Stress Reduction in the Secondary Prevention of Cardiovascular Disease

Randomized, Controlled Trial of Transcendental Meditation and Health Education in Blacks

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Background—Blacks have disproportionately high rates of cardiovascular disease. Psychosocial stress may contribute to this disparity. Previous trials on stress reduction with the Transcendental Meditation (TM) program have reported improvements in cardiovascular disease risk factors, surrogate end points, and mortality in blacks and other populations.

Methods and Results—This was a randomized, controlled trial of 201 black men and women with coronary heart disease who were randomized to the TM program or health education. The primary end point was the composite of all-cause mortality, myocardial infarction, or stroke. Secondary end points included the composite of cardiovascular mortality, revascularizations, and cardiovascular hospitalizations; blood pressure; psychosocial stress factors; and lifestyle behaviors. During an average follow-up of 5.4 years, there was a 48% risk reduction in the primary end point in the TM group (hazard ratio, 0.52; 95% confidence interval, 0.29–0.92; P=0.025). The TM group also showed a 24% risk reduction in the secondary end point (hazard ratio, 0.76; 95% confidence interval, 0.51–0.91; P=0.17). There were reductions of 4.9 mm Hg in systolic blood pressure (95% confidence interval −8.3 to −1.5 mm Hg; P=0.01) and anger expression (P<0.05 for all scales). Adherence was associated with survival.

Conclusions—A selected mind–body intervention, the TM program, significantly reduced risk for mortality, myocardial infarction, and stroke in coronary heart disease patients. These changes were associated with lower blood pressure and psychosocial stress factors. Therefore, this practice may be clinically useful in the secondary prevention of cardiovascular disease.

Clinical Trial Registration—URL: www.clinicaltrials.gov Unique identifier: NCT01299935. (Circ Cardiovasc Qual Outcomes. 2012;5:750-758.)

Key Words: cardiovascular disease | integrative medicine | health status disparities | complementary therapies | meditation | mind–body therapies | stress

Cardiovascular disease (CVD) is the leading cause of death in the United States and the world.1,2 Blacks suffer from disproportionately high rates of CVD morbidity and mortality.1,3 Substantial evidence indicates that psychosocial stress contributes to the onset and progression of CVD.4,5 The attributable risk associated with psychosocial stress factors across diverse populations is similar to traditional CVD risk factors.5 Psychological distress factors, including depression, anger, hostility, and anxiety, predict CVD clinical events.9–11 The disparity in CVD in blacks may be related to disproportionate levels of psychosocial and environmental stress.12–16 Randomized, controlled trials of stress reduction using the Transcendental Meditation (TM) program have reported decreases in CVD risk factors, surrogate end points, and mortality in blacks and the general population.17–24 The overall objective of this trial was to evaluate the effects of practice of the TM program in the secondary prevention of CVD in blacks.

Methods

Study Design

The trial was conducted between March 1998 and July 2007 in 2 phases. The first phase was from March 1998 to April 2003. After a hiatus in...
是什么已知
- 心理社会压力与心血管疾病的发生和进展相关。
- 压力减少与正念冥想程序在改善心血管风险因素（如高血压、压力性心理应激、物质滥用、胰岛素抵抗、外周动脉疾病、左心室肥厚和冠状动脉造影）方面显示出有益效果。
- 该程序被认为是一种简单、自然、无努力的冥想练习，可帮助减轻心理应激和相关心血管疾病结果。

研究的增加
- 本随机、控制试验发现，与常规护理相比，正念冥想练习在保持正常血压和降低压力反应方面有显著效果。
- 可能的机制对于观察到的差异在血压和血糖控制中起作用。
- 正念冥想程序可能有助于预防心血管疾病。

