LIFESTYLE MEDICINE: TREATING THE CAUSES OF DISEASE

Mark A. Hyman, MD; Dean Ornish, MD; Michael Roizen, MD

Mark A. Hyman, MD, is a contributing editor of *Alternative Therapies in Health and Medicine*. He recently launched the Functional Medicine Foundation, based in New York, New York, to promote awareness of, fund research on, and educate the public about functional medicine. Dean Ornish, MD, is clinical professor of medicine at the University of California, San Francisco. Michael Roizen, MD, is chief wellness officer and chair of the Wellness Institute at Cleveland Clinic, Ohio.
(*Altern Ther Health Med*. 2009;15(6):12-14.)

Recently, at a small gathering in Martha's Vineyard in support of the Robert F. Kennedy Center for Justice and Human Rights, Larry Summers, PhD, economist and director of the White House's National Economic Council, spoke about our narrow escape from economic depression. Dr Summers also addressed the even larger impending risks to our economy if the costs of healthcare are not successfully addressed now. He was asked how we could control these costs without tackling the root causes of the problem, the fact that most of the chronic diseases that affect 160 million Americans and account for 78% of our healthcare costs are caused by lifestyle and environmental factors—namely our diet, sedentary lifestyle, smoking, chronic stress, and environmental toxins.

But most believe that doctors don't "do" lifestyle. Dr Summers dismissed "lifestyle" as a community and public health issue that was already included in the current plan. He didn't understand that physicians can and must practice clinical lifestyle medicine to effectively treat disease and dramatically reduce healthcare costs. Lifestyle factors leading to chronic diseases such as heart disease, diabetes, obesity, and cancer are the domain of doctors and not merely a "public health problem."

Lifestyle is not only a public health issue; it is also a medical and clinical care issue. Lifestyle medicine is not just about preventing chronic disease but also about treating it, often more effectively and less expensively than relying only on drugs and surgery. Nearly all the major medical societies recently joined in publishing a review of the scientific evidence for lifestyle medicine both for the prevention and treatment of chronic disease.[1] There is strong evidence that this approach works and saves money. Unfortunately, insurance doesn't usually pay for it. No one profits from lifestyle medicine, so it is not part of medical education or practice. It should be the foundation of our healthcare system.

For example, the recent "EPIC" study published in the *Archives of Internal Medicine* studied 23 000 people's adherence to 4 simple behaviors (not smoking, exercising 3.5 hours a week, eating a healthy diet [fruits, vegetables, beans, whole grains, nuts, seeds, and limited amounts of meat], and maintaining a healthy weight [BMI <30]). In those adhering to these behaviors, 93% of diabetes, 81% of heart attacks, 50% of strokes, and 36% of all cancers were prevented.[2]

This study is only one among a large evidence base documenting how lifestyle intervention is often more effective in reducing cardiovascular disease, hypertension, heart failure, stroke, cancer, diabetes, and all-cause mortality than almost any other medical intervention.[1] It is because lifestyle addresses not only risk factor modification or reduction. Our lifestyle and environment influence the fundamental biological mechanisms leading to disease: changes in gene expression, which modulate inflammation, oxidative stress, and metabolic dysfunction.

The distinction between risk factors and causes is an important one.[3] High blood pressure, dyslipidemia, and elevated C-reactive protein or glucose are not in and of themselves the real causes of chronic disease but simply surrogate markers that are the effects of environmental toxins, what we eat, how much we exercise, and how we respond to stress.

The future of medical care must be to transform the general lifestyle guidance (eat a healthy diet, exercise regularly) that many physicians try to provide to their patients in individually tailored lifestyle prescriptions for both prevention and treatment of chronic diseases. Lifestyle is the best medicine when applied correctly.

"Prevention" therapies as written into current healthcare bills are public health– and community-based wellness initiatives or payment for early detection of disease with mammograms, colonoscopies, and other screening tests. As the Congressional Budget Office recently indicated, early detection without treating the major underlying causes of chronic diseases—our lifestyle choices—may actually add to costs.

For example, a mammogram does not prevent breast cancer; it may find it sooner, when it is more easily treated, but hundreds or thousands of women must be tested to find 1 incidence of cancer. The argument for this type of "prevention" is necessary and moral but not economic.

Health insurance reform is important, but it is insufficient.

