ADDRESSING THE THREE CARDIOVASCULAR CHALLENGES: COGNITIVE MEDICINE, TECHNOLOGY, AND HEALTH PROMOTION

Increased knowledge of cardiovascular disease (CVD) pathogenesis, improved medications, and, most of all, new technologies have helped to significantly decrease CVD–related morbidity and mortality. But only cognitive medicine and health promotion can turn the tide against the growing CVD epidemic worldwide, as a result of rising rates of obesity, diabetes, hypertension and dyslipidemia.

In the context of extraordinary technological developments, the cardiovascular field has splintered into many highly specialized disciplines. Over the past 10 to 15 years, it has become more laboratory and technologically focused, and less rooted in bedside evaluation. This shift has negatively impacted patients, physically and emotionally, and it has greatly added to the nation’s health care bill: the cost of treating CVD almost tripled, from about $150 billion a decade ago. The global CVD prevalence is expected to increase not only because of increased longevity, but also because of rising rates of obesity and related illnesses as mentioned above.

Against this backdrop, we must expand our focus on health promotion as the primary way to prevent heart disease. To this end, Mount Sinai Heart has developed a model that integrates three fundamental perspectives: cognitive medicine, based on a strong interaction between doctor and patient; state-of-the-art technology when required; and an emphasis on prevention and cardiovascular health promotion. Over the past five years, this integration has been an evolving culture at Mount Sinai Heart—one that is influencing fellows and future specialists alike.

Too few cardiovascular programs are producing broadly trained clinical cardiologists. Most trainees seek expertise in cardiovascular procedures and opt for additional months and years of such apprenticeship. In traditional programs they spend comparatively less time learning the most precious aspect of medicine: how to gain insight on the whole patient. Inarguably, high–tech tools can improve decision making, but they should not replace clinical and emotional insight—factors that are widely recognized as critical in successful care management.

Indeed, reliance on sophisticated technology in the diagnosis, monitoring, and management of patients can result in physicians losing competency in performing physical examinations and, in turn, confidence in their own clinical judgment. Patients come to us for highly personalized care—especially against the backdrop of a variable health care delivery system. Technology must complement, not substitute, cognitive and preventive cardiology.

Only recently has significant attention been paid to health promotion and disease prevention, at individual and programmatic levels. It is a great paradox that despite tremendous advances in technology and treatment, and reductions in age–related CVD deaths, the prevalence of CVD is increasing—regardless of geography. Consequently, our economic burden will continue to rise because, currently, the vast majority of dollars are spent treating, rather than preventing, CVD.

Some of the most exciting initiatives at Mount Sinai Heart engage trainees in community service locally, on distant shores, and in different venues. Four out of 18 recent trainees are already involved in health promotion projects on a global level. This focus on disease prevention, together with cognitive medicine approaches and judicious use of state–of–the–art technology, equips Mount Sinai Heart experts and trainees to lead the challenge against the worldwide CVD epidemic.

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