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Building the foundation for a healthy life: individuals, communities and the state

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Population Health

Societies create the conditions leading to a population's health or lack thereof. While this is a simplistic statement, it has dramatic consequences as reflected in the variation in levels of health from community to community that have nothing to do with the natural conditions of life. Housing, education, crime, food supply, pollution, employment, access to medical care, unemployment, and other factors not associated with biological processes interdependently create the foundation on which healthy lives are built. What are these factors and how can those be changed to optimize health of individuals and populations? Multiple models have been developed to explain why certain communities are healthier than others. A popular model, developed by Robert Evans and Greg Stoddart in 1990 and re-designed in 2003 takes into account our current understanding of the determinants of health.[i] The Evans and Stoddart model comes out of the Canadian Institute for Advanced Research (CIAR) and has been widely used by communities (including the state of New Hampshire) to model the determinants of health.

The model indicates that health begins with individual values and beliefs, and then builds on knowledge gained through experience, our evaluation of what we do (evidence-based medicine/public health) and scientific research. As our knowledge expands so does our understanding of what makes us healthy and how we can restore health. The model has various determinants of health (income and social status, social support systems, education, working conditions, physical environment, biology and genetics, personal health practices, healthy child development, and health services). The income and social status determinant suggests that not only does health differ between the rich and the poor, but also that there is a social gradient, i.e., as income increases one's health also increases.[ii] Some of the other determinants (such as education and working conditions) may be correlated with income but also have their own impact on health. The contribution of genetics has become increasingly apparent with the genome-mapping project. However, genetics is not destiny; a genetic predisposition to a disease may or may not materialize given individual behavior or social and physical environmental characteristics. At the bottom of the list of determinants is health care services. While health care is a $2.7 trillion a year industry in the United States, its contribution for health status is estimated to account for approximately 10percent of the variation in a country's health status.[iii]

The Evans and Stoddart model also assigns responsibilities for improving health. Those include the individual, family, community, health care system, and society as a whole. It also delineates various strategies that individuals/societies can use, including reorienting the health system, developing personal skills, creating supportive environments, building healthy public policy, and strengthening community action. Reorient health services is meant to build a health system that focuses more on health promotion and disease prevention rather than fixing people after they are sick or disabled. Building a healthy public policy will be discussed later in this essay.

The Role of the Individual

Individual responsibility is an ever-present consideration in current conversations concerning health and health reform. The word responsibility has many definitions. Responsibility can be legal or moral, an obligation; responsibility can be causal—accountability or fault can be assigned; role responsibilities are parent,

teacher, learner, etc.; and scope of responsibility can range from great to little. Regardless of definition, the central questions are two: Who is responsible? For what? In terms of the "who", the Evans and Stoddart model shows that responsibility for health is complex and shared, but for what are individuals most directly responsible?

> As we come to understand the multiple determinants of health, the list of agents whose actions have a role in its maintenance and restoration grows long—ranging from international organizations to states, communities, employers, insurers, and the health professions…who is responsible for health? …it is increasingly clear that individual choices…are at least as significant in achieving good health outcomes as costly medical interventions… actions taken can have a marked and positive impact on one's health while also radiating good effects on other dimensions of life and on other people.[iv]

It is difficult to be precise as to where individual responsibility begins. For example, many people feel that if a person engages in risky behavior (smoking, drinking alcohol, eating high fatty foods, etc.) that society's obligation to the individual is diminished. However, it is tricky to lay responsibility on the individual. One must assume that the individual is acting freely and with full knowledge of the consequences. However, that is not always easy to demonstrate. When do you assume that all individuals should know the danger of "X"? Societal/cultural norms as well as economic conditions shape an individual's expectation of what is acceptable, permissible, and affordable. Is smoking in the South to be treated differently than smoking in the Northeast? How much of a person's limited income should we expect them to spend on expensive fresh fruits and vegetables? While we tend to fault people for risky behaviors, we do not do so for people that engage in sports that might be dangerous. It is easy to turn individual responsibility into "victim blaming," blaming people whose choices may be unwise in the larger picture but not truly voluntary or acted upon with clear knowledge of the risks.

It is also not clear where individual responsibility ends. One of the major principles of the German health care system is "obligation," that the individual has a social obligation to pay for health insurance, to share the burden of caring for illness. This has been adopted by the state of Massachusetts in its requirement for mandatory health insurance and is now being considered as a cornerstone of health reform at the federal level.

It is easy to suggest that individuals are responsible for their own health; at one level they are. However, it is difficult to draw the line between individual responsibility and the role of other actors such as family, communities, and society as a whole.