干预
该程序被用作干预来影响生理学相关数据和CVD结果，因为其标准化、可重复性、效度。

统计分析
基线比较使用t检验分析连续变量。使用Fisher精确检验分析二分类变量的比较。
Survival curves were estimated by the Kaplan-Meier product limit method using time-to-first event. Hazard ratios (HRs) and 95% confidence intervals (CIs) were estimated using the Cox proportional hazard model. Event data from phases 1 and 2 for all subjects were included in the survival analyses with time to event censored at the end of the subjects’ follow-up. That is, subjects who enrolled in phase 1 were followed through completion of phase 1. Subjects who reenrolled in phase 2 were followed through completion of phase 2, including the interim/hiatus period. Mortality data were collected from public records for all subjects regardless of reenrollment status and confirmed with death certificates. Multivariate models covaried for the stratification factors of age, sex, and lipid-lowering medication status because this is recommended to improve the precision and power of the analyses. Multivariate models covaried for the stratification factors of age, sex, and lipid-lowering medication status because this is recommended to improve the precision and power of the analyses.52,53

The primary survival analysis comprised the study periods during which subjects were consented and enrolled (either phase 1 only or phase 1 through 2). Reenrollment in phase 2 of the study was examined as an additional grouping factor in the analyses of baseline characteristics and as a time-dependent covariate in the survival analyses. The validity of the proportional hazards assumption was tested by assessing the joint significance of the reenrollment variable, the treatment variable, and their interaction. A second, independent analysis of the survival data was conducted by Dr Bruce Barton, Department of Quantitative Health Sciences, University of Massachusetts Medical School.

Changes in intermediate outcomes were analyzed using a repeated measures mixed model. Subject differences were modeled as random effects. Other independent variables were fixed effects. Time was modeled as a continuous linear trend. Baseline level of the outcome, age, sex, and lipid-lowering medication were covariates. The model was fit over all available data points by restricted maximum likelihood estimation.

All primary and secondary outcomes were analyzed using the intention-to-treat principle. Power calculations were based on the approach of Proschan and Hunsberger for conditional power. The power calculation for phase 1 estimated that with 374 subjects, there was 80% power to detect a 36% risk reduction in the composite of cardiovascular mortality, nonfatal MI, nonfatal stroke, coronary artery bypass graft surgery, percutaneous coronary intervention, and hospitalizations for heart failure and ischemic heart disease (non-MI). At the completion of phase 1, 201 subjects had been recruited (Figure 1). With review and approval of the data and safety monitoring board, a single interim analysis determined that with 201 subjects and an additional 5 years of follow-up to accrue the required number of events, the trial had 80% power to detect a 50% risk reduction in the data and safety monitoring board-approved end point of all-cause mortality, nonfatal MI, and nonfatal stroke.

**Results**

There were 201 participants who met eligibility criteria, provided informed consent, and were randomized to either TM...
The rate of non-participation in the treatment groups was 19 of 99 or 19% in the TM group and 10 of 102 or 10% in the HE group, a nonsignificant difference ($P=0.07$, Fishers exact test). At the beginning of phase 2, 143 subjects were reenrolled in the second phase. Fifty-eight subjects from phase 1 did not participate in phase 2 because of death, attrition, or lack of informed consent. Of these, 25 or nearly half, had primary outcome events during phase 1.

As shown in Table 1, the groups were generally similar at baseline; 42% were women; mean age was 59 years; half of the participants reported incomes of <$10,000/year. Significant baseline differences were education level and CESD score. No significant interactions were found on any of the baseline variables between treatment group and phase 2 reenrollment.

Randomized subjects were observed for a maximum of 9.3 years and a mean of 5.4±2.4 years (TM group = 5.3±2.3 years, HE group = 5.4±2.5 years). There were 52 primary end point events. Of these, 20 events occurred in the TM group and 32 in the HE group (Table 2). Figure 2 shows the survival curves for the primary end point of mortality, MI, and stroke. Table 3 presents the results of the survival analyses. In the primary analysis, the adjusted HR for the TM group compared with the HE group was 0.52 (95% CI, 0.29–0.92; $P=0.025$). The stratification factors of age, sex, and lipid-lowering medications used as covariates were jointly significant as predictors of time to event ($P=0.0003$, for the individual covariates: $P=0.0003$, $P=0.057$, and $P=0.03$, respectively). The test for violation of the proportional hazards assumption was not significant.

