CHAPTER

3

Thinking Upstream: Nursing Theories and Population-Focused Nursing Practice

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OBJECTIVES

Upon completion of this chapter, the reader will be able to do the following:

1. Differentiate between upstream interventions, which are designed to alter the precursors of poor health, and downstream interventions, which are characterized by efforts to modify individuals' perceptions of health.
2. Describe different theories and their application to community/public health nursing.
3. Critique a theory in regard to its relevance to population health issues.
4. Explain how theory-based practice achieves the goals of community/public health nursing by protecting and promoting the public's health.

KEY TERMS

conservative scope of practice
critical interactionism
critical theoretical perspective
health belief model (HBM)
macroscopic focus
microscopic focus
Milio's framework for prevention
self-care deficit theory
theory
upstream thinking

OUTLINE

It may seem as if many community health problems are so complex, so multifaceted, and so deep that it is impossible for a nurse to make substantial improvements in health. Although nurses see persons in whom cancer, cardiovascular disease, or pulmonary disease has just been diagnosed, we know that their diseases began years or even decades ago. In many cases, genetic risks for diseases are interwoven with social, economic, and environmental risks in ways that are difficult to understand and more difficult to change. In the face of all these challenges, how can nurses hope to affect the health of the public in a significant way? How can the actions nurses take today reduce the current burden of illness and prevent illness in the next generation of citizens?

When nurses work on a complex community health problem they need to think strategically. They need to know where to focus their time, energy, and programmatic resources. Most likely they will be up against health problems that have existed for years, with other layers of foundational problems that may have existed for generations. If nurses use organizational resources in an unfocused manner, they will not solve the problem at hand and may create new problems along the way. If nurses do not build strong relationships with

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community partners (e.g., parent groups, ministers, local activists), it will be difficult to succeed. If nurses are unable to advocate for their constituencies in a scientifically responsible, logical, and persuasive manner, they may fail. In the face of these challenges and many more, how can nurses succeed in their goal to improve public health?

Fortunately, there are road maps for success. Some of those road maps can be found by reading a nursing history book or an archival work that tells the story of a nurse who succeeded in improving health by leveraging diplomacy skills or neighborhood power, such as Lillian Wald. Other road maps may be found in "success stories" that provide an overview of how a nurse approached a problem, mobilized resources, and moved strategically to promote change. This chapter addresses another road map for success: the ability to think conceptually, almost like a chess player, to formulate a plan to solve complex problems. Thinking conceptually is a subtle skill that requires you to understand the world at an abstract level, seeing the manifestations of power, oppression, justice, and access as they exist within our communities. Most of all, thinking conceptually means that you develop a "critical eye" for the community and understand how change happens at micro and macro levels.

This chapter begins with a brief overview of nursing theory, which is followed by a discussion of the scope of community health nursing in addressing population health concerns. Several theoretical approaches are compared to demonstrate how different conceptualizations can lead to different conclusions about the range of interventions available to the nurse.

THINKING UPSTREAM: EXAMINING THE ROOT CAUSES OF POOR HEALTH

> *I am standing by the shore of a swiftly flowing river and hear the cry of a drowning man. I jump into the cold waters. I fight against the strong current and force my way to the struggling man. I hold on hard and gradually pull him to shore. I lay him out on the bank and revive him with artificial respiration. Just when he begins to breathe, I hear another cry for help. I jump into the cold waters. I fight against the strong current and swim forcefully to the struggling woman. I grab hold and gradually pull her to shore. I lift her out onto the bank beside the man and work to revive her with artificial respiration. Just when she begins to breathe, I hear another cry for help. I jump into the cold waters. Fighting again against the strong current, I force my way to the struggling man. I am getting tired, so with great effort I eventually pull him to shore. I lay him out on the bank and try to revive him with artificial respiration. Just when he begins to breathe, I hear another cry for help. Near exhaustion, it occurs to me that I'm so busy jumping in, pulling them to shore, applying artificial respiration that I have no time to see who is upstream pushing them all in.... (Adapted from a story told by Irving Zola as cited in McKinlay JB: A case for refocusing upstream: The political economy of illness. In Conrad P, Leiter V, editors: The sociology of health and illness: critical perspectives, ed 9, New York, 2012, Worth, Ch 47.)*

In his description of the frustrations in medical practice, McKinlay (1979) used the image of a swiftly flowing river to represent illness. In this analogy, doctors are so busy rescuing victims from the river that they fail to look upstream to see who is pushing patients into the perilous waters. There are many things that could cause a patient to fall (or be pushed) into the waters of illness. Refocusing upstream requires nurses to look beyond individual behavior or characteristics to what McKinlay terms the "manufacturers of illness." McKinlay discusses factors such as tobacco products companies, companies that profit from selling products high in saturated fats, the alcoholic beverage industry, the beauty industry, exposure to environmental toxins, and occupationally induced illnesses. "Manufacturers of illness" are what push clients into the river. Cigarette companies are a good example of manufacturers of illness—their product causes a change for the worse in the health status of their consumers, and they take little to no responsibility for it. McKinlay used this analogy to illustrate the ultimate futility of "downstream endeavors," which are characterized by short-term, individual-based interventions, and challenged health care providers to focus more of their energies "upstream, where the real problems lie" (McKinlay, 1979, p. 9). Downstream health care takes place in our emergency departments, critical care units, and many other health care settings focused on illness care. **Upstream thinking** actions focus on modifying economic, political, and environmental factors that are the precursors of poor health throughout the world. Although the story cites medical practice, it is equally fitting to the dilemmas of nursing practice. Nursing has a rich history of providing preventive and population-based care, but the current U. S. health system emphasizes episodic and individual-based care. This system has done little to stem the tide of chronic illnesses to which 70% of American deaths can be attributed (Centers for Disease Control and Prevention, 2013).

