruel, Editor and Sara Torres, Co-Editor

This book advances the work of the IOM report, *The Future of Nursing: Leading Change, Advancing Health*, by discussing evidence-based programs which contribute to the successful increase of Hispanics in the nursing workforce.

Susan Hassmiller, PhD, RN, FAAN, Robert Wood Johnson Foundation Senior Adviser for Nursing

Hispanic Voices: Progreso, Poder, y Promesa examines advances in Hispanic nursing education that can be widely implemented to address the disparity of Hispanics in the nursing workforce. It is a must-read for educators.

Susan C. Reinhard, PhD, RN, FAAN, Senior Vice President, AARP Public Policy Institute and Chief Strategist, Center to Champion Nursing in America

Hispanic Voices: Progreso, Poder, y Promesa presents a wide perspective on the progress, power and promise of Hispanic nurses. The authors make specific recommendations for the career development and mobility of Hispanic nurses and discuss how Hispanic nurses can reshape the landscape of nursing.

Carmen J. Portillo, PhD, RN, FAAN Professor, Department of Community Health Systems, School of Nursing, University of California San Francisco; Past President, National Association of Hispanic Nurses



National League for Nursing 61 Broadway • New York, NY 10006 800-669-1656 or 212-363-5555 www.nln.org



©2012 National League for Nursing. All Rights Reserved. Printed in the U.S.A.