In secondary and sensitivity analyses, adjustment for baseline education and CESD score in addition to the stratification

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>TM (n=99)</th>
<th>HE (n=102)</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female participants</td>
<td>41.4</td>
<td>44.1</td>
<td>0.70</td>
</tr>
<tr>
<td>Age, y</td>
<td>59.9 (10.7)</td>
<td>58.4 (10.5)</td>
<td>0.30</td>
</tr>
<tr>
<td>Lipid-lowering medication</td>
<td>59.6</td>
<td>60.8</td>
<td>0.86</td>
</tr>
<tr>
<td>ACE inhibitors</td>
<td>43.4%</td>
<td>45.1%</td>
<td>0.81</td>
</tr>
<tr>
<td>Angiotensin receptor agonists</td>
<td>7.1%</td>
<td>6.9%</td>
<td>0.95</td>
</tr>
<tr>
<td>$\beta$-blockers</td>
<td>2.0%</td>
<td>2.0%</td>
<td>0.98</td>
</tr>
<tr>
<td>Calcium channel blockers</td>
<td>34.3%</td>
<td>36.3%</td>
<td>0.77</td>
</tr>
<tr>
<td>Diuretics</td>
<td>43.4%</td>
<td>46.1%</td>
<td>0.71</td>
</tr>
<tr>
<td>Aspirin</td>
<td>41.4%</td>
<td>31.4%</td>
<td>0.14</td>
</tr>
<tr>
<td>Married</td>
<td>32.7</td>
<td>26.5</td>
<td>0.34</td>
</tr>
<tr>
<td>Education, y</td>
<td>11.3 (2.7)</td>
<td>9.9 (3.6)</td>
<td>0.003**</td>
</tr>
<tr>
<td>Household income, $</td>
<td>16 979 (17 807)</td>
<td>14 194 (15 023)</td>
<td>0.25</td>
</tr>
<tr>
<td>Income &lt;$10 000</td>
<td>4.85</td>
<td>4.71</td>
<td>0.84</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>93.1 (19.4)</td>
<td>92.6 (24.0)</td>
<td>0.87</td>
</tr>
<tr>
<td>BMI</td>
<td>32.2 (6.8)</td>
<td>32.7 (7.4)</td>
<td>0.56</td>
</tr>
<tr>
<td>Stenosed arteries, No.</td>
<td>1.8 (0.9)</td>
<td>1.8 (0.9)</td>
<td>0.91</td>
</tr>
<tr>
<td>Systolic blood pressure, mm Hg</td>
<td>133.0 (18.7)</td>
<td>131.5 (18.0)</td>
<td>0.57</td>
</tr>
<tr>
<td>Diastolic blood pressure, mm Hg</td>
<td>77.5 (12.3)</td>
<td>76.8 (11.4)</td>
<td>0.68</td>
</tr>
<tr>
<td>Hypertensive (BP &gt;140/90 mm Hg)</td>
<td>39.4</td>
<td>35.3</td>
<td>0.55</td>
</tr>
<tr>
<td>Heart rate, bpm</td>
<td>72.0 (10.1)</td>
<td>72.2 (9.6)</td>
<td>0.89</td>
</tr>
<tr>
<td>Currently smoke</td>
<td>38.4</td>
<td>43.1</td>
<td>0.49</td>
</tr>
<tr>
<td>Consume alcohol</td>
<td>30.3</td>
<td>28.4</td>
<td>0.77</td>
</tr>
<tr>
<td>Use illicit drugs</td>
<td>4.0</td>
<td>4.9</td>
<td>0.77</td>
</tr>
<tr>
<td>Moderate or vigorous physical activity, h/d</td>
<td>4.4 (4.0)</td>
<td>4.9 (4.0)</td>
<td>0.41</td>
</tr>
<tr>
<td>Anger expression</td>
<td>26.0 (11.9)</td>
<td>28.5 (11.3)</td>
<td>0.14</td>
</tr>
<tr>
<td>CMHI</td>
<td>15.2 (5.1)</td>
<td>15.9 (5.3)</td>
<td>0.38</td>
</tr>
<tr>
<td>CESD</td>
<td>13.8 (9.9)</td>
<td>17.8 (11.7)</td>
<td>0.01**</td>
</tr>
<tr>
<td>Treatment expectancy</td>
<td>3.5 (0.9)</td>
<td>3.7 (0.9)</td>
<td>0.36</td>
</tr>
</tbody>
</table>