HISTORICAL PERSPECTIVES ON NURSING THEORY

Many scholars agree that Florence Nightingale was the first nurse to formulate a conceptual foundation for nursing practice. Nightingale believed that clean water, clean linens, access to adequate sanitation, and quiet would improve health outcomes, and she put these beliefs into practice during the Crimean War (Bostidge, 2008). However, in the years after her leadership, nursing practice became less theoretical and was based primarily on reacting to the immediacy of patient situations and the demands of medical staff. Thus hospital and medical personnel defined the boundaries of nursing practice. Once nursing leaders saw that others were defining their profession, they became proactive in advancing the theoretical and scientific foundation of nursing practice. Some of the early nursing theories were extremely narrow and depicted health care situations that involved only one nurse and one patient. Family members and other health professionals were noticeably absent from the context of care. Historically, this characterization may have been an appropriate response to the constraints of nursing practice and the need to emphasize the medically dependent activities of the nursing profession.

Although somewhat valuable, theories that address health from a microscopic, or individual, rather than a macroscopic, or global/social, perspective have limited applicability to community/public health nursing. Such perspectives are inadequate because they do not address social, political, and environmental factors that are central to an understanding of communities. More recent advances in nursing theory development address the dynamic nature of health-sustaining and/or health-damaging environments and address the nature of a collective (e.g., school, worksite) versus an individual client.

HOW THEORY PROVIDES DIRECTION TO NURSING

The goal of **theory** is to improve nursing practice. Chinn and Kramer (2008) stated that using theories or parts of theoretical frameworks to guide practice best achieves this goal. Students often find theory intellectually burdensome and cannot see the benefits to their practice of something so seemingly obscure. Theory-based practice guides data collection and interpretation in a clear and organized manner; therefore it is easier for the nurse to diagnose and address health problems. Through the process of integrating theory and practice, the student can focus on factors that are critical to understanding the situation. The student also has an opportunity to analyze the realities of nursing practice in relation to a specific theoretical perspective, in a process of ruling in and ruling out the fit of particular concepts (Schwartz-Barcott et al., 2002). Barnum (1998) stated, "A theory is like a map of a territory as opposed to an aerial photograph. The map does not give the full terrain (i.e., the full picture); instead it picks out those parts that are important for its given purpose" (p. 1). Using a theoretical perspective to plan nursing care guides the student in assessing a nursing situation and allows the student "to plan and not get lost in the details or sidetracked in the alleys" (J. M. Swanson, personal communication to P. Butterfield, May 1992).

BOX 3-1 DEFINITIONS OF THEORY PROPOSED BY NURSING THEORISTS

- "A systematic vision of reality; a set of interrelated concepts that is useful for prediction and control" (Woods and Catanzaro, 1988, p. 568).
- "A conceptual system or framework invented for some purpose; and as the purpose varies so too must the structure and complexity of the system" (Dickoff and James, 1968, p. 19).
- "A creative and rigorous structuring of ideas that projects a tentative, purposeful, and systematic view of phenomena" (Chinn and Kramer, 1999, p. 51).
- "A set of ideas, hunches, or hypotheses that provides some degree of prediction and/or explanation of the world" (Pryjmachuk, 1996, p. 679).
- "Theory organizes the relationships between the complex events that occur in a nursing situation so that we can assist human beings. Simply stated, theory provides a way of thinking about and looking at the world around us" (Torres, 1986, p. 19).

As with other abstract concepts, different nursing writers have defined and interpreted theory in different ways. Several writers' definitions of theory are listed in Box 3-1. The lack of uniformity among these definitions reflects the evolution of thought and the individual differences in the understanding of relationships among theory, practice, and research. The definitions also reflect the difficult job of describing complex and diverse theories within the constraints of a single definition. Reading several definitions can foster an appreciation for the richness of theory and help the reader identify one or two particularly meaningful definitions. Within the profession, definitions of *theory* typically refer to a set of concepts and relational statements and the purpose of the theory. This chapter presents theoretical perspectives that are congruent with a broad interpretation of theory and correspond with the definitions proposed by Dickoff and James (1968), Torres (1986), and Chinn and Kramer (2008).

MICROSCOPIC VERSUS MACROSCOPIC APPROACHES TO THE CONCEPTUALIZATION OF COMMUNITY HEALTH PROBLEMS

Each nurse must find her or his own way of interpreting the complex forces that shape societies to understand population health. The nurse can best achieve this transformation by integrating population-based practice and theoretical perspectives to conceptualize health from a macroscopic rather than microscopic perspective. Table 3-1 differentiates between these two approaches to conceptualizing health problems.

The individual patient is the **microscopic focus** whereas society or social economic factors influencing health status are the **macroscopic focus**. When the individual is the focus,

TABLE 3-1 MICROSCOPIC VERSUS MACROSCOPIC APPROACHES TO THE DELINEATION OF COMMUNITY HEALTH NURSING PROBLEMS

MICROSCOPIC APPROACH	MACROSCOPIC APPROACH
Examines individual, and sometimes family, responses to health and illness	Examines interfamily and intercommunity themes in health and illness Delineates factors in the population that perpetuate the development of illness or foster the development of health
Often emphasizes behavioral responses to individual's illness or lifestyle patterns	Emphasizes social, economic, and environmental precursors of illness
Nursing interventions are often aimed at modifying an individual's behavior through changing his or her perceptions or belief system	Nursing interventions may include modifying social or environmental variables (i.e., working to remove care barriers and improving sanitation or living conditions) May involve social or political action

the micro focus contains the health problem of interest (e.g., pediatric exposure to lead compounds). In this context, a microscopic approach to assessment would focus exclusively on individual children with lead poisoning. Nursing interventions would focus on the identification and treatment of the child and family. However, the nurse can broaden his or her view of this problem by addressing removal of lead sources in the home and by examining interpersonal and intercommunity factors that perpetuate lead poisoning on a national scale. A macroscopic approach to lead exposure may incorporate the following activities: examining trends in the prevalence of lead poisoning over time, estimating the percentage of older homes in a neighborhood that may contain lead pipes or lead-based paint surfaces, and locating industrial sources of lead emissions. These efforts usually involve the collaborative efforts of nurses from school, occupational, government, and community settings. Doty (1996) noted that macro-level perspectives provide nurses with the conceptual tools that empower clients to make health decisions on the basis of their own interests and the interests of the community at large.

