

Resources for Integrating Environmental Health Content into the Curriculum

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Every day, nurses are called on to respond to common health complaints and diseases that may be linked to environmental factors, such as asthma, diabetes, lead poisoning, and cancer. To meet the growing need to prevent health risks associated with environmental exposure, environmental health content must be integrated into the curriculum of all pre-licensure nursing programs. Registered nurses play a key role as primary health providers in a variety of care settings, and all RNs have opportunities to evaluate clients for environmental and occupational exposures and potential risks. As a profession, modern nursing has viewed health holistically by recognizing the importance of the environment in work, home, and recreational settings.

In 2010, the American Nurses Association (ANA) updated the document *Nursing: Scope and Standards of Practice*, which reflects the evolution of nursing practice with the inclusion of environmental health into the role of the registered nurse. Standard 16 states: "The registered nurse practices in an environmentally safe and healthy manner" (ANA, 2010, p. 11). Not new to nursing practice and standards, the inclusion of environmental health practice and advocacy are long standing in the foundation of nursing's heritage, as evidenced in the writings of Florence Nightingale (1912) in *Notes on Nursing: What it is and What it is Not*. As sister Callista Roy commented on Nightingale's work (1992), "No amount of medical knowledge will lessen the accountability for nurses to do what nurses do; that is, manage the environment to promote positive life processes" (p. 66).

It is imperative that environmental health information be included in the 'toolbox' that every nurse brings into his or her compass of care. In everyday practice, nurses are expected to respond to



health concerns that may have a variety of environmental components. In fact, many common health complaints and diseases may be linked to environmental factors. All nurses can play an integral role to advocate for healthier environments for clients, communities, and themselves by identifying sources of preventable exposures and developing strategies to minimize or eliminate them. Just as vital, nurses must have environmental and occupational health information to protect themselves from potential harmful exposure in the workplace.

It is critical for nurses to have knowledge of environmental dangers and access to resources to address hazards in every health care delivery setting. Nurses and other health care team members are exposed to hazardous materials including housekeeping chemicals, medication, radiation, anesthetic gases, sharps, and infectious waste. Exposure to these toxins can lead to increased rates of asthma, miscarriage, certain cancers, and increased rates of birth defects. As front-line health care workers, nurses have a unique role as champions for positive environmental change within health care

facilities and beyond. Nurses must have the information and resources to protect themselves to ensure their health and safety and to protect the health and safety of their families and the communities where they live and work.

Shaping an environmentally savvy nurse must begin in nursing school. Environmental health content can be introduced in the very first lecture. For example, in the Connecticut Community College Nursing Program (CT-CCNP), the first freshmen lecture, "Contemporary Nursing Practice," teaches students about historical leaders in nursing, including Florence Nightingale. The students are given details on Nightingale's contributions to nursing including reforming hospitals, improving the standards of care for casualties of the Crimean War, and creating and implementing public health policies (Berman, 2008).

In 2009, the National Student Nurses' Association (NSNA) House of Delegates took a leadership role in promoting environmental health by adopting the resolution, "In Support of Increasing Environmental Health Advocacy and Education." The resolution contained three components: to encourage its constituents to advocate for environmental health awareness, to advocate for the inclusion of environmental health education into nursing curricula, and for NSNA to demonstrate its commitment to increased environmental health awareness by becoming a Beacon of The Luminary Project (if feasible). This resolu-

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tion is a call to action for all nursing programs to give future leaders in nursing the tools they need to advocate for environmental health.

Environmental health education in the nursing curriculum may also include Florence Nightingale as the first documented environmental nurse. Nightingale recognized that nurses play an integral role in identifying risks and implementing environmentally responsible practices in hospitals and communities. Nightingale observed that the patient's environment had an important role not only in the patient's illness, but also in the patient's recovery. In *Notes on Nursing: What It Is and What It Is Not*, Nightingale noted, "the symptoms or the sufferings generally considered to be inevitable and incident to the disease are very often not symptoms of the disease at all, but of something quite different – of the want of fresh air, or of light, or of warmth, or of quiet, or of cleanliness, or of punctuality and care in the administration of diet, of each or of all of these. And this quite as much in private as in hospital nursing" (1912, p. 8).