TM indicates Transcendental Meditation program; HE, health education control group; ACE, angiotensin-converting enzyme; BMI, body mass index (calculated as weight in kilograms divided by height in meters squared); BP, blood pressure; CMHI, Cook-Medley Hostility Inventory composite score37,38; and CESD, Center for Epidemiological Studies Depression Scale.35,36

†For continuous variables, data are expressed as mean (SD) values; for dichotomous variables, data are expressed as percentage of patients.
Table 2. Components of Primary and Secondary Clinical Event End Points

<table>
<thead>
<tr>
<th>End Point</th>
<th>Number of Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary end point*</td>
<td></td>
</tr>
<tr>
<td>All-cause mortality</td>
<td>TM 17, HE 24, Both 41</td>
</tr>
<tr>
<td>Nonfatal MI</td>
<td>TM 1, HE 4, Both 5</td>
</tr>
<tr>
<td>Nonfatal stroke</td>
<td>TM 2, HE 4, Both 6</td>
</tr>
<tr>
<td>Total</td>
<td>TM 20, HE 32, Both 52</td>
</tr>
<tr>
<td>Secondary end point*</td>
<td></td>
</tr>
<tr>
<td>CVD mortality</td>
<td>TM 4, HE 5, Both 9</td>
</tr>
<tr>
<td>Nonfatal MI</td>
<td>TM 0, HE 2, Both 2</td>
</tr>
<tr>
<td>Nonfatal stroke</td>
<td>TM 2, HE 4, Both 6</td>
</tr>
<tr>
<td>Revascularization (CABG, PCI)</td>
<td>TM 17, HE 15, Both 32</td>
</tr>
<tr>
<td>Hospitalization for CHD</td>
<td>TM 12, HE 18, Both 30</td>
</tr>
<tr>
<td>Hospitalization for CHF</td>
<td>TM 9, HE 10, Both 19</td>
</tr>
<tr>
<td>Total</td>
<td>TM 44, HE 54, Both 98</td>
</tr>
</tbody>
</table>

TM indicates Transcendental Meditation program; HE, health education control group; MI, myocardial infarction; CVD, cardiovascular disease; CABG, coronary artery bypass graft surgery; PCI, percutaneous coronary intervention; CHD, coronary heart disease; and CHF, congestive heart failure.

*The counts of events refer to first events, and therefore the counts of primary and secondary events in each category may differ.

Figure 2. Kaplan-Meier survival curves of primary end point (all-cause mortality, nonfatal MI, or nonfatal stroke). HE indicates the health education intervention; TM, the Transcendental Meditation program.

Independent analysis of the primary and secondary survival data confirmed identical results (Dr Bruce Barton, University of Massachusetts Medical School).

Table 4 shows changes in the intermediate outcomes averaged during the trial. There was a significant net difference of −4.9 mm Hg in systolic BP in the TM group compared with HE group (95% CI, −8.3 to −1.5 mm Hg; \(P=0.01\)). For diastolic BP, there was a net difference of −1.6 mm Hg (95% CI, −3.4 to 0.3 mm Hg; \(P=0.27\)). There were no significant between-group changes in BMI, physical activity, alcohol use, smoking, or diet. There were significant improvements in anger-in, anger-control, and total anger (\(P=0.02, P=0.02,\) and \(P=0.03\), respectively for the TM vs HE group. There were no significant changes in anger-out, depression, or hostility for the TM versus HE groups. There were significant group by time interactions for anger-in (\(P=0.002\)) and total anger (\(P=0.01\)), although not for anger-control or other intermediate outcomes.

Experimental subjects practiced the TM technique an average of 8.5 times per week. Control subjects practiced healthy lifestyle activities an average of 8.6 times per week. Attendance at follow-up meetings averaged during 5.4 years was 48% for each group. There were no significant differences in home practice or meeting attendance for either group in phase 1 compared with phase 2.