Competencies and Skills

At the individual level, much has been written about health literacy. According to the U.S. Department of Health and Human Services, health literacy is "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."[v] An individual's level of health literacy can impact their decisions and outcomes along the continuum of health. Whether or not people understand how infectious diseases spread can impact hygiene, recognizing the consequences of food choices can impact healthy eating habits, and misunderstanding the instructions for medication use can cause adverse drug events.

How an individual becomes health literate is not always clear. Some information is learned in school. Familial and cultural influences can impact health literacy (hand washing and healthy eating). The public health system conveys important health messages. In recent years, advertising about pharmaceuticals has become a major source of "health education." Many people get health information from the Internet without a way to determine its accuracy. Some argue that improving health literacy is the responsibility of health care providers. The ability to comprehend health information can vary. How well can one understand medical information when it is part of a devastating diagnosis? Do we expect an 85 year old to navigate through the myriad of private pharmaceutical plans available under Medicare?

What role does an individual have in his/her own health care decision-making? Is it the responsibility of the care provider to offer multiple options, or the responsibility of the person to ask? Extensive research on supplier-induced care indicates that[vi] medical care services will be used to the extent they are available, at times irrespective of actual need. In the face of multiple treatment choices, individuals need to understand the pros and cons of different treatment choices and how those align with personal preferences and values. For this to happen, people need to be active participants in decision-making.

The Role of Public Policy and Health

Any political system has to determine the role of government and individual freedoms/responsibilities. To what extent does society restrain individual actions for the purpose of society as a whole? Erich Fromm describes this as the difference between "freedom from" government and "freedom to" or the use of government to provide the conditions for freedom.[vii] The recent legislative debate on mandatory use of seatbelts in New Hampshire came down on the side of individual "freedom from." "Freedom to" can be exemplified by the use of mandatory public education (restricting individual freedom) to provide individuals with the tools necessary to live a full life and participate in a democratic society. For health and medical care, societies are on a continuum, with the United States placing more emphasis than others on individual freedom and responsibility and reliance on market mechanisms.

Within health there are two areas where government policies play a major role, one is in the area of public health and the other is the correction of market forces. The many environmental factors affecting health that are outside an individual's control (water, air, purity of food and medicines, infectious diseases) are best addressed through public health initiatives. The recent spread of H1N1 virus demonstrates the need for global coordination. All societies (to some degree) attempt to modify behavior of individuals (e.g., smoking) and corporations (e.g., pollution controls) in order to protect the public's health. All countries have policies to correct defects when the market system fails. In the United States, we have determined that because the market does not work well for the elderly (Medicare), the poor (Medicaid), children (SCHIP) and veterans (Veteran's Administration) we have public medical care systems or insurance plans. Another example of correcting market failure is to provide assurance that services and products are safe and effective (e.g., the role of the Food and Drug Administration).

The determinants of health are multiple and complex with most of them involving to one degree or another public policy. For example, as seen in the Evans and Stoddart model, education is one of the variables that has a strong relationship with health. The more education one has the better the health for both the individual and a community; education policy becomes health policy. Transportation policy (the creation of sidewalks and bike paths to encourage exercise; mass transit, and lower polluting vehicles to decrease energy consumption and create cleaner air) becomes health policy. Agricultural policy becomes health policy. Energy policy becomes health policy. During the current year, the Congress and the Presidency will be discussing "health reform." This is better understood as "Medical Insurance Reform"—changing the ways that people gain and retain medical insurance rather than actually reforming health care. While critically important to individuals without access to medical care, this legislation is unlikely to result in much "health reform" since medical care is a small component of health. Our "health policy" remains focused on medical care rather than on health.

The importance of policy to health is frequently overlooked in this country; we do not consciously consider the health impacts of most enacted policies. In Europe Health Impact Assessment[viii] is gaining acceptance. This approach analyzes the direct and indirect health impacts of all proposed legislation. Similar to environmental impact statements, there would be an analysis of the health impacts of widening interstate highways as opposed to the construction of rail lines, the health impacts of mandating completion of high school or the health impacts of allowing vending machines in schools. Despite potential methodological and data problems, even at the most basic level, such analyses would sensitize both voters and politicians to the intended and unintended health consequences of policy decisions.

Concluding Statement

The health of individuals and communities depends on a complex web of interdependent interactions among individuals, families, communities, corporations, non-profit organizations, states, nations, and international cooperation. Understanding these interdependencies along with associated individual and collective responsibilities and making informed and effective choices in light of this understanding builds the foundation for a healthy life.

Endnotes

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