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Environmental Health Professionals: Local Interprofessional Collaborations Require Global Thinking to Meet Shared Ethical Obligations



Editor's Note: In an effort to provide environmental health professionals with relevant information and tools to further the profession, their careers, and themselves, the National Environmental Health Association has teamed up with the American Academy of Sanitarians (AAS) to publish two columns a year in the *Journal*. AAS is an organization that “elevates the standards, improves the practice, advances the professional proficiency, and promotes the highest levels of ethical conduct among professional sanitarians in every field of environmental health.” Membership with AAS is based upon meeting certain high standards and criteria, and AAS members represent a prestigious list of environmental health professionals from across the country.

Through the column, information from different AAS members who are subject matter experts with knowledge and experience in a multitude of environmental health topics will be presented to the *Journal's* readership. This column strengthens the ties between both associations in the shared purposes of furthering and enhancing the environmental health profession.

Professor Daniel Oerther is a leader bridging interdisciplinary environmental health practice, teaching, research, and policy. He is a diplomate with AAS, president-elect of the American Academy of Environmental Engineers and Scientists, deputy-chair of the Chartered Institute of Environmental Health, and a lifetime honorary fellow of the American Academy of Nursing.

We can trace the origins of today's modern practice of interdisciplinary environmental health to the Great Sanitary Awakening and the twin developments of 1) densely populated urban environments and 2) the emergence of specialized professional practice as sanitarians, engineers, nurses, and others protecting health and promoting wellness among indi-

viduals, families, communities, and the public (Oerther et al., 2021). In the UK, where the Chartered Institute of Environmental Health (2021) was founded in 1883, the definition of environmental health encompasses all of the external factors that affect human health and well-being—ranging from the air we breathe, the food we eat, and the water we drink to the wider impact of human-made

hazards on the world around us. In the U.S., where the American Academy of Environmental Engineers and Scientists was founded in 1955, environmental engineers research, design, plan, or perform engineering duties in the prevention, control, and remediation of environmental hazards using various engineering disciplines, including waste treatment, site remediation, or pollution control (Occupational Information Network, 2021).

The work of environmental health professionals (EHPs)—from sanitarians, to engineers, to environmental health nursing—shares a common conceptual framework undergirding local practice, namely that the normal state of humanity is one of health and that the chief aim of practice is to prevent deviations from health as well as to promote wellness in the public by improving the local environment. This conceptual framework was well captured in Florence Nightingale's Environmental Theory (Fawcett, 2018). Today, while much of the work of EHPs remains intensely local (e.g., sanitary inspections of food service operations, vaccinations to prevent disease transmission, the design and installation of community water supplies), there is a growing need for EHPs to have a global world view. I believe that this global world view is essential for EHPs to contribute to effective policies and evidence-informed best practices that promote environmental health globally and across the breadth of professions (e.g., sanitarians, engineers, nurses, others).

One global world view that EHPs may wish to consider are the 17 Sustainable Develop-

ment Goals (SDGs) from the United Nations (2015). The 17 SDGs were formally adopted by the United Nations General Assembly and began in force in 2015 to guide global efforts at sustainable development through 2030. Goal 6 (Clean Water and Sanitation) is clearly within the scope of practice of environmental health. In addition, I propose that sanitarians, engineers, nurses, and others have an important role to play in multiple goals. For example, Goal 3 (Good Health and Well-Being) and Goal 11 (Sustainable Cities and Communities) clearly benefit from the work of EHPs (Squires et al., 2019).

Throughout most of 2020 and ongoing even today, the world is dealing with the consequences of adapting to a new normal in the aftermath of the COVID-19 pandemic (Oerther & Klopper, 2021). As described by Rodrigues et al. (2021), the COVID-19 pandemic has shown where the practice of environmental health has strained under the demands placed on it during the pandemic. For example, in many local jurisdictions EHPs were redeployed to use their expertise assisting with test and trace as part of controlling the spread of transmission. While this example highlights the flexibility of EHPs to pivot their daily activities, it also brought to light a lack of redundancy and cross-coverage among EHPs. For example, vital surveillance or intervention activities such as inspections and enforcement may not have been performed with the typical due diligence normally afforded as resources were redeployed to deal with COVID-19.

Collectively, these four observations that EHPs share—an origin story, a common conceptual framework undergirding local practice, a global world view provided by the SDGs, and strained systems due to a lack of redundancy and cross-coverage—all point toward an urgent need to improve coordination among the practitioners that all share claim to the title of EHP.

In the practice of healthcare, it has long been recognized that physicians, nurses, pharmacists, social workers, and other members of the healthcare team benefit from coeducational training and continuing professional development that creates an esprit de corps at the clinical bedside. This approach is known as interprofessional education (IPE) (Buring et al., 2009; Oerther & Oerther, 2021). A parallel approach to IPE is lacking among the professions of environmental health.

In my opinion, this lack of a clear approach to interdisciplinary collaboration impedes the ability of environmental health to meet its ethical obligations to the public (Oerther, in press). Furthermore, in my opinion, one way to address this issue is to adopt an intentional approach to interdisciplinary collaboration as part of the ongoing efforts of the American Academy of Sanitarians (AAS) to refresh the definition of sanitarian and sanitary practice.

AAS needs input from the breadth of environmental health practitioners including members of the National Environmental Health Association (2021), the Environmental Section of the American Public Health Association (2021), the Alliance of Nurses for Healthy Environments (2021), and the American Academy of Environmental Engineers and Scientists (2021), among others. Input is needed from international practitioners as well, such as from the membership of the Chartered Institute of Environmental Health.

While I recognize that much of the current scope of practice within environmental health is strongly focused on the local level, I am equally aware that each profession shares strikingly similar statements of ethical obligation to patients, communities, and the public. My rhetorical question is, “What stops us from working together outside of the clinical setting as we collectively protect health by improving the local environment?” For example, sanitarians long have recognized that the suppliers of food could have as profound an impact on local outbreaks of foodborne illness as the kitchens where the food is prepared (Millstone & Lang, 2018). Therefore, evidence-informed protection of the food supply must include confidence in food safety from the farm gate to the dinner plate. This confidence is achieved through a combination of effective policies and professional practice including local inspections.

Would it similarly be useful to recognize that the morbidity and mortality increasingly associated with local heat waves are influenced strongly by weather patterns impacted by the collective actions of humanity (Chinowsky, 2021)? Would it be fair to propose that evidence-informed protection for captive and highly vulnerable populations—such as prisoners, school-age children, and residents of nursing homes—must include inspections that verify local access to air conditioning as well as effective policies linking local impacts to climate variability?

How do the practitioners that all share claim to the title of EHP work together effectively to deliver robust service to our local clients? I propose that we must think globally. We must recognize our shared ethical obligations. We must be intentional in our efforts to cultivate interprofessional collaboration. The public, local to global, needs us to step forward boldly and to practice to the full scope of our training, licenses, and credentials. 🐼

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