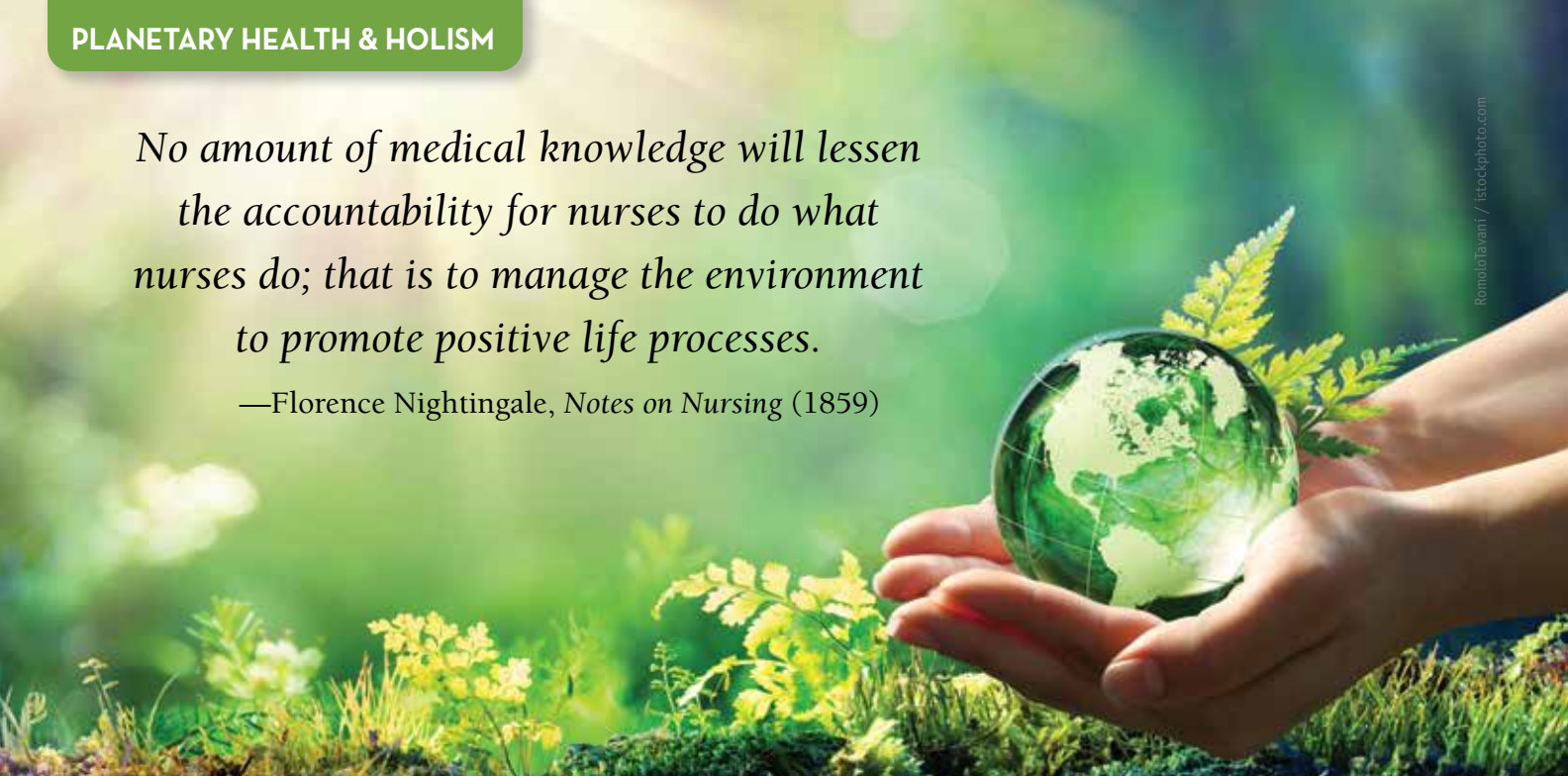


*No amount of medical knowledge will lessen the accountability for nurses to do what nurses do; that is to manage the environment to promote positive life processes.*

—Florence Nightingale, *Notes on Nursing* (1859)



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## ENVIRONMENTAL INFLUENCES ON HEALTH: A Holistic Nursing Assessment

by SUSAN J. LUCK, RN, BS, MA, CCN, HWNC-BC

Reflecting on our role as holistic nurses, how can we include environmental awareness, assessment, coaching, and education into our client practices and patient care? A growing awareness of the connection between human health and global environmental degradation precipitates much-needed action by concerned citizens, policy makers, healthcare advocates, and healthcare providers. There has never been a more critical time for nurses to raise both their concerns and their voices.