One common dilemma in community health practice is the tension between working on behalf of individuals and working on behalf of a population. For many nurses, this tension is exemplified by the need to reconcile and prioritize multiple daily tasks. Population-directed actions are often more global than the immediate demands of ill people; therefore they may sink to the bottom of the priority list. A community health nurse or nursing administrator may plan to spend the day on a community project directed at preventive efforts, such as screening programs, updating the surveillance program, or meeting with key community members about a specific preventive program. However, the nurse may actually end up spending the time responding to the emergency of the day. This type of reactive rather than proactive nursing practice prevents progress toward "big picture" initiatives and population-based programs. When faced with multiple demands, nurses must be vigilant in devoting a sustained effort toward population-focused projects. Daily pressures can easily distract the nurse from population-based nursing practice. Several nursing organizations focus on this population, and one organization, the Quad Council of Public Health Nursing, is composed of representatives from the following four public health/community health nursing organizations:

- Public Health Nursing Section of the American Public Health Association (PHN-APHA)
- Association of Community Health Nurse Educators (ACHNE)
- Association of Public Health Nurses (APHN)
- American Nurses Association Council on Nursing Practice and Economics (ANA)

The organizations emphasize "systems thinking" in daily practice and the importance of improving health through the design and implementation of population-based interventions (QUAD Council, 2013).

A theoretical focus on the individual can preclude understanding of a larger perspective. Dreher (1982) used the term **conservative scope of practice** in describing frameworks that focus energy exclusively on intrapatient and nurse-patient factors. She stated that such frameworks often adopt psychological explanations of patient behavior. This mode of thinking attributes low compliance, missed appointments, and reluctant participation to problems in patient motivation or attitude. Nurses are responsible for altering patient attitudes toward health rather than altering the system itself, "even though such negative attitudes may well be a realistic appraisal of health care" (Dreher, 1982, p. 505). This perspective does not entertain the possibility of altering the system or empowering patients to make changes.

ASSESSING A THEORY'S SCOPE IN RELATION TO COMMUNITY HEALTH NURSING

Theoretical scope is especially important to community health nursing because there are many levels of practice within this specialty area. For example, a home health nurse who is caring for ill people after hospitalization has a very different scope of practice from that of a nurse epidemiologist or health planner. Unless a given theory is broad enough in scope to address health and the determinants of health from a population perspective, the theory will not be very useful to community health nurses. Although the past 25 years yielded much advancement in the development of nursing theory, there continues to be a lack of clarity about community health nursing's theoretical foundation (Batra, 1991). Applying the terms *microscopic* and *macroscopic* to health situations may help nurses fill this void and stimulate theory development in community health nursing.

Although the concept of macroscopic is similar to the upstream analogy, the term *macroscopic* refers to a broad scope that incorporates many variables to aid in understanding a health problem. Upstream thinking would fall within this domain. Viewing a problem from this perspective emphasizes the variables that precede or play a role in the development of health problems. Macroscopic is the broad concept, and upstream is a more specific concept. These related concepts and their meanings can help nurses develop a critical eye in evaluating a theory's relevance to population health.

REVIEW OF THEORETICAL APPROACHES

The differences among theoretical approaches demonstrate how a nurse may draw very diverse conclusions about the reasons for client behavior and the range of available interventions. The following section uses two theories to exemplify individual microscopic approaches to community health nursing problems; one originates within nursing and one is based in social psychology. Two other theories demonstrate the examination of nursing problems from a macroscopic perspective; one originates from nursing and another has roots in phenomenology. The format for this review is as follows:

1. The individual is the focus of change (i.e., microscopic).
   a. Orem's self-care deficit theory of nursing.
   b. The health belief model (HBM).

2. Thinking upstream: Society is the focus of change (i.e., macroscopic).
   a. Milio's framework for prevention.
   b. Critical social theory perspective.

The Individual Is the Focus of Change

Orem's Self-Care Deficit Theory of Nursing

In 1958, Dorothea Orem, a staff and private duty nurse who later became a faculty member at Catholic University of America, began to formalize her insights about the purpose of nursing activities and why individuals required nursing care (Eben et al., 1986; Fawcett, 2001). Her theory is based on the assumption that self-care needs and activities are the primary focus of nursing practice. Orem outlined her **self-care deficit theory** of nursing and stated that this general theory is actually a composite of the following related constructs: the theory of self-care deficits, which provides criteria for identifying those who need nursing; the theory of self-care, which explains self-care and why it is necessary; and the theory of nursing systems, which specifies nursing's role in the delivery of care and how nursing helps people (Orem, 2001).

Application of Self-Care Deficit Theory. During a discussion about theory-based initiatives, a British occupational health nurse lamented over her nursing supervisor's intention to adopt Orem's self-care deficit theory. She was frustrated and argued that much of the model's assumptions seemed incongruous with the realities of her daily practice. Kennedy (1989) maintained that the self-care deficit theory assumes that people are able to exert purposeful control over their environments in the pursuit of health; however, people may have little control over the physical or social aspects of their work environment. On the basis of this thesis, she concluded that the self-care model is incompatible with the practice domain of occupational health nursing.

The Health Belief Model

The second theory that focuses on the individual as the locus of change is the **health belief model (HBM)**. The model evolved from the premise that the world of the perceiver determines action. The model had its inception during the late 1950s, when America was breathing a collective sigh of relief after the development of the polio vaccine. When some people chose not to bring themselves or their children into clinics for immunization, social psychologists and other public health workers recognized the need to develop a more complete understanding of factors that influence preventive health behaviors. Their efforts resulted in the HBM.

Kurt Lewin's work lent itself to the model's core dimensions. He proposed that behavior is based on current dynamics confronting an individual rather than prior experience (Maiman and Becker, 1974). Figure 3-1 outlines the variables and relationships in the HBM. The health belief model is based on the assumption that the major determinant of preventive health behavior is disease avoidance. The concept of disease avoidance includes perceived susceptibility to disease "X," perceived seriousness of disease "X," modifying factors, cues to action, perceived benefits minus perceived barriers to preventive health action, perceived threat of disease "X," and the likelihood of taking a recommended health action. Disease "X" represents a particular disorder that a health action may prevent. It is important to note that actions that relate to breast cancer will be different from those relating to measles. For example, in breast cancer, a cue to action may involve a public service advertisement encouraging women to make an appointment for a mammogram. However, for measles, a cue to action may be news of a measles outbreak in a neighboring town.

