Nurses focus on environment

Programs aimed on public health

By Gary Hornbacher
Contributing Writer

In recent years, we have all become more sensitized to the issue of environmental health. Pollution, contamination of food and water, indoor and outdoor air quality issues, lead paint, toxins in health and beauty aids, etc. Well, we surely all get the point — there are myriad risks inherent in our daily environment and some are especially vulnerable to these hidden dangers.

It’s a focus that increasingly involves many disciplines, both from within and outside the healthcare community. On the broad level, it involves research, assessment, advocacy, policy development and community education; on a more personal scale, the patient-provider level, it finds dedicated healthcare professionals incorporating new understanding and new skills into their daily practices.

Among them nurses.

Here in Maryland, two world-renowned universities are leaders in preparing nurses for new and exciting roles in environmental health. The University of Maryland School of Nursing (UMSON) is the only nursing school in the country offering a master’s degree (and post-master’s certificate) in environmental health nursing.

Over at the Johns Hopkins Bloomberg School of Public Health, which includes an Occupational and Environmental Health Nursing (OEHN) program, educators proudly point to a joint master’s of Public Health and Nursing (MSN/MPH) degree program and the first doctoral program in the world to offer nurses preparation in environmental nursing. (FYI: The University of Maryland School of Nursing has been graduating doctorally-prepared nurses in environmental health for a number of years now.)

Both programs share similar roots — dating back to the mid-1990s when a seminal report on environmental health nursing put out by the Institute of Medicine concluded there was a paucity of needed formal training in practice, research and teaching — but have differing focus.

Strong interdisciplinary focus at Johns Hopkins

At Johns Hopkins, Jacqueline Agnew, RN, MPH, Ph.D., a professor in the department of environmental health sciences and director of the Education and Research Center for Occupational Safety and Health, says the environmental nursing focus builds on obvious tie-ins to a strong interdisciplinary educational program that incorporates new understanding and new skills into their daily practices.

"We teach nurses about exposures in homes, workplaces, school settings or what we call the community — inside and outside," says Agnew. "It is very hard to get a handle on because employers are so varied." Nationally, explains Agnew, there are 16 other university centers like the multidisciplinary center for safety and health at Johns Hopkins. All are funded by the National Institute for Occupational Safety and Health, or NIOSH, and, like Hopkins, have associated nursing programs.

"The lines are blurred between occupational and environmental health," adds Agnew. "Differences blur because we deal with the same exposures and the same health effects; we are often dealing with the same client."

UMSON helps build national standards

At UMSON, where Barbara Satter RN, DrPH, FAAN, a professor and director, heads up the Environmental Health Education Center, the focus on environmental nursing reaches out not only to nurses doing community-based work but also to nurses found in hospitals and a broad variety of other settings, including the private sector.

"We teach nurses about exposures in homes, workplaces, school settings or what we call the community — outside — settings," says Satter, "and our students learn about the risks associated with all media — meaning air, water, food, soil and even consumer products — and we teach about population-based approaches. But we also look at environmental health in terms of the special vulnerabilities patients may have over the course of a lifetime and what nurses need to know and do in their individual specialties and subspecialties."

Environmental nursing, to paraphrase Satter, is not just dealing with community-wide, population-based kinds of health issues like food contaminants, pesticides in the soil or toxins in the air or water but it also touches all specialties in a multitude of ways — from a nurse midwife or visiting nurse dealing with special vulnerabilities to environmental exposures to nurses themselves in hospital settings.

And what the UNSOM environmental nursing degree and certificate programs do, she explains, is provide the kinds of education and added layers of assessment tools to not only assess a patient but also their environment.
“We give them another set of questions and then we give them another whole set of resources so that they can heed early warnings and provide anticipatory guidance,” says Sattler. “We teach them how to look at things upstream and from a much higher vantage point to better prevent disease and promote health.” Nurses who want to acquire this additional layer of skills presently can choose between UMSON’s master’s in environmental nursing and the post-master’s certificate course. At the heart of both are three three-credit courses – an introductory course that teaches how to do environmental assessments (home, school, work, community); applied toxicology; and a final advanced environmental health course that focuses on topical issues and where the resources are.

Of note, UMSON’s environmental nursing course content is available online, enabling students from distant locations to commute electronically. (Both the UMSON and Johns Hopkins programs, incidentally, have a clinical component, too.) “Many of our graduates are now in leadership positions in their hospitals, leading hospital Green Team and coordinating hospital sustainability efforts; in their nursing subspecialty organizations creating environmental health committees and helping to integrate environmental health into nursing practice; and in government positions – state and federal agencies.

In an effort to more broadly affect nursing practice, UMSON has helped create a national organization called the Alliance of Nurses for Healthy Environments, which has already resulted in several nursing subspecialties becoming members (school nurses, Hispanic nurses, public health nurses, midwives) – members already working collaboratively to exchange information, share tools and even collaboratively writing an online textbook on environmental health for nursing.

This latter activity is in response to the fact that many present-day nursing faculties across the country still lack a comfort level when it comes to environmental health issues as they apply to nursing. Small wonder, then, and smiles all around when a recently offered UMSON program trained 48 nursing faculty from around the country so that they could go back to their respective schools of nursing and begin working on integrating environmental health into their existing curriculum.

**What’s the future hold in environmental nursing?**

The new baccalaureate criteria in nursing, which is a national standard, includes environmental health and it is saying all nurses should learn a little something about environmental health.

“There need to be nurses around the country who dig in deeply into environmental health,” says Sattler, “but the rest of the nurses will also need to have a little piece of this and the piece they take must organically fit into their nursing practice in their practice setting.” “I think we will see more and more formal educational programs [in environmental nursing],” says Agnew, “but in the field I think we [already] have the basics covered because we have baccalaureate programs like Maryland’s; master’s programs in both nursing and public health; and we have Ph.D. and DrPH research. We also have different forms of certificates and some schools have nurse practitioner programs for those doing hands-on care, so I think in terms of types of programs we’ve pretty much covered the bases.” •

Designed for nurses who are interested in the environment and its impact on health, environmental nursing starts with health issues like water quality, air quality, indoor air issues, food production, food quality and other environmental health subjects. Advocacy, policy, health assessment, community education and community-based research are emphasized but relevance also can extend to individualized practice settings.

To learn more about environmental nursing program opportunities, why not check out these web sites:

At UMSON see [http://nursing.umaryland.edu/programs/ms/community.htm](http://nursing.umaryland.edu/programs/ms/community.htm) and [www.enviRN.umaryland.edu](http://www.enviRN.umaryland.edu)

At JHU, see [www.jhsphs.edu/erc/oehn.html](http://www.jhsphs.edu/erc/oehn.html) or go to the general Web site for the entire center (multi-disciplinary), which includes the OEHN program: [www.jhsphs.edu/erc/index.html](http://www.jhsphs.edu/erc/index.html)