With more than 20 million nurses and midwives globally, and 4.5 million nurses in the United States, what is our potential role in changing the health of our communities? As holistic nurse leaders, how do we include the environment into a body-mind-spirit assessment and framework?

### Defining Environmental Health

The World Health Organization (WHO, 2006) defines environment, as it relates to health, as “all the physical, chemical, and biological factors external to a person, and all the related behaviors.” Environmental health includes preventing or controlling disease, injury, and disability related to the interactions between people and their environment. According to the *Global Environment Outlook 6*, a United Nations report published in 2019, a quarter of all premature deaths and diseases worldwide are due to manmade pollution and environmental

damage. The results of this analysis underscore the importance of stronger action to create healthier environments that will contribute to sustainability and improve the lives of millions around the world. According to the report, healthier environments could prevent almost one quarter of the global burden of disease. A few of the most significant environmental threats to human health include:

- Sea level rise and coastal communities
- Living near toxic waste sites
- Fracking and nuclear power plants
- Contaminated water
- Chemicals in our food sources
- Air pollutants
- EMFs and high-voltage power lines

### Climate Change

Phillip Landrigan, MD, professor of environmental medicine and public health, and Dean for global health at the Icahn School of Medicine at Mount Sinai in New York, states that global warming is doing far more than changing topography and weather. It is also having a series of devastating, detrimental effects on human health. Warmer weather not only exacerbates pollution, it also triggers longer and more severe pollen seasons, increasing the incidence of allergies and causing havoc for allergy sufferers, while exacerbating symptoms for those with

asthma. As infections, asthma, and allergy rates rise, so will the burden of these illnesses on our healthcare system. Everyone, regardless of income or geography, will become more vulnerable to these diseases (Landrigan, 2017).

### Chemicals in Our Food & Drinking Water

A top environmental concern are the chemicals applied in agriculture permeating our food supply. Modern processed foods are often depleted of protective plant-based phytonutrients that help filter, neutralize, and detoxify harmful pollutants in our environment. Food products too often are filled with artificial colorings, preservatives, flavorings, and many industrial ingredients. *Toxic body burden* stresses the immune system and compromises the body's ability to detoxify and eliminate many of these harmful substances (Luck, 2022). Environmental pollutants contribute to health problems linked to respiratory diseases, heart disease, and some types of cancer. People with low incomes are more likely to live in polluted areas and have unsafe drinking water, increasing their toxic body burden and susceptibility to disease. Children and pregnant women are at higher risk of health problems related to pollution and other exposures (Brusseau et al., 2019).

### Environmental Activism Inspired by Nightingale

If we are to ensure health and wellbeing for all human beings of the global village and restore integrity to the ecological systems that govern life, we must seek out opportunities to integrate this important work into practice, education, research, and policy settings. Florence Nightingale's legacy informs our holistic nursing Core Values and the critical planetary health issues of our time — issues addressed in the United Nations' 17 Sustainable Development Goals (SDGs) (see sidebar on p. 16). As global citizens inspired by the vision of Nightingale, we can use the SDG framework to become environmental activists contributing to global health — through local means — empowering each of us to nurture healthy people living on a healthy planet (Rosa, 2019).

At the heart and spirit of Florence Nightingale's legacy is the knowledge that our external environment is inextricably interconnected to health and wellbeing. Nightingale focused not only on problems, but she also sought solutions that guide us today. She engaged in what we today call *risk assessment* and asking questions such as “What is considered safe drinking water in our communities?” and “How much atmospheric pollution is a risk factor in urban environments?” Modern environmental initiatives and movements are part of a general societal intention to sustain a habitable planet now and in years to come. Assessing and identifying environmental health risks and potential hazards, including those within the workplace, is critical to the health of individuals, families, and communities.

