

Better Preventive Health Care Needed

Reno Gazette-Journal / RGJ.COM

Tuesday, February 12, 2008

The medical advice dispensed by practitioners in these pages and other local media is generally authoritative. I would confidently seek their counsel were my health to warrant such attention. Nonetheless, I have a nagging concern almost anytime I encounter such commentary: Such remedies perpetuate our society's preoccupation with "downstream" as opposed to "upstream" interventions to improve health and well-being in our community.

Medical sociologist Irving Zola's upstream-downstream metaphor provides a useful framework for thinking about how we typically address the goal of improved health and well-being. Zola described modern medical practice in the following terms:

"... sometimes it feels like this. There I am standing by the shore of a swiftly flowing river and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to the shore and apply artificial respiration. Just when he begins to breathe, there is another cry for help. So I jump into the river, reach him, pull him to shore, apply artificial respiration, and then just as he begins to breathe, another cry for help. So back into the river again, reaching, pulling, applying, breathing and another yell. Again and again, without end, goes the sequence. You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who in the hell is upstream pushing them in."

Downstream interventions include what we generally think of as medical care – outpatient care in a physician's office, surgery or an inpatient stay at St. Mary's or Renown, routine dental restoration, psychotherapy, and the like. Downstream interventions thus basically deal with the diagnosis and treatment of the disease or malady *after* the pathology has occurred.

In contrast, "upstream" interventions focus on aspects of our social and physical environments that are either conducive or not to good health and well-being. Upstream interventions typically concentrate on changing or minimizing aspects of those environments that are health damaging, or enhancing aspects of our social and physical surroundings associated with good health.

Examples of upstream interventions include the familiar day-to-day public health activities undertaken by local health departments, the contentious fluoridation of drinking water by municipal authorities, and the lesser known, yet health-consequential, public policies promoting access to decent housing and jobs and paychecks.

In essence, upstream health interventions deal with the prevention of disease and promotion of population health, as well as the ultimate sources of disease *before* pathologies have occurred.

In a perfect world, the distribution of resources among upstream and downstream interventions would be based on the degree to which such interventions contribute to the health and well-being of communities. Alas, we do not live in a perfect world and thus the concern of public health advocates: We devote most of our attention, not to mention resources, on downstream treatments and interventions.

None of this is to suggest that downstream efforts are futile or that a considerable amount of short-term good is not being accomplished – one only needs to spend a few hours in a local emergency room or trauma center to witness the life-extending benefits of “downstream” medical interventions. Rather, my point is that the most effective, not to mention cost-efficient, approaches to many of today’s health problems lie further upstream than our health practitioners and media commentators suggest.

Consider one fact: Of the 2.1 trillion dollars annually spent on health in the United States – that is, a little over \$7,026 per person or 16 percent of gross domestic product in 2006 – about 5 percent is spent on public health promotion and disease prevention activities. The rest is spent on medical care, the construction of new health facilities, biomedical research and the search for new cures, and the education and training of largely “downstream” health professionals.

This state of affairs persists despite what is abundantly known about the contributions of public health efforts and other upstream interventions versus medical measures and other downstream interventions to the reduction of morbidity and mortality in our society over the past century. The former have been enormous, while the latter have been comparatively modest and, in many cases, certainly less cost effective.

It’s worth stressing that a just and affluent society such as ours is capable of devoting its resources and attention to both downstream and upstream health interventions. Nonetheless, the premise of this column is that such a more candid discussion of what’s “pushing people in” is warranted. In a nutshell: Public health matters.

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