EDITORIAL

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Almost everyone at the intuitive level understands the idea of vulnerability, but it becomes clear in efforts to define it precisely that it is a slippery concept with many possible levels of analysis. Context is extraordinarily important. Vulnerability involves not only individual attributes and circumstances, both inborn and acquired, but also the environmental and community aspects that shape definitions and reactions and either facilitate or restrict the resources needed to deal with adversity. Understanding vulnerability also inevitably involves ideological and moral concepts that influence whether people are punished and stigmatized or supported and assisted. A core conception that underlies much of the dialogue about vulnerability is "personal responsibility" and the extent to which difficult personal circumstances are believed to be due to individual decisions and behavior or a consequence of influences over which individuals have little control or just bad luck. These are cultural and ideological frames that have significant impact on how peer groups, communities and societies deal with issues of vulnerability.

Vulnerability can be seen as the discordance between the challenges individuals and communities face and their uncertain resources to manage them (Mechanic, Tanner, 2007). As the gap grows between the magnitude of threat and coping resources, vulnerability increases. This explains why vulnerability is commonly associated with disadvantaged individuals and groups characterized by low socioeconomic status, stigmatized racial and ethnic characteristics, dependency and incapacities as reflected in very young and old ages, serious illness and disability and exposure to traumatic life circumstances.

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Most studies measure vulnerability at particular time points but vulnerability, or its obverse resilience, develops over the life course and influences are cumulative. The timing of events and challenges, their persistence over time, and the particular historical context that shapes responses to individual and community stressors are all relevant to how the vulnerability process unfolds. The social determinants of vulnerability are commonly characterized as "upstream" influences and important influences are identifiable early, even beginning in prenatal stages, such as birth weight, nutrition and growth, and early developmental factors. Such early factors influence cognitive capacities, educational achievement and chronic disease later in the life course. Indeed, some influences are intergenerational depending on the health, nutrition, and social resources of mothers and even grandmothers (Mechanic, 2007).

Socioeconomic status and poverty are key to understanding most endpoints of interest. Low education and income are associated with longevity and most other important health indicators. They influence vulnerability by shaping the environments and challenges to which individuals and groups are exposed and the resources they develop to address challenges and threats. Their influences occur through many pathways that influence the prevalence of threatening events or the capacities and resources to avoid or deal with adversity. As Phelan, Link and Tehranifar (2010) have persuasively argued, status, power, money and privilege give the advantaged early and abundant opportunities to access relevant knowledge, social supports and effective interventions that help avoid risks, maintain health and limit the consequences of sickness.

Vulnerability comes in many forms and from a wide array of biological, environmental and social influences. These range from inborn errors of nature to natural and man-made catastrophes. The extent to which preparation is effective in ameliorating the impact of these events depends on the social institutions and cultural forces that help build the knowledge base and the social and political influences that allow intelligently applying what we know. Many of the barriers to limiting vulnerability arise from the divergent value systems, ideologies , conflicting interests and politics present in all complex societies.

Many politically acceptable health and social welfare programs seeking to limit vulnerability demand individual initiative and motivation. Such programs inevitably favor those within the defined eligible groups with greater social and personal resources who can more easily take advantage of these opportunities. Persons who more vigorously seek such benefits, and who are more knowledgeable in navigating what are often complex eligibility processes, obviously benefit more. It is not surprising that such programs commonly fail to reach those most in need. Ironically, many such

interventions, however well intentioned, often lead to increased disparities in relation to the most disadvantaged parts of the population (Mechanic, 2002).

This need not be so. Many typical barriers to program participation can be simplified and made less demanding. In many instances it would be practical to assume eligibility of all people in particular population groupings and then make it possible for individuals who don't want to participate to opt out. The literature refers to this as nudging as contrasted with coercion (Thaler, Sunstein, 2008). Most important is the fact that there are many types of population interventions that promote health, safety and welfare whose success does not depend on individual initiative. These range from fluoridation of water and fortified foods to transportation and workplace safety. The opportunities in population health are abundant to meaningfully reduce vulnerability and improve health throughout the life course for all.

References

Mechanic D., Tanner J. (2007). Vulnerable People, Groups, and Populations: Societal View, *Health Affairs*, 26, 5: 1220-1230.

Mechanic D. (2007). Population Health: Challenges for Science and Society, *Milbank Quarterly*, 85, 3: 533-559, 2007.

Mechanic D. (2002). Disadvantage, Inequality and Social Policy, *Health Affairs*, 21, 2: 48-59.

Phelan J.C., Link B.G., Tehranifar P. (2010. Social Conditions as Fundamental Causes of Health Inequalities: Theory, Evidence and Policy Implications, *Journal of Health and Social Behavior* , 51(extra issue): S28-S40, 2010.

Thaler R.H., Sunstein C.R. (2008). Nudge: *Improving Decisions About Health, Wealth and Happiness*. New York: Penguin.