In amplifying Nightingale's voice as an environmentalist, nurses are leading initiatives in health care and increasingly becoming environmental advocates. By assessing the environments in which people live, work, and play, nurses are

**Toxic Body Burden** = The lifelong accumulation of toxic chemicals that we are exposed to through food, air, and the environment.

integrating environmental awareness, education, and preventive health strategies, and thus, are improving health outcomes on local to global levels.

### Health Advocacy & Policy

Advocacy and establishing informed policies is key to improving health — local to global. *Healthy People 2030*, a U.S. Department of Health and Human Services initiative, focuses on reducing people's exposure to harmful pollutants in air, water, soil, food, and materials in homes and workplaces through laws and policies at the local, state, territorial, and federal level. Evidence-based health policies can help prevent disease and promote health across the life span. Nurses are uniquely positioned to join with community leaders and policy makers to both explore the problems and seek creative solutions (Luck, 2022).

### The Holistic Nurse's Role in Building Environmental Health Awareness

Our modern world raises new issues and concerns for nurses, working in every sector of society. In our holistic nursing practice, as clinicians, educators, and coaches, we assist others in exploring their options and encourage and support them in making life-affirming choices. Holistic nurses are in an ideal role to access the fountainhead of wisdom and strength within, and to assist others to reclaim their own inner strength. This work, as in all authentic endeavors, strives for an environmentally conscious life, aspiring to be part of a larger whole. The first step towards environmental health awareness is holistic assessment for self, community, and others.

### Environmental Assessment for Self

When assessing our personal stressors, it is important to include noise levels, indoor and outdoor air quality, green space, and workplace toxins. Our internal and external environments are intertwined. Our lifestyle choices and self-care practices, including how we manage stress, our sleep habits, physical activity levels, social support networks, and our food preferences, all can influence and impact our overall quality of life. We can offer information and tools that bridge the scientific research with practical strategies that nurses can use to support their own health and wellbeing and to inspire and empower our colleagues and communities in advocating for healthier environments.

### Environmental Assessment for Communities

Holistic nurses are in the perfect role to educate, advocate and coach our patients, families, and communities toward healthier

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lifestyles including healthier eating choices and creating healing environments. Below are just a few examples of questions we can ask when assessing our environments:

- What is the history of environmental concerns in your community?
- What is the quality of the air, the water, and the green space?
- Do you see a relationship between health problems and environmental influences in your community?
- Have customs or habits in your community changed as a result of environmental pollution?
- Has there been community advocacy for addressing the environmental concerns?
- After assessing the health of the community, what is the next step in addressing environmental issues?

### Environmental Assessment for Patients & Clients

An environmental health questionnaire is an essential component of any integrative, holistic assessment. Integrative Nurse Coaches, and holistic nurses, use environmental assessment tools in their inquiry to increase awareness of potential environmental influences impacting one's health. This allows for further exploration and for creating strategies and choices to consider how their environment may have contributed to dis-ease and can lead to improving health outcomes. One example is the *Integrative Health and Wellbeing Assessment™* (IHWA), found in the International Nurse Coach Association's textbook, *Nurse Coaching: Integrative Approaches for Lifestyle Health and Wellbeing* (Dossey et al., 2015), or <https://ihwa.inursecoach.com/>.

Holistic nurses are acutely sensitive to the interplay between one's environment and one's health, integrating environmental awareness into a nursing framework. We know that the most

### U.N. Sustainable Development Goals (SDGs)

<https://sdgs.un.org/goals>

1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation, and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice, and strong institutions
17. Partnerships for the goals

“It is up to each of us to develop an environmental sensitivity in our daily lives...”

important tool we have to offer is modeling the way we live our lives. The core values and practice of holistic nursing includes our own self-care. It is up to each of us to develop an environmental sensitivity in our daily lives and become increasingly cognizant of our opportunities to institute positive change.

Take a moment and reflect on one change that you can make to create a healthier environment for yourself and your family today.

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