Environmental health education can continue throughout a student's progression in the nursing program. In nearly every content area, information about environmental health can be readily integrated. For example, in the context of vital signs, this would include informing students of the dangers of mercury that may be in thermometers still used in some homes and devices containing mercury in some patient care areas. Mercury is a strong neurotoxin that can damage the brain and kidneys and cause injury to a developing fetus (National Library of Medicine, 2013). In pharmacology, making the students aware of proper disposal of unwanted medications can be a crucial link in avoiding contamination of water supplies. Students can carry this information into each clinical setting including community health nursing, where they can provide education regarding safer disposal of medications to wider audiences.

In community health nursing, nursing students can play active roles in surveying the environmental health of their community by completing an informal "windshield" survey (National Network of Libraries of Medicine, 2013). Students drive around the community and assess the strengths and deficits of the geographical area. For example, students can note the type of housing available in the area. In their research, the students may consider an area with older homes as

potential sources for asbestos and lead paint. The risk of lead poisoning for children in the area is high and should be considered during physical assessment. The students also take notice of resources within the community that may decrease the area's carbon footprint. For example, are there stores in the area for residents to walk to, avoiding the need for a car or mass transportation? During the windshield survey, the students can consider the amount of safe "green" spaces including trees, grass, and gardens that are available for activities, socialization, and reflection.

NSNA encourages school and state chapters to conduct community health projects. These projects may address specific environmentally related illnesses (such as lead poisoning), encourage communities to replace plastic bags with recyclable bags, and teach school children how to recognize sources of pollution and hazardous waste. Each year, NSNA recognizes chapters for their work in community health through an awards program and in the NSNA Leadership University program (NSNA, 2013).

There are many tools to assist educators to integrate evidenced-based environmental health information into their nursing curriculum. The Alliance of Nurses for Healthy Environments (ANHE) (www.envirn.org) is the "on-line presence for all nurses interested in environmental health." There are four main workgroups within ANHE: Education, Practice, Research, and Policy/Advocacy (each with open membership). The site includes a "road map" of nursing curricular content areas aligned with the nursing competencies of the National League for Nursing's *Outcomes and Competencies for Graduates of Practical/Vocational, Diploma, Associate Degree, Baccalaureate, Master's, Practice Doctorate, and Research Doctorate Programs in Nursing* (2010); and ANA's *Nursing: Scope and Standards of Practice* (2010). Each content area contains suggested activities for inclusion of environmental health content and associated activities in pre-licensure programs are available on the ANHE Web site. An electronic textbook on the site includes curriculum recommendations, teaching strategies and tools, and an *EnviRN Navigation Guide* (ANHE, 2013).

Leadership classes may consider utilizing The Luminary Project as a source for information about nurses making a difference in environmental health in projects. "The Luminary Project: Nurses Lighting the Way to Environmental Health," is an effort to capture the illuminating stories of nurses' activities to improve human

health by improving the health of the environment (Luminary Project, 2013). There are many stories in The Luminary Project of nurses making a difference to reduce environmental health risks in the United States and beyond. Students can explore the stories and experience the passion that each luminary has for environmental issues and become inspired to pursue changes in their own backyard. Many of the nurses participating in The Luminary Project are eager to be mentors to nurses and students interested in improving environmental health and awareness.

As one of the most trusted professions, the education of nurses must include environmental health content so that they can protect themselves, co-workers, their families, and communities. The public's increasing awareness of all things "green" and how the environment affects health creates a demand for nurses to comprehend the connection between human health and the environment. All nurses, current and future, are called to action to play a pivotal role to improve human health by improving the health of the environment. **DN**