In the high-adherence subgroup of subjects who were regular in home practice (n=141), the HR was 0.34 (95% CI, 0.16–0.69; \(P=0.003\)). The interaction between treatment and adherence (high versus low) showed a statistical trend (\(P=0.08\)). Cox regression analysis within the TM group indicated that frequency of home practice was inversely associated with primary clinical events (\(P=0.04\)). On average, subjects attended 70% of all semiannual testing visits.
Table 4. Changes in Intermediate Outcomes During 5.4-Year Average Follow-Up

<table>
<thead>
<tr>
<th>Outcome (TM/HE No.)</th>
<th>TM Group Change, Mean (SE)</th>
<th>HE Group Change, Mean (SE)</th>
<th>Net Difference (TM−HE)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systolic BP, mm Hg (86/97)</td>
<td>0.022 (1.264)</td>
<td>4.883 (1.184)</td>
<td>−4.861</td>
<td>0.01</td>
</tr>
<tr>
<td>Diastolic BP, mm Hg (86/97)</td>
<td>−3.433 (0.683)</td>
<td>−1.877 (0.643)</td>
<td>−1.556</td>
<td>0.27</td>
</tr>
<tr>
<td>HR, bpm (86/97)</td>
<td>0.518 (0.541)</td>
<td>−0.145 (0.509)</td>
<td>0.663</td>
<td>0.01</td>
</tr>
<tr>
<td>BMI, kg/m² (86/97)</td>
<td>−0.070 (0.274)</td>
<td>−0.144 (0.258)</td>
<td>0.074</td>
<td>0.94</td>
</tr>
<tr>
<td>Exercise, h/d (81/88)</td>
<td>0.454 (0.327)</td>
<td>0.440 (0.316)</td>
<td>0.014</td>
<td>0.13</td>
</tr>
<tr>
<td>Alcohol, drinks/wk (80/90)</td>
<td>−2.494 (0.424)</td>
<td>−3.109 (0.400)</td>
<td>0.615</td>
<td>0.46</td>
</tr>
<tr>
<td>Cigarettes, No./d (84/93)</td>
<td>−0.637 (0.324)</td>
<td>−0.027 (0.309)</td>
<td>−0.610</td>
<td>0.16</td>
</tr>
<tr>
<td>Anger-in (85/94)</td>
<td>−1.826 (0.399)</td>
<td>−1.618 (0.378)</td>
<td>−0.209</td>
<td>0.02</td>
</tr>
<tr>
<td>Anger-out (85/94)</td>
<td>0.266 (0.338)</td>
<td>−0.156 (0.321)</td>
<td>0.422</td>
<td>0.87</td>
</tr>
<tr>
<td>Anger-control (85/94)</td>
<td>−0.267 (0.290)</td>
<td>−1.344 (0.277)</td>
<td>1.077</td>
<td>0.02</td>
</tr>
<tr>
<td>Total anger (85/94)</td>
<td>−1.171 (0.750)</td>
<td>−0.531 (0.712)</td>
<td>−0.640</td>
<td>0.03</td>
</tr>
<tr>
<td>Depression (85/93)</td>
<td>−0.252 (0.713)</td>
<td>0.686 (0.680)</td>
<td>−0.938</td>
<td>0.20</td>
</tr>
<tr>
<td>Hostility (84/92)</td>
<td>−0.703 (0.346)</td>
<td>−0.621 (0.330)</td>
<td>−0.082</td>
<td>0.53</td>
</tr>
</tbody>
</table>

TM indicates Transcendental Meditation program; HE, health education control group; BP, blood pressure; HR, heart rate; and BMI, body mass index (calculated as weight in kilograms divided by height in meters squared).

Discussion

This randomized, controlled trial on the secondary prevention of CVD in a high-risk population extends previous trials reporting that mind–body intervention with the TM program reduced CVD risk factors, surrogate end points, and mortality. In this trial, the TM program was associated with 48% risk reduction in the composite of mortality, nonfatal MI, and nonfatal stroke in black men and women with coronary heart disease during an average of 5.4 years follow-up. These results were confirmed by independent data analysis. Concurrently, there were improvements in BP and psychosocial distress factors, particularly anger. Regularity of TM practice was associated with increased survival.

The effects of active intervention were stable and reliable during the trial. The 2 treatment groups did not differ in characteristics between phases 1 and 2, indicating that there was no evidence of selective attrition. Adherence to the interventions was similar in both phases. Although there were between-group baseline differences on education and depression, adjusting for these differences did not substantially affect the primary outcome.

