

## Chapter 6

# Nurses, Healthcare, and Environmental Pollution and Solutions: Breaking the Cycle of Harm

A. Elaine McKeown  
Independent Researcher, USA

### ABSTRACT

*Many nurses may not be aware of the role that healthcare plays in the cycle of harm. Healthcare participates in the cycle of harm by mismanaging waste, using fossil fuel energy and offering meat-based diets. Lack of knowledge, resources and empowerment potentiate this participation. Greenhouse gas emissions from fossil fuel use and meat-based diets, with resultant water pollution, contribute to climate change. Climate change and healthcare source pollution in water from mismanaged waste, contributes to illnesses of community members. Once sickened, individuals come to the healthcare center for treatment. This illness care then contributes to more environmental pollution. Specific human health consequences of resultant water pollution and climate change will be discussed. With healthcare professionals collaborating with others concerned, the connections potentiating this cycle of harm can be broken. Recommendations will be offered for healthcare's forward movement to help create the solutions to the pollution.*

### INTRODUCTION

Nursing professional scope does include evaluating and correcting environmental factors to improve human health. From the Nightingale foundational concepts in the eighteen hundreds (Nightingale, 1969) to the American Nurses Association's (ANA) *Principles of the Environmental Health for Nursing Practice with Implementation Strategies* (American Nurses Association [ANA], 2007) a helpful framework is set for healthcare's forward movement into the twenty-first century.

Florence Nightingale was not only the founder of the modern nursing profession, she was a pioneer in recognizing the environment as a key factor in determining if a patient would recover from his wounds

DOI: 10.4018/978-1-5225-1674-3.ch006

or die. She reduced the death rate of those wounded in the Crimean War dramatically by providing a hygienic environment including clean water, clean air, clean linen and frequent wound cleansing followed by an application of clean bandages (Dossey, 1999).

According to the ANA (2007) there are ten principles of environmental health:

1. “Knowledge of environmental health concepts is essential to nursing practice.
2. The Precautionary Principle guides nurses in their practice to use products and practices that do not harm human health or the environment and to take preventive action in the face of uncertainty.
3. Nurses have a right to work in an environment that is safe and healthy.
4. Healthy environments are sustained through multidisciplinary collaboration.
5. Choices of materials, products, technology, and practices in the environment that impact nursing practice are based on the best evidence available.
6. Approaches to promoting a healthy environment respect the diverse values, beliefs, cultures, and circumstances of patient and their families.
7. Nurses participate in assessing the quality of the environment in which they practice and live.
8. Nurses, other health care workers, patients and communities have the right to know relevant and timely information about the potentially harmful products, chemicals, pollutants and hazards to which they are exposed.
9. Nurses participate in research of best practices that promote a safe and healthy environment.
10. Nurses must be supported in advocating for and implementing environmental health principles in nursing practice” (p.16).

The ANA’s principles most applicable to the current discussion include one, two, four, six, seven and eight. The writing of this entire chapter is built on principle one. This foundation in environmentalism will be demonstrated throughout the chapter. Also referred to in this chapter is principle two, the precautionary principle. According to principle two, healthcare workers do not need to wait until environmental conditions have caused irreparable harm to human health before taking action to mediate circumstances that could lead to such harm. Principle four talks about the need for multidisciplinary collaboration. In order to create a cleaner, safer and more sustainable future for humankind, this chapter will call on far-reaching professional networks to strive together to accomplish such an end. Principle six affirms that approaches to promoting a healthy environment respect the diverse values, beliefs, cultures, and circumstances of the patient and their families (ANA, 2007). This chapter will show environmental concerns are multinational and all cultural contexts are in need of solutions suited to individual regions, resources available and associated circumstances. Principle seven is about assessing the quality of the environment. As the chapter emphasizes, this environmental assessment is a legitimate and important part of a nurse’s scope of practice. Finally, principle eight emphasizes the right to know information about potentially harmful products and hazards. This right to know encompasses healthcare workers as well as the general community population. The current chapter will affirm that dissemination of this risk and hazard information can be an important part of a nurse’s role along with health education on measures that families can undertake to minimize their polluting behaviors. Recommendations will include discussion of who could take on this educational role and some suggestions and examples of how this could be done will be included.

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/nurses-healthcare-and-environmental-pollution-and-solutions/165808](http://www.igi-global.com/chapter/nurses-healthcare-and-environmental-pollution-and-solutions/165808)

## Related Content

---

### Untold Stories: Healthcare, Education, and Social Justice for African Americans

Darryl Scriven (2023). *Assessing the Need for a Comprehensive National Health System in the United States* (pp. 155-167).

[www.irma-international.org/chapter/untold-stories/315887](http://www.irma-international.org/chapter/untold-stories/315887)

### Exploring Early Adopter Baby Boomers' Approach to Managing Their Health and Healthcare

Deborah E. Seale, Cynthia M. LeRouge, Jennifer E. Ohs, Donghua Tao, Helen W. Lach, Keri Jupka and Ricardo Wray (2022). *Research Anthology on Improving Health Literacy Through Patient Communication and Mass Media* (pp. 289-315).

[www.irma-international.org/chapter/exploring-early-adopter-baby-boomers-approach-to-managing-their-health-and-healthcare/285417](http://www.irma-international.org/chapter/exploring-early-adopter-baby-boomers-approach-to-managing-their-health-and-healthcare/285417)

### Parameter Analysis of Electronic Gadgets During Homa: Smart City Healthcare Perspective With CPS and IoT

Rohit Rastogi, Mamta Saxena, Sheelu Sagar, T. Rajeshwari, Neeti Tandon, Mukund Rastogi and Mayank Sharma (2022). *International Journal of Applied Research on Public Health Management* (pp. 1-14).

[www.irma-international.org/article/parameter-analysis-electronic-gadgets-during/290381](http://www.irma-international.org/article/parameter-analysis-electronic-gadgets-during/290381)

### Exploring the Complex Nature of Ethical Cultures in Health Care Organizations

Darrell Norman Burrell, Nimisha Bhargava, Terrence Duncan, Preston Vernard Leicester Lindsay, Cherise M. Cole and Perna Sangle (2019). *International Journal of Applied Research on Public Health Management* (pp. 29-46).

[www.irma-international.org/article/exploring-the-complex-nature-of-ethical-cultures-in-health-care-organizations/232255](http://www.irma-international.org/article/exploring-the-complex-nature-of-ethical-cultures-in-health-care-organizations/232255)

### On the Possible Spatial Structures of the -Amyloid: The Native Structure of Proteins

Gennadiy Vladimirovich Zhizhin (2022). *International Journal of Applied Research on Public Health Management* (pp. 1-8).

[www.irma-international.org/article/possible-spatial-structures-amyloid/290380](http://www.irma-international.org/article/possible-spatial-structures-amyloid/290380)