References

- Alliance of Nurses for Healthy Environments. (2013). *EnviRN navigation guide*. Retrieved from <http://envirn.org/pg/groups/24526/for-educators/>
- American Nurses Association (ANA). (2010). *Nursing: Scope and standards of practice* (2nd ed.). Silver Spring, MD: Author.
- Berman, A.S. (2008). *Fundamentals of nursing*. Upper Saddle River, NJ: Pearson Education, Inc.
- Luminary Project, The. (2012). *The Luminary Project: Nurses lighting the way to environmental health*. Retrieved from <http://www.theluminaryproject.org>
- National League for Nursing (NLN). (2010). *Outcomes and competencies for graduates of practical/vocational, diploma, associate degree, baccalaureate, master's, practice doctorate, and research doctorate programs in nursing*. New York: Author.
- National Library of Medicine. (2013). *MedlinePlus: Mercury*. Retrieved from <http://www.nlm.nih.gov/medlineplus/mercury.html>
- National Network of Libraries of Medicine (NN/LM). (2013). *Guide 1: Set the direction with a community assessment*. Retrieved from <http://nnlm.gov/outreach/community/planning.html>
- National Student Nurses' Association (NSNA). (2009). *Resolutions 2009*. Retrieved from <http://www.nсна.org/Portals/0/Skins/NSNA/pdf/Resolution2009.pdf>
- Nightingale, F. (1912). *Notes on nursing: What it is, and what it is not* [Electronic version]. New York: D. Appelton. Retrieved from <http://books.google.com/books?id=emANAAAYAAJ&>
- Roy, C. (1992). Vigor, variables, and vision: Commentary on Florence Nightingale. In Carroll, D.P. (Ed.), *Notes on Nursing: What it is and what it is not* (Commemorative Edition). Philadelphia: Lippincott, Williams & Wilkins.

2013 NCLEX-RN Test Plan Now in Effect

The 2013 NCLEX-RN Test Plan (https://www.ncsbn.org/2013_NCLEX_RN_Test_Plan.pdf) went into effect on April 1, 2013. A number of changes/clarifications were made between the 2010 NCLEX-RN Test Plan and the 2013 NCLEX-RN Test Plan, including:

- The definition of *client* as the individual, family, or group, which includes significant others and population, was added.
- The new test plan further clarifies the NCLEX setting in order to help the public better understand the NCLEX exam and potential exam questions.
- The results from the *2011 RN Practice Analysis: Linking the NCLEX-RN Examination to Practice* suggested that the Management of Care and Safety and Infection Control client needs categories of the RN test plan required an increase in test plan percentages (which is the percentage of items in the test plan content area that will be on each exam). In general, the practice of newly licensed nurses suggests activities in these two areas have increased in significance of frequency and criticality

based on maintenance of client safety and decreasing the occurrence of complications.

The following content changes were made in each of the Client Needs Categories:

- In the first category, Management of Care, there was an increase in emphasis by 1%.
- In the second category, Safety and Infection Control, there was an increase by 1%.
- In the third category, Health Promotion and Maintenance, Health and Wellness was subsumed under Health Promotion and Maintenance content and Principles of Teaching/Learning was removed as a bullet because it is an integrated process found throughout the entire test plan.
- In the fourth category, Psychosocial Integrity, Substance Use Disorder was added to Chemical and Other Dependencies, and Cultural Diversity was replaced by Cultural Awareness/Cultural Influences on Health for clarification.

No changes were made to the Basic Care and Comfort, Pharmacological and

Parenteral Therapies, Reduction of Risk Potential, and Physiological Adaptation categories of the RN test plan.

These changes to the test plan are also outlined in the 2013 NCLEX-RN Detailed Test Plan, which offers a more thorough and comprehensive listing of content for each client needs category and subcategory as outlined in the test plan. The 2013 NCLEX-RN Detailed Test Plan exists in two versions, a Candidate Version (https://www.ncsbn.org/2013_NCLEX_RN_Detailed_Test_Plan_Candidate.pdf) and an Item Writer/Item Reviewer/ Nurse Educator Version (https://www.ncsbn.org/2013_NCLEX_RN_Detailed_Test_Plan_Educator.pdf). The versions are identical in content except the Item Writer/Item Reviewer/Nurse Educator Version offers an item writing guide and a section with case scenarios to provide nurse educators with additional item examples.

The NCLEX-RN Test Plan is reviewed every three years by NCSBN. Changes are based upon empirical data collected from several sources, including newly licensed nurses, the expert opinion of the boards of nursing and the NCLEX Examination Committee. For more information, go to <https://www.ncsbn.org/nclex.htm>. **DN**

NSNA Upcoming Events

NSNA Annual Summer Leadership Conference

July 26, 2013

Mt. Sinai Hospital, New York, NY

31st Annual MidYear Career Planning Conference

"Navigating the Journey to Your Future Career"

November 7-10, 2013

Galt House, Louisville, KY

Program includes special faculty program and continuing education credit.