We need healthcare reform. We need to change the content and not just the financing and coverage of healthcare. We must change not only the way we do medicine, but the medicine we do.

The center of the healthcare debate must change to what is covered, not just who is covered, if we are to make current treatments more effective and less costly.

The lifestyle factors leading to chronic disease are the domain of doctors and not just a "public health problem." Doctors must "do" lifestyle medicine and receive adequate reimbursement; otherwise, the cost of chronic disease will bankrupt Medicare by 2017.[4]

TREATING CAUSES RATHER THAN RISK FACTORS

Let's circle back to the flaw in treatment of risk factors and not causes. Typically doctors treat "risk factors" for disease such as giving a lifetime's worth of medications to lower high blood pressure, elevated blood sugar, and high cholesterol. These, however, do not treat the underlying causes of those risk factors: what and how much we eat, whether we smoke, how often we exercise, how we manage stress, and the effects of environmental toxins. Disregarding the underlying causes and treating only risk factors is somewhat like mopping up the floor around an overflowing sink instead of turning off the faucet, which is why medications usually have to be taken for a lifetime. When the underlying lifestyle causes are addressed, patients often are able to stop taking medication (under their doctor's supervision, of course). Likewise, they often can avoid surgery as well.

Presently, according to the American Heart Association, 1.3 million coronary angioplasty and 448 000 coronary bypass operations are performed annually at a cost of more than $100 billion.[5] Despite these costs, many studies, including one last month in *The New England Journal of Medicine,* reveal that angioplasties and stents do not prolong life or even prevent heart attacks in stable patients (ie, 95% of those who receive them[6]). Coronary bypass surgery prolongs life in less than 2% to 3% of patients who receive it.[7]

In contrast, the INTERHEART study, published in *The Lancet* in 2004, followed 30 000 people and found that changing lifestyle could prevent at least 90% of all heart disease.[8]

Think about it. Heart disease accounts for more premature deaths and costs Americans more than any other illness and is almost completely preventable simply by changing diet and lifestyle. The same lifestyle changes that can prevent or even reverse heart disease can prevent or reverse many other chronic diseases as well.

Medicare and insurance companies currently pay billions of dollars every year for surgical procedures such as angioplasties and bypass surgeries. These are high-risk, invasive, expensive procedures fraught with complications, and they are largely ineffective.

In the large ACCORD study of more than 10 000 diabetics, aggressive blood sugar lowering with medication actually caused deaths.[9] High blood sugar is a side effect of poor lifestyle choices. The treatment isn't insulin to lower blood glucose, but healthy dietary choices, exercise, stress management, and not smoking. The Diabetes Prevention Program Research Group study showed that lifestyle changes are even more effective than diabetes drugs such as metformin in reducing the incidence of diabetes in people at high risk, with lower costs and fewer side effects.[10]

Lifestyle medical treatment, including personalized, science-based prescriptions for diet, exercise, and stress management, however, are not reimbursed or are only partially reimbursed. These therapies are low-risk and effective in reversing and preventing chronic diseases.

If we train and pay for doctors to learn how to help patients address the real causes of disease with lifestyle medicine and not just treat disease risk factors (simply the effects of poor lifestyle choices) with medications or surgery, we can save almost $1.9 trillion over 10 years for just 5 major diseases: heart disease, diabetes, "pre-diabetes" or metabolic syndrome, and prostate and breast cancer.*

Our nation is actively debating whether we can provide access to healthcare for all Americans and reduce costs at the same time. We cannot do either if we continue to provide the same type of healthcare based primarily on treating disease with medications and surgery rather than lifestyle medicine. Giving 47 million more people access to our current methods of treatment for chronic disease will surely cost more and offer less.

Many, including the head of the American Medical Association, argue that lifestyle medicine is a social, community, and public health issue, not a medical care issue. Real doctors don't "treat" patients with lifestyle medicine. While community wellness programs and public health education do work (tobacco use decreased by two-thirds since the 1950s; Americans reduced dietary fat by 4% and increased carbohydrate consumption by 6% on the urging of the misguided US Dietary guidelines of 1977; and more people use seatbelts, sunscreen, and helmets),[11] they only go part way. Doctors need to go the rest of the way.

