1. COMMUNICATION OF ENVIRONMENTAL HEALTH RISKS

Health care providers often discuss issues of risk and uncertainty with patients in the context of surgery, diagnostic tests, immunizations, or treatment. Communication of potential risks and benefits before making a voluntary decision is the foundation of informed consent [1].

Communication about environmental health risk differs from medical informed consent in that the hazard usually involves involuntary exposure, may be unfamiliar, provides no benefit to those exposed, and there often is much less known about the potential risks. Health care providers may not know where to find information to answer questions related to environmental health generally, or endocrine disruption specifically. Even when scientific information is available about the health effects of chemical exposure, it is almost never enough to answer questions pertaining to individual risk (as opposed to population risk) and rarely addresses issues related to the long-term effects of poorly quantified exposure during vulnerable periods of development of the fetus, young child, or adolescent [2].

Despite the paucity of relevant information, health care providers have an important role to play in communication of risks associated with endocrine disruptors and
other environmental toxicants. There is widespread concern among the general public about environmental health risks, especially risks to infants and children. Patients frequently come to their health care provider’s office with questions about environmental hazards. A survey of pediatric patients found that exposure to “environmental poison” leads the list of issues that parents worry about but that pediatricians rarely gave advice on this topic.

There are three major settings in which health care providers may need to communicate with people about environmental health risks. The most obvious setting is the clinic or office, where discussions occur about personal risk to specific individuals. Second, health care providers are sometimes called upon to provide information in workplaces, schools, or community settings, where there is a potential environmental risk to a group of people, or a perceived cluster of disease. Third, health care providers may occasionally be called upon to address the public at large and to comment on the public health significance of scientific findings. The latter situations may involve conversations with the media or policymakers.

This chapter will present a framework for conversations in all three of the general settings outlined above. The key components for successfully communicating about environmental health issues include (i) anticipating the general categories of questions that may arise, (ii) preparing approaches to common specific questions, (iii) understanding the principles of risk communication in the environmental health context, and (iv) rapidly gathering information from reliable sources to help answer questions that arise.

2. COMMUNICATING WITH THE INDIVIDUAL PATIENT

In the patient care or community setting, environmental health concerns tend to focus on questions about individual risk. People bring worries about specific exposures or illnesses to their personal physician or to a meeting at their workplace or school or in their community. Because the science on endocrine disruptors and other environmental health hazards does not pertain to individual risk, the challenge to the health care professional is substantial. Even assuming that the physician is familiar with the scientific data relevant to the issue in question, there remains the challenge of translating a combination of results from sources such as in vitro receptor-binding assays, laboratory rodent studies, ecological epidemiology, and occasionally limited human epidemiological research into something relevant to a patient’s individual situation. This problem is further complicated by difficulties in exposure assessment, the fact that most people are exposed to mixtures, and uncertainties about the different effects of chemicals at different times during the lifespan. The resulting conversation must therefore move away from a focus on trying to “answer the question” toward a more open discussion of scientific uncertainty, risk, and prevention.

2.1. Categories of Questions

There are three major categories of questions that health care providers may encounter in the office or community setting. These categories include

(1) Anticipatory guidance: Patients often come to their physician with questions or concerns about potential environmental hazards in the absence of any specific medical complaints. These concerns may be sparked by an article in the newspaper, something