

# Science, Policy, and Politics

*"Pretending that politics and science do not coexist is foolish, and cleanly separating science from politics is probably neither feasible nor recommended."*

—Madelon Lubin Finkel

Politics and science often reside together quietly, and their close relationship is not readily apparent. However, conflicts involving the two occur occasionally and draw the attention of the media, the public, and policymakers. This chapter explores how science and politics interact with and influence each other as well as how science can influence policy. This exploration dispels the myth that science is free from political influence. It also illustrates the concept that science can be used productively, or it can be ignored or misused (intentionally or inadvertently) in policymaking. Recognizing the intricate relationships among science, politics, and policy is the first step in making sense of the influence they can exert on each other. To assist, a model is presented that displays the relationships (Figure 39-1). The model depicts the "supply" side of science (research) and the "demand" side of science (science users). It is important for nurses and other health professionals involved in advocacy and policymaking to understand how to use science to shape good policy—as well as to understand how political forces may influence scientific data.

American science is second to none in its productivity, scope, scale, and budget. Since World War II, the scientific community has received extensive resources from the United States government (i.e., the citizens) and has become the world's greatest scientific enterprise (Greenberg, 2007). Table 39-1 presents some U.S. government agencies involved in the production and regulation of science; this provides a glimpse at the broad scope of scientific activities carried out or supported by the U.S. government.

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Scientific knowledge informs the practice of the clinical disciplines, drives organizational and administrative practices in the health system, and influences access initiatives, cost-control measures, and quality improvement strategies. Pioneering research has led to great benefits for health, wealth, and the nation's defense, but the corporate presence in science has caused concern, and unscrupulous activities are not unknown (Greenberg, 2001, 2007).

## POLITICS AND SCIENCE: THE DEFINITIONS

*Politics* has been defined as the process of influencing the allocation of scarce resources, and *policy* is a deliberate course of action. *Science* is the study, documentation, and collection of evidence pertaining to observable, naturally occurring objects, processes, and phenomena in ways that can be objectively reproduced to verify the results (Shrake, Elfner, Hummon, Janson, & Free, 2006). *Research* is a process of systematic inquiry using disciplined methods to solve problems or answer questions. Simply put, research is the process of building and refining scientific knowledge (Polit & Beck, 2008). Research develops *evidence* through numerous methods including case studies, randomized controlled trials, surveys and polls, systematic reviews, meta-analyses, and data mining of existing data sources (Diers & Price, 2007).

## THE RELATIONSHIPS AMONG SCIENCE, POLITICS, AND POLICY

Research is expensive and the process of funding it is an inherently political one. Research scientists, including nurses, often compete with others for funding by having their research proposals evaluated. Based on proposal reviews, federal agencies,