The average BP reduction of 5 mm Hg is similar to that found in meta-analyses of shorter term trials of the TM program. Reduction in systolic BP may be 1 physiological mechanism for reduced clinical events in this trial because this magnitude of reduction has been associated with 15% reduction in cardiovascular clinical events. The improvements in anger expression and control may also have contributed to enhanced survival, because anger has been associated with CVD clinical events in coronary heart disease patients. There was a nonsignificant reduction in smoking in the TM group. It is possible that other mechanisms not evaluated in this study contributed to the reduced risk in the TM group. Previous studies have reported reductions in sympathetic nervous system tone, hypothalamic-pituitary-adrenal axis activation, insulin resistance, left ventricular mass, myocardial ischemia, carotid atherosclerosis, and heart failure.

Central nervous system integration has been proposed as a neurophysiologic basis for these physiologic effects.

There was some evidence of a dose–response relationship between practice of the TM program and survival. There was a significant association between regularity of home practice and survival. Further, the subgroup of subjects who were regular in their TM practice had a 66% risk reduction compared with the overall sample risk reduction of 48%.

To our knowledge, this is the first randomized, controlled trial to demonstrate a reduction in the risk for mortality, MI, and stroke with the individual practice of a relatively simple mind–body intervention, particularly in a high-risk racial/ethnic population. Previous randomized trials of stress reduction methods in patients with coronary heart disease typically used group-based psychosocial counseling methods with complex multimodal interventions, lacked attention controls, and resulted in heterogeneous outcomes. This is also the first prospectively designed and conducted randomized, controlled trial to evaluate effects on CVD clinical events of a nonpharmacologic, lifestyle modification approach for hypertension.

There were limitations to this study. The sample size did not allow for sufficiently powered analyses of single clinical end points. The 24% risk reduction in the secondary composite end point of CVD mortality, MI, stroke, coronary revascularization, and CVD hospitalization did not reach statistical significance (P=0.17). This may have been related to variability in the use of revascularization procedures and hospitalizations in the community. The reduction in depression in the meditation group was not significant, perhaps, because depression was already low in this group at baseline, which may have contributed to lack of further reduction in one or both groups. Hostility scores were relatively low in both groups at baseline. There were no significant differences between groups in change in BMI, exercise, or alcohol consumption, although in both study groups there were apparent (within group) improvements in exercise and alcohol consumption. As noted earlier, there was a nonsignificant reduction in cigarette smoking in the stress reduction group. The sample was limited to...
a single racial/ethnic sample. However, previous studies have reported improvements in CVD outcomes with the TM program in general population samples, suggesting that this finding is generalizable.17-20,39

Another limitation was the variable length of time of subject participation and the heterogeneity of outcome data for subjects who did not reenroll in phase 2. However, when all available data, that is, mortality from non-reenrolling subjects was included in a sensitivity analysis of the primary end point, the results were similar to the main analysis in treatment effect and significance level. The unadjusted results of the primary end point analysis showed a nonsignificant statistical trend (P=0.12). However, the HR adjusted for covariates of age, sex, and antihypertensive medications was significant (P=0.025). According to Pocock et al52 and Consolidated Standards of Reporting Trials (CONSORT) recommendations, adjusted analyses frequently improve the precision of the estimate of the treatment effect.70 Furthermore, because these factors were used in the stratified randomization procedure, it is recommended to adjust for stratification factors to achieve the most efficient treatment comparison.52,53 This is particularly relevant when the adjustment factors predict the outcome, as they did in this trial.52

The proportion of cardiovascular deaths in the present trial was lower than national averages.1 This may have been because of the sample size or method of collecting causes of death from death certificates. The accuracy of death certificate data for cause of death has been seriously questioned.71,72 There was a nonsignificantly higher nonparticipation rate in the TM group compared with HE controls. Because the analysis was based on intention to treat, the higher nonparticipation rate in the TM group may have led to a more conservative estimate of the treatment effect.

This trial did not address the effects of other mind–body, meditation-type interventions on clinical events. Although several meta-analyses and comparative studies suggest a distinctive effect of the TM program,10,48,73 it remains for future comparative effectiveness trials to address