

Commentary on “Effect of Patients’ Awareness of CVD Risk Factors on Health-Related Behaviors”

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During the last several decades, there has been a large and steady drop in the age-standardized death from cardiovascular disease. These advances have come largely from improved diagnostic and treatment technologies that positively affect patients with established disease. Nevertheless, there are limits of treating established disease and to continue the positive trends in reducing cardiovascular disease, greater advances will need to be made in prevention. With this in mind, the American Heart Association (AHA) recommended the implementation of a population-based approach to prevent cardiovascular disease.¹ Their recommendations for national health goals focus on the adoption of four ideal health behaviors (not smoking, maintaining a healthy body mass index, engaging in regular physical activity, and eating a healthy diet) and the achievement of three ideal health factors (untreated total cholesterol <200 mg/dL, untreated blood pressure <120/80 mm Hg, and a fasting blood glucose of <100 mg/dL). The goal is to achieve a population-wide improvement of 20% for these seven factors by 2020, with a resultant 20% reduction in death from cardiovascular disease.

In this issue of the *Southern Medical Journal*, Rothberg and colleagues review the effects of patient knowledge on patient achievement of the AHA’s seven ideal cardiovascular health factors.² They found that increased knowledge led to significant improvements and greater compliance with these health goals; however, the improvements found were small and well below the 2020 targets set by the AHA. The authors’ research suggests that if these ideal health factors are to be

widely adopted by the population, greater education will help but additional strategies and interventions will be required.

Educational methods often fall short because the method of delivery is passive instead of interactive. Such passive educational approaches tend to be ineffective in changing behavior, thus making additional reinforcement strategies essential to optimally improve the population’s cardiovascular health.

One common method of changing behavior is governmental intervention through laws and regulations. Perhaps the most effective laws are ones that provide direct financial incentives. One successful approach has been the strategy of increasing cigarette excise taxes to decrease the rate of teen smoking.³ This approach of taxing undesirable behavior appears to be significantly more effective than laws that simply prohibit behavior. For example, texting while driving laws appear to have little effect on changing behavior unless accompanied by an educational campaign to increase knowledge and awareness.⁴

Another possible way to improve the effectiveness of knowledge in improving healthy behaviors may be provided by reminder systems. For example, frequent reminders delivered via short message service and social media appear to help improve the effectiveness of education in terms of weight loss, smoking cessation, and adherence to medication regimens.⁵ It is possible that frequent feedback loops that assess patient progress while reinforcing learning may be necessary to achieve the AHA targets.

The contribution of the study by Rothberg et al is twofold. First, the time spent educating patients regarding the AHA’s seven ideal health targets is time well spent. Knowledge, even passive knowledge, does lead to improved health behaviors. Second, education alone is insufficient and additional strategies will need to be implemented to achieve the seven AHA ideal health targets by 2020. One strategy that is likely to help is to reinforce the importance of healthy behaviors at every patient contact. Supporting laws that provide financial incentives to implement healthy behaviors also is likely beneficial. Finally, adopting automated reminder systems via short message service and social media can help reinforce positive health messages that lead to a healthier lifestyle.

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The author has no financial relationships to disclose and no conflicts of interest to report.

Accepted June 4, 2013.

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0038-4348/0-2000/106-610

DOI: 10.1097/SMJ.0000000000000014

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