DOCTORS MUST LEARN AND PRACTICE LIFESTYLE MEDICINE

The fundamental flaw in thinking in healthcare right now is that doctors don't "do" lifestyle medicine and that people don't change. In part that is true. Only 50% of patients take the drugs their doctors recommend. The food and drug industry, however, has been very successful in changing our habits for the worse. The typical American now eats 680 more calories per day than 30 years ago, and 81% of the adult population takes at least 1 medication.[12] Established financial interests drive research and delivery of care based on medication and surgery. There are no incentives to drive doctors to treat disease with lifestyle medicine. Changes in policy, reimbursement, research, education, and clinical care encouraging doctors to "do" lifestyle medicine must take center stage in healthcare reform.

You might argue that doing this for everyone may cost

*According to Cleveland Clinic estimates for the Take Back Your Health Act of 2009. Data were prepared by the clinic and presented to Congress by Drs Mark Hyman, Dean Ornish, and Michael Roizen.

more (and it might), so let's begin with those who already have chronic disease. Integrated healthcare teams led by physicians practicing lifestyle medicine can save our healthcare system. Presently, however, physicians lack training and financial incentives to help people learn how to eat a healthy diet, exercise, stop smoking, manage their weight, or address the effects of environmental toxins. So they continue to do what they know how to do: prescribe medication and perform surgery.

Personalized lifestyle medicine is a high-science, high-touch, low-tech, low-cost treatment that is more effective for the top 5 chronic diseases than our current approaches. Yet is it not taught in medical schools, practiced by physicians, or delivered in hospitals or healthcare settings. In fact, this treatment, if applied to all the patients with cardiovascular disease, diabetes, metabolic syndrome (obesity), prostate cancer, and breast cancer could reduce net health care expenditures $930 billion over 5 years and result in dramatically better health and quality of life.*

OPPORTUNITIES FOR CHANGE

On August 6, 2009, Senator Ron Wyden (D, Oregon) introduced new legislation, the Take Back Your Health Act (S. 1640) that includes payment for intensive lifestyle medicine as treatments, not just prevention. This legislation has bipartisan cosponsorship by Senators John Cornyn (R, Texas) and Tom Harkin (D, Iowa). We worked closely with these senators to help craft this initiative. This pending legislation, or changes in Medicare policy, can make it feasible for intensive lifestyle treatments to take hold in medical care. It will reinvigorate primary care medicine and drive the transformation of existing healthcare institutions, medical schools, postgraduate education, and insurers to meet the demand for interventional lifestyle treatment of chronic disease. It will induce doctors to learn and practice lifestyle medicine both because it works better for their patients and physicians will be paid to do it. It will support the development of a wellness- and health-based economy rather than one based on sickness and chronic disease.

If lifestyle medicine becomes central to the practice of medicine, our sick care system will be transformed into a healthcare system.

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*According to Cleveland Clinic estimates for the Take Back Your Health Act of 2009. Data were prepared by the clinic and presented to Congress by Drs Mark Hyman, Dean Ornish, and Michael Roizen.

ERRATA

North American Research Conference Abstracts

In each of the following abstracts that were published in our May/Jun issue in partnership with the Consortium of Academic Health Centers for Integrative Medicine (CAHCIM), an author was mistakenly excluded from the listing. The corrected listings appear below.

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Poznanski A, Lapides J, Hsu M, Gracely R, Clauw D, Harris R.
Differences in central neural pain processing following acupuncture and sham acupuncture therapy in fibromyalgia (FM).
University of Michigan Medical School, 24 Frank Lloyd Wright Drive, Ann Arbor, MI 48106
apozna@umich.edu
Altern Ther Health Med. 2009;15(3):S120.

2975

Shin S, Tsutomo K, Sei S.
Anti-obesity effect by a newly developed Chinese Qi-gong meridian therapy.
Japan Chinese Medical Qigong Diet Association, Tokyo 150-0002, Japan
saisei@nirs.go.jp
Altern Ther Health Med. 2009;15(3):S122.

CAHCIM regrets the errors.

Probiotics for Preventing Necrotizing Enterocolitis

The byline for the article, "The effect of probiotics on preventing necrotizing enterocolitis in premature babies," which appeared on page 18 of our Jul/Aug issue (*Altern Ther Health Med*. 2009;15(4):18-20) should have read "Eric Manheimer, MS; Brian Berman, MD; Gunn Vist, PhD; Claire Glenton, PhD."

The authors regret the oversight.