62nd Annual NSNA Convention

April 9-13, 2014

Gaylord Opryland Resort, Nashville, TN

Visit www.nсна.org for complete details on these and other upcoming events.

Jesse Kennedy Elected 2013-2014 President of the National Student Nurses' Association

The National Student Nurses' Association is pleased to announce the election of Jesse Kennedy as the 2013-2014 NSNA President. Elections were held on April 6, 2013, during the 61st Annual Convention in Charlotte, North Carolina. Mr. Kennedy is finishing his final semester at Lane Community College in Eugene, Oregon, where he will earn an Associate Degree in Nursing (ADN) in June 2013. His education continues this fall as he looks forward to earning a Bachelor of Science in Nursing (BSN) at Oregon Health and Sciences University.

Mr. Kennedy knew he would run for NSNA leadership after attending the NSNA 60th Annual Convention in April 2012. "The amount of energy and inspiration that I received from that week was indescribable," he says. "I knew that I wanted to be a part of this impressive group of student leaders and help lead this amazing organization."

He hopes to energize and empower students to make a difference in their individual communities. "I am extremely passionate about advocating for my fellow student nurses, nurses, and patients," he says. "I want to ensure that NSNA students know that there are resources to ensure their success in making a lasting difference in their community."

Looking ahead beyond his years at NSNA, Mr. Kennedy hopes to pursue a Master of Science in Nursing degree and eventually operate a wellness clinic. **DN**

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NCSBN Celebrates 35th Anniversary with Donation to FNSNA

The National Council of State Boards of Nursing (NCSBN) is making two special donations, totaling \$170,000, in celebration of its 35 years of nursing regulatory success.

NCSBN will donate \$135,000 to the Foundation of the National Student Nurses' Association (FNSNA) to provide scholarships to qualified undergraduate nursing students. FNSNA was created in 1969 to honor Frances Tompkins, NSNA's first Executive Director. Since 1974, FNSNA has awarded more than \$2 million in scholarships to undergraduate nursing students. The NCSBN Endowed Scholarship Fund was established in 2009.

"This generous contribution for undergraduate nursing education will support students to achieve their educational goals. Scholarships not only provide financial support, they inspire students to maximize their potential and to reach new heights as they prepare for their nursing careers. We sincerely appreciate all of the support that the NCSBN provides for undergraduate nursing education," stated Diane J. Mancino, EdD, RN, CAE, FAAN.

NCSBN will also donate \$35,000 to the Florence Nightingale International Foundation for its Girl Child Education Fund (GCEF), to support the primary and secondary schooling of girls under the age of 18 in developing countries whose nurse parent or parents have died. This donation will go toward school fees, uniforms, shoes and books. FNIF is the International Council of Nurses' (ICN) premier foundation; it supports and complements the work and objectives of ICN.

"ICN is sincerely grateful to NCSBN for its generous support of the Girl Child Education Fund," said David C. Benton, BSC,

MSC, MPhil, RGN, RMN, CEO of the International Council of Nurses. "Thanks to donations such as these we have enabled over 130 girls to complete high school; many of whom have gone on to tertiary education. By supporting these girls, the NCSBN is showing solidarity with their nursing colleagues in sub-Saharan Africa, whose harsh working conditions may threaten the livelihood and future of their children. We know that educating girls leads to better health for themselves, their families and their communities, and we thank the NCSBN for their generous gift."

These donations will be presented during NCSBN's anniversary celebrations at its Annual Meeting and Delegate Assembly, August 14-16, 2013, in Providence, RI.

Founded March 15, 1978, as an independent not-for profit organization, NCSBN was created to lessen the burdens of state governments and bring together boards of nursing (BONs) to act and counsel together on matters of common interest. NCSBN's membership is comprised of the BONs in the 50 states, the District of Columbia, and four U.S. territories – American Samoa, Guam, Northern Mariana Islands, and the Virgin Islands. There are also 12 associate members that are either nursing regulatory bodies or empowered regulatory authorities from other countries or territories. NCSBN Member Boards protect the public by ensuring that safe and competent nursing care is provided by licensed nurses. These BONs regulate more than 3 million licensed nurses, the second largest group of licensed professionals in the U.S. **DN**