Application of the Health Belief Model. Over the years, a number of writers have proposed broadening the scope of the HBM to address health promotion and illness behaviors

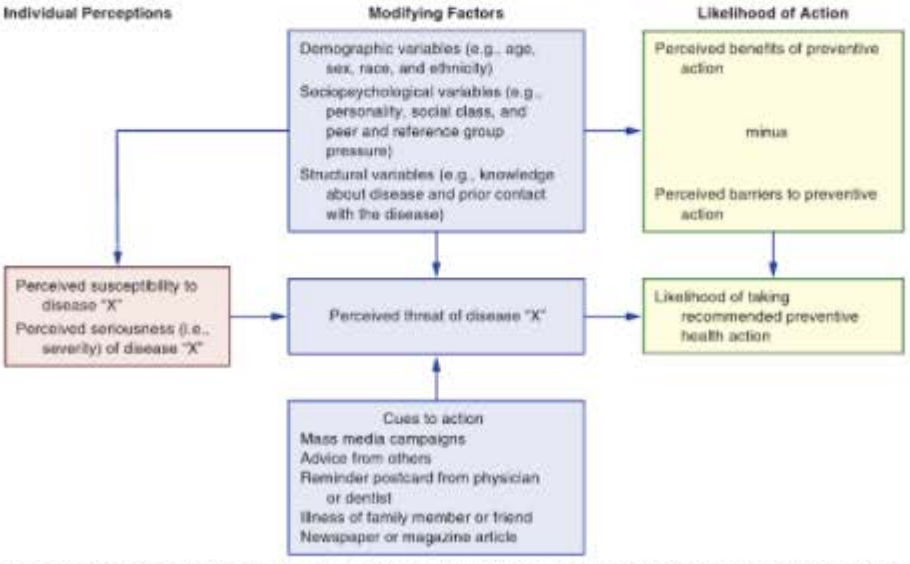

FIGURE 3-1 Variables and relationships in the health belief model (HBM). (Redrawn from Rosenstock IM: Historical origins of the health belief model. In Becker MH, editor: *The health belief model and personal health behavior*, Thorofare, NJ, 1974, Charles B Slack).

(Kirscht, 1974; Pender, 1987) and to merge its concepts with other theories that describe health behavior (Cummings, Becker, and Malie, 1980). The following section contains a brief personal account of the author's perceptions addressing the strengths and limitations of the model.

During my nursing education classes at the undergraduate level, I was exposed to a large number of nursing theories. The HBM was probably my least favorite. Most of the content was interesting, but I found it difficult applying the concepts to patients in the community and home setting. The model's focus on compliance was something that nurses with a critical theoretical perspective would have difficulty applying in their own clinical practice. My perception of the model changed a few years ago when my younger brother had pancreatic cancer diagnosed. This experience allowed me to see how the HBM could offer some insight into an individual's health behaviors. It helped me organize ideas about why people choose to accept or reject the instructions of well-intended nurses and doctors. Concepts such as perceived seriousness, perceived susceptibility, and cue to action afforded new insights into the dynamics of health decision making. I began to apply the model's concepts to guide my work with my family. My brother who became ill had smoked much of his life. Another brother also smoked. My family members believed that you are destined to follow a path of life and death, but this experience clearly modified their health beliefs. Until this point, my family members did not quit smoking because they did not perceive the susceptibility and seriousness of smoking; they belonged to a reference group that disdained most traditional medical practices and favored inaction over action. During the next several weeks, my siblings requested information on strategies that would help them quit smoking and hopefully decrease their chances for the development of cancer.

Over the years, I have become more skilled in assessing and identifying patient needs and issues and have gained a better appreciation for the strengths and limitations that any theoretical framework imposes on a situation.

Limitations of the HBM. The HBM places the burden of action exclusively on the client. It assumes that only those clients who have negative perceptions of the specified disease or recommended health action will fail to act. In practice, this model focuses the nurse's energies on interventions designed to modify the client's distorted perceptions.

The HBM offers an explanation of health behaviors that is similar to a mechanical system. Consulting the HBM, a nurse may induce compliance by using model variables as catalysts to stimulate action. For example, an intervention study based on HBM precepts sought to improve follow-up in clients with hypertension by increasing their perceived susceptibility to and seriousness of the dangers of hypertension (Jones, Jones, and Katz, 1987). The study provided patients with education over the telephone or in the emergency department and resulted in a dramatic increase in compliance. However, the researchers noted that several patient groups, in particular, a group of patients without child care, failed to respond to the intervention. Studies such as these demonstrate the predictive abilities and the limitations of HBM concepts (Lajunen and Rasanen, 2004; Lin et al., 2005; Mirotznik et al., 1998). The Health Belief Model has been used in childhood obesity prevention research. It was reported that the model accounted for less than 50% of the variance resulting from behavior change interventions (National Heart Lung and Blood Institute, 2007).

The HBM may effectively promote behavioral change by altering patients' perspectives, but it does not acknowledge the health professional's responsibility to reduce or ameliorate health care barriers. The model reflects the type of theoretical perspective that dominated nursing education and behavioral health for many years. The narrow scope of the model is its strength and its limitation: nurses are not challenged to examine the root causes of health opportunities and behaviors in the communities we serve.

The Upstream View: Society Is the Focus of Change

Milio's Framework for Prevention

Nancy Milio conducted extensive research on tobacco policy (1985). Milio's approach to advancing people's health is seen in her seminal book, *Promoting Health through Public Policy*, and through her detailed studies of tobacco policy and Norwegian farm food policy (Draper, 1986). **Milio's framework for prevention** (1976) provides a complement to the HBM and a mechanism for directing attention upstream and examining opportunities for nursing intervention at the population level. Nancy Milio outlined six propositions that relate an individual's ability to improve healthful behavior to a society's ability to provide accessible and socially affirming options for healthy choices. Milio used these propositions to move the focus of attention upstream by challenging the notion that a main determinant for unhealthful behavior choice is lack of knowledge. She said that government and institutional policies set the range of health options, so community health nursing needs to examine a community's level of health and attempt to influence a community's health through public policy. She noted that the range of available health choices is critical in shaping a society's overall health status. Milio believed that national-level policy making was the best way to favorably impact the health of most Americans rather than concentrating efforts on imparting information in an effort to change individual patterns of behavior.

Milio (1976) proposed that health deficits often result from an imbalance between a population's health needs and its health-sustaining resources. She stated that the diseases associated with excess (e.g., obesity and alcoholism) afflict affluent societies and that the diseases resulting from inadequate or unsafe food, shelter, and water afflict the poor. Within this context, the poor in affluent societies may experience the least desirable combination of factors. Milio (1976) cited the socioeconomic realities that deprive many Americans of a health-sustaining environment despite the fact that "cigarettes, sucrose, pollutants, and tensions are readily available to the poor" (p. 436). Propositions proposed by Milio are listed in Table 3-2.

Personal and societal resources affect the range of health-promoting or health-damaging choices available to individuals. Personal resources include the individual's awareness,

TABLE 3-2 APPLICATION OF MILIO'S FRAMEWORK IN PUBLIC HEALTH NURSING

MILIO'S PROPOSITION SUMMARY	POPULATION HEALTH EXAMPLES
Population health results from deprivation and/or excess of critical health resources.	Individuals and families living in poverty have poorer health status compared with middle- and upper-class individuals and families.
Behaviors of populations result from selection from limited choices; these arise from actual and perceived options available as well as beliefs and expectations resulting from socialization, education and experience.	Positive and negative lifestyle choices (e.g., smoking, alcohol use, safe sex practices, regular exercise, diet/nutrition, seatbelt use) are strongly dependent on culture, socioeconomic status, and educational level.
Organizational decisions and policies (both governmental and nongovernmental) dictate many of the options available to individuals and populations and influence choices.	Health insurance coverage and availability are largely determined and financed by federal and state governments (e.g., Medicare and Medicaid) and employers (e.g., private insurance); the source and funding of insurance very strongly influence health provider choices and services.
Individual choices related to health-promoting or health-damaging behaviors is influenced by efforts to maximize valued resources.	Choices and behaviors of individuals are strongly influenced by desires, values, and beliefs. For example, the use of barrier protection during sex by adolescents is often dependent on peer pressure and the need for acceptance, love, and belonging.
Alteration in patterns of behavior resulting from decision making of a significant number of people in a population can result in social change.	Some behaviors, such as tobacco use, have become difficult to maintain in many settings or situations in response to organizational and public policy mandates. As a result, tobacco use in the United States has dropped dramatically.
Without concurrent availability of alternative health-promoting options for investment of personal resources, health education will be largely ineffective in changing behavior patterns.	Addressing persistent health problems (e.g., overweight/obesity) is hindered because most people are very aware of what causes the problem, but are reluctant to make lifestyle changes to prevent or reverse the condition. Often, "new" information (e.g., a new diet) or resources (e.g., a new medication) can assist in attracting attention and directing positive behavior changes.

Adapted from Milio, N. A framework for prevention: changing health-damaging to health-generating life patterns, *Am J Publ Health*, 66:435-439, 1976.

knowledge, and beliefs and the beliefs of the individual's family and friends. Money, time, and the urgency of other priorities are also personal resources. Community and national locale strongly influence societal resources. These resources include the availability and cost of health services, environmental protection, safe shelter, and the penalties or rewards for failure to select the given options.

Milio (1976) challenged health education's assumption that knowledge of health-generating behaviors implies an act in accordance with that knowledge. She proposed that "most human beings, professional or nonprofessional, provider or consumer, make the easiest choices available to them most of the time" (p. 435). Health-promoting choices must be more readily available and less costly than health-damaging options for individuals to gain health and for society to improve health status. Milio's framework can enable a nurse to reframe this view by understanding the historic play of social forces that have limited the choices available to the parties involved.

Comparison of the HBM and Milio's Conceptualizations of Health. Milio's health resources bear some resemblance to the concepts in the HBM. The purpose of the HBM is to provide the nurse with an understanding of the dynamics of personal health behaviors. The HBM specifies broader contextual variables, such as the constraints of the health care system, and their influence on the individual's decision-making processes. The HBM also assumes that each person has unlimited access to health resources and free will. In contrast, Milio based her framework on an assessment of community resources and their availability to individuals. By assessing such factors up front, the nurse is able to gain a more thorough understanding of the resources people actually have. Milio offered a different set of insights into the health behavior arena by proposing that many low-income individuals are acting within the constraints of their limited resources. Furthermore, she investigated beyond downstream focus and population health by examining the choices of significant numbers of people within a population.

Compared with the HBM, Milio's framework provides for the inclusion of economic, political, and environmental health determinants; therefore, the nurse is given broader range in the diagnosis and interpretation of health problems. Whereas the HBM allows only two possible outcomes (i.e., "acts" or "fails to act" according to the recommended health action), Milio's framework encourages the nurse to understand health behaviors in the context of their societal milieu.

Implications of Milio's Framework for Current Health Delivery Systems. Through its broader scope, Milio's model provides direction for nursing interventions at many levels. Nurses may use this model to assess the personal and societal resources of individual patients and to analyze social and economic factors that may inhibit healthy choices in populations. Population-based interventions may include such diverse activities as working to improve the nutritional content of school lunches and encouraging political activity on behalf of health care reform (Hobbs et al., 2004; Milio, 1981).

Overall, current health care delivery systems perform best when responding to people with diagnostic-intensive and acute illnesses. Those people who experience chronic debilitation or have less intriguing diagnoses generally fare worse in the health care system despite efforts by community- and home-based care to "fill the gaps." Nurses in both hospital and

TABLE 3-3 COMPARISON OF INDIVIDUAL AND SOCIETAL LEVELS OF CHANGE

INDIVIDUAL LEVEL	SOCIETAL LEVEL
The individual is the focus of change	Society/community is the focus of change
Microscopic	Macroscopic
Downstream activities emphasized	Upstream activities emphasized
Theories:	Theories:
a. Orem's self-care deficit theory of nursing	a. Milio's framework for prevention
b. The health belief model (HBM)	b. Critical social theory perspective

community-based systems often feel constrained by profound financial and service restrictions imposed by third-party payers. These third parties often terminate nursing care after the resolution of the latest immediate health crisis and fail to cover care aimed toward long-term health improvements. Many health systems use nursing standards and reimbursement mechanisms that originate from a narrow, compartmentalized view of health.

Personal behavior patterns are not simply "free" choices about "lifestyle" that are isolated from their personal and economic context. Lifestyles are patterns of choices made from available alternatives according to people's socioeconomic circumstances and how easily they are able to choose some over others (Milio, 1981). It is therefore imperative to practice nursing from a broader understanding of health, illness, and suffering. Public health nurses must often work at both the individual and societal level. As Milio suggested, it is not only individual behaviors but the economic context as well. This can be seen in Table 3-3, which shows that the focus of change can be at the individual or society level.

Critical Theoretical Perspective

Similar to Milio's framework for prevention, **critical theoretical perspective** uses societal awareness to expose social inequalities that keep people from reaching their full potential. This perspective is devised from the belief that social meanings structure life through social domination. "A critical perspective can be used to understand the linkages between the health care system and the broader political, economic, and social systems of society" (Waitzkin, 1983, p. 5). According to Navarro (1976), in *Medicine Under Capitalism*, the health care system mirrors the class structure of the broader society. According to Conrad (2008), a critical theoretical perspective is one that does not regard the present structure of health care as sacred. A critical theoretical perspective accepts no truth or fact merely because it has been accepted as such in the past. The social aspects of health and illness are too complex to use only one perspective. The critical theoretical perspective assumes that health and illness entail societal and personal values and that these values have to be made explicit if illness and health care problems are to be satisfactorily dealt with. This perspective is informed by the following values and assumptions:

1. The problems and inequalities of health and health care are connected to the particular historically located social arrangements and the cultural values of society.
2. Health care should be oriented toward the prevention of disease and illness.
3. The priorities of any health care system should be based on the needs of the clients/population and not the health care providers.
4. Ultimately, society itself must be changed for health and medical care to improve (Conrad and Leiter, 2012).

Stevens and Hall (1992) used critical theoretical perspective in nursing to address unsafe neighborhoods as well as economic, political, and social disadvantages of the community we serve. They advocate for emancipator nursing actions for our communities. Proponents of this theoretical approach maintain that social exchanges that are not distorted from power imbalances will stimulate the evolution of a more just society (Allen, Diekelmann, and Benner, 1986). Critical theoretical perspective assumes that truth standards are socially determined and that no form of scientific inquiry is value free. Allen and colleagues (1986) stated, "One cannot separate theory and value, as the empiricist claims. Every theory is penetrated by value interests" (p. 34).

Application of Critical Theoretical Perspective. Application of a critical theoretical perspective can be seen when health care is used as a form of social control. The social control function in health care is used to get patients to adhere to norms of appropriate behavior. This is accomplished through the medicalization of a wide range of psychological and socioeconomic issues. *Medicalization* is identification or categorization of (a condition or behavior) as being a disorder requiring medical treatment or intervention. Examples include medicalization related to sexuality, family life, aging, learning disabilities, and dying (Conrad, 1975, 1992; Zola, 1972). Medicalization can incorporate many facets of health and illness care from childbirth and allergies to hyperactivity and hospitals that have become dominated by the medical profession and its explanation of health and illness. When social problems are medicalized, there is often profit to be made. This can be seen when a patient readily receives a prescription for a medication before the root social cause of the illness is addressed by the health care provider. Using medical treatments for "undesirable behavior" has been implemented throughout history, including lobectomies for mental illness and synthetic stimulants for classroom behavior problems.

In this context, the nurse may examine how the concepts of power and empowerment influence access to quality child care (Kuokkanen and Leino-Kilpi, 2000). The nurse may contrast an organization's policies with interviews from workers who believe the organization is an impediment to achieving quality child care. Data analysis may also include an examination of the interests of workers and administration in promoting social change versus maintaining the status quo.

Wild (1993) used critical social theory to analyze the social, political, and economic conditions associated with the cost of prescription analgesics and the corresponding financial burden of clients who require these medications. Wild compared the trends in pharmaceutical pricing with the inflation rates of other commodities. The study stated that pharmaceutical sales techniques, which market directly to physicians, distance the needs of ill clients from the pharmaceutical industry. Wild's analysis specified nursing actions that a downstream analysis would not consider, such as challenging pricing policies on behalf of client groups.

Challenging Assumptions about Preventive Health Through Critical Theoretical Perspective. The HBM and Milio's prevention model focus on personal health behaviors from a disease avoidance or preventive health perspective; nurses may also analyze this phenomenon using critical social theory. Again, McKinlay's upstream analogy refers to health workers who were so busy fishing sick people out of the river that they did not look upstream to see how they were ending up in the water. Later in the same article, McKinlay (1979) used his upstream analogy to ask the rhetorical question, "How preventive is prevention?" (p. 22). He used this tactic to critically examine different intervention strategies aimed at enhancing preventive behavior. Figure 3-2 illustrates McKinlay's model, which contrasts the different modes of prevention. He linked health professionals' curative and lifestyle modification interventions to a downstream conceptualization of health; the majority of alleged preventive actions fail to alter the process of illness at its origin. Political-economic interventions remain the most effective way to address population determinants of health and to ameliorate illness at its source.

McKinlay (1979) further delineated the activities of the "manufacturers of illness—those individuals, interest groups, and organizations which, in addition to producing material goods and services, also produce, as an inevitable byproduct, widespread morbidity and mortality" (pp. 9, 10). The manufacturers of illness embed desired behaviors in the dominant cultural norm and thus foster the habituation of high-risk behavior in the population. Unhealthy consumption patterns are integrated into everyday lives; for example, the American holiday dinner table offers concrete examples of "the binding of at-riskness to culture" (p. 12). The existing U.S. Health Care System, in a misguided attempt to help, devotes its efforts to changing the products of the illness manufacturers and neglects the processes that create the products. Manufacturers of illness include the tobacco industry, the alcohol industry, and multiple corporations that produce environmental carcinogens.

Waitzkin (1983) continued this theme by asserting that the health care system's emphasis on lifestyle diverts attention from important sources of illness in the capitalist industrial environment and "it also puts the burden of health squarely on the individual rather than seeking collective solutions to health problems" (p. 664). Salmon (1987) supported this position by noting that the basic tenets of Western medicine promote an understanding of individual health and illness factors and obscure the exploration of their social and economic roots. He stated that critical social theory "can aid in uncovering larger dimensions impacting health that are usually unseen or misrepresented by ideological biases. Thus the social reality of health conditions can be both understood and changed" (p. 75).

In the past decade, a critical theoretical perspective has been used with *symbolic interactionism*, a theory that focuses predominantly on the individual and the meaning of situations. **Critical interactionism** brings the two theories together to address some issues of health care reform and thinking both upstream and downstream to make health care system changes (Burbank and Martins, 2010; Martins and Burbank, 2011). Nurses can use both upstream and downstream approaches to address health issues through critical interactionism (Table 3-4).

Nurses in all practice settings face the challenge of understanding and responding to collective health within the context of a health system that allocates resources at the individual level. The Tavistock Group (1999) released a set of ethical principles that summarizes this juxtaposition by noting that "the care of individuals is at the center of health care delivery, but must be viewed and practiced within the overall context of continuing work to generate the greatest possible health gains for groups and populations" (pp. 2, 3). This perspective is an accurate reflection of Western-oriented thought, which generally gives individual health precedence over collective health. Although nurses can appreciate the concept of individual care at the center of health delivery, they should also consider transposing this principle. Doing so allows the nurse to consider a health care system that places the community

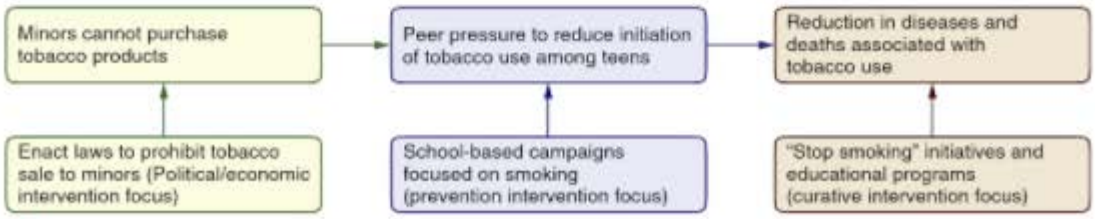

FIGURE 3-2 McKinlay's model of continuum of health behaviors and corresponding interventions foci applied to tobacco use. Data from McKinlay J: A case for refocusing upstream: the political economy of illness. In Gartley J, editor: *Patients, physicians and illness: a sourcebook in behavioral science and health*, New York, 1979, Free Press, pp. 9-25.

TABLE 3-4 CRITICAL INTERACTIONISM: COMPARISON OF UPSTREAM AND DOWNSTREAM FOCUSES

ISSUE	DOWNSTREAM FOCUS	UPSTREAM FOCUS	CRITICAL INTERACTIONISM: AN UPSTREAM/ DOWNSTREAM APPROACH
Clients: Obesity rates	Individual behavior strategies to reduce weight Lifestyle changes Bariatric surgery nursing care	Health policy changes Vending machines in school with healthier choices School lunch program modifications Target corporations that profit from obesity	Individual strategies with weight loss in conjunction with system changes Social marketing at both levels
Client or nurse: Workplace violence	Behavior change at individual level Workplace programs to reduce violence	Address organizational factors that promote workplace violence What organizational structures perpetuate workplace violence?	Change needed in knowledge and skills to address issue of workplace violence at both the downstream and upstream level
Nurse: Workplace errors	Focus on individual: root cause analysis that has individual as focus Change behavior of individual nurse Reeducation of nurse with workplace error	System changes needed What system level factors lead to workplace errors? What organizational structures perpetuate workplace errors?	A dual approach: Providers need changes in knowledge and skills to address root causes of workplace errors that move from individual to system level

Data from Martins DC, Burbank P: Critical interactionism: an upstream-downstream approach to health care reform, *Adv Nurs Sci* 34(4):315-329, 2011.

ETHICAL INSIGHTS

Social Injustice in Community-Based Practice

Chafey (1996) refers to "putting justice to work in community-based practice" and notes that nursing has a rich historic legacy in social justice activities. Although social justice activities are alive and well in nursing practice, many leaders think that the continuing struggle for resources is taking its toll on the scope of social action within community health systems. In addition, the policies of the current federal administration often emphasize market justice values over social justice values. *Market justice* refers to the principle that people are entitled to valued ends (e.g., status, income) when they acquire them through fair rules of entitlement. In contrast, *social justice* refers to the principle that all citizens bear equitably in the benefits and burdens of society (Drevdahl et al., 2001). These are complex concepts that cannot be easily distilled into a clear set of rules or nursing policies. However, in the context of community health nursing, health (and consequently health care) is considered a right rather than a privilege. To the extent that certain citizens, by virtue of their income, race, health needs, or any other attribute, are unable to access health care, our society as a whole suffers. Nurses are well positioned to "stand on the shoulders" of yesterday's nursing leaders and act on behalf of justice in health care access for all citizens.

in the center of health care and holds the goal of generating health gains for individuals. Fortunately, these worldviews of health delivery systems are not mutually exclusive, and nurses can understand the duality of health care needs in individuals and populations.

HEALTHY PEOPLE 2020

Documents from the U.S. program *Healthy People 2020* provide health professionals with a broad mandate to save lives by thinking and acting strategically. The *Healthy People 2020* documents are classified into 38 "topic areas" that address specific diseases (e.g., diabetes, cancer, chronic kidney disease), care systems (e.g., health care access), and crosscutting issues in public health (e.g., persons with disabilities, family planning). Each of the focal areas specified by the Centers for Disease Control and Prevention and in the *Healthy People 2020* documents encompasses a complex and multifaceted problem, one that can be addressed only by "looking upstream." By thinking about the root causes of health problems, we begin to understand the importance of directing nursing efforts toward the antecedents of poor health and lost opportunities. There is simply no other way to bring positive changes to the more than 290 million U.S. and 6 billion global citizens who inhabit our planet.

The Social Determinants of Health topic area within *Healthy People 2020* is designed to identify ways to create social and physical environments that promote good health for all. All Americans deserve an equal opportunity to make the choices that lead to good health. But to ensure that all Americans have that opportunity, advances are needed not only in health care but also in fields such as education, child care, housing, business, law, media, community planning, transportation, and agriculture. Making these advances would involve working together to: (1) explore how programs, practices, and policies in these areas affect the health of individuals, families, and communities; (2) establish common goals, complementary roles, and ongoing constructive relationships between the health sector and these areas; and (3) maximize opportunities for collaboration among federal-, state-, and local-level partners related to social determinants of health (US Department of Health and Human Services, 2013).

The photos on the following page present environmental health issues and efforts being taken by nurses to address them.

NURSES WORK IN ENVIRONMENTAL HEALTH IN A VARIETY OF WAYS

Open mine waste in the rural West can pose a continuing threat to local citizens. Nurses have been involved in advocacy efforts to ensure that citizens receive periodic screening for exposure to lead. Nurses can be active in policy efforts to prevent environmental disasters in the future.

A public health nurse inspects the site of an asphalt spill off a rural railway car. Hazardous materials spills often occur in remote areas away from health care services. Broad conceptual frameworks allow nurses to think upstream and incorporate environmental risks into the consideration of community health issues.

A public health nurse teaches a class on environmental health for local nurses. Environmental health is an important part of community health nursing's expanding practice.

Citizens can be unaware of biological and chemical contaminants in their drinking water. Nurses are playing more active roles in water testing and in communicating the results of such tests to community members. When health is conceptualized broadly, nurses understand and view risk in new ways.

A nurse practitioner reviews educational materials addressing occupational and environmental health risks. By providing guidance for her clients, she is working to reduce risks and empower her clients to reduce their personal and community-based risks.

RESEARCH HIGHLIGHTS

Understanding the Health Experiences of Homeless Populations

How do we understand the health experiences of oppressed populations in the community such as the homeless? Using the lens of the homeless person, a descriptive phenomenological study was conducted. The research question was "What are your experiences with the health care system as a homeless person?" The purposive sample consisted of 15 homeless adults. Four major themes emerged:

1. Living without essential resources compromises health
2. Putting off health care until a crisis arises
3. Encountering barriers to receiving health care to include (a) social triage, (b) feeling labeled and stigmatized, (c) a non-system for health care for the homeless, (d) being treated with disrespect, and (e) feeling invisible to health care providers and
4. Developing underground resourcefulness

Although homeless persons articulated many problems in their health care system encounters, they also described their own resourcefulness and the strategies they employed to manage being marginalized by society and the health care system. Through the use of the critical theoretical perspective, our increased understanding of health care experiences from the homeless persons' view can guide community health nursing emancipatory actions.

Adapted from Martins DC: Experiences of homeless people in the health care delivery system: a descriptive phenomenological study, *Public Health Nurs* 25(6):420-430, 2008.

SUMMARY

Nursing and health service literature often focuses on health care access issues. This topic is interesting because tremendous disparities for access exist between insured and uninsured people in the United States. Access to care is associated with economic, social, and political factors, and, depending on individual and population needs, it can be a primary determinant of health status and survival. Structural variables, such as race-ethnicity, educational status, gender, and income, may be highly predictive of health status. These types of factors, which are also strongly grounded in the sociopolitical and economic milieu, identify risk factors for poor health and opportunities for community-based interventions.

Community health nurses have been instrumental in making many of the lifesaving advances in sanitation, communicable diseases, and environmental conditions that today's society takes for granted. Community health practice helps develop a broad context of nursing practice because community environments are inherently less restrictive than hospital settings. Clarke and Cody (1994) compared the environmental characteristics in community-based settings with those in hospital-based settings. They proposed that the dynamic nature of community settings lends itself best to the education of professional nurses (Clarke and Cody, 1994).

In a discussion addressing the future of community health nursing, Bellack (1998) differentiates between "nursing in the community" and "nursing with the community." This subtle reframing of the nursing role reinforces the notion that the health agenda originates from natural leaders, church members, local officials, parents, children, teens, and other community members. Forming and advancing a shared vision of health can be a formidable challenge for the nurse; as with any other complex issue, multiple viewpoints are the norm. Even "naming" health problems can be difficult, because different constituents are likely to see issues differently and pursue different lines of reasoning. However, allowing the genesis of change to occur from within the community is the essential challenge of nursing with the community. "Nursing with the community" efforts allow the nurse to create agendas that arise from community members rather than those imposed upon community members. Listening, being patient, providing accurate and scientifically sound information, and respecting the experiences of community members are essential to the success of these efforts.

The nursing profession has advanced and with it so has the need to develop nursing theories that formalize the scientific base of community health nursing. The richness of community health nursing comes from the challenge of conceptualizing and implementing strategies that will enhance the health of many people. Likewise, nurses in this practice area must have access to theoretical perspectives that address the social, political, and environmental determinants of population health. The integration of population-based theory with practice gives nurses the means to favorably affect the health of the global community.

LEARNING ACTIVITIES

1. Select a theory or conceptual model. Evaluate its potential for understanding health in individuals, families, a population of 400 children in an elementary school, a community of 50,000 residents, and 2000 workers within a corporate setting.
2. Identify one health problem (e.g., substance abuse, domestic violence, or cardiovascular disease) that is prevalent in the community or city. Analyze the problem using two different theories or conceptual models. One should emphasize individual determinants of health, and another should emphasize population determinants of health. What are some differences in the way these different perspectives inform nursing practice?
3. Review the ANA's definition of community health nursing practice and the APHA's definition of public health nursing practice. What do these definitions indicate about the theoretical basis of community health nursing? How does the theoretical basis of community health nursing practice differ from that of other nursing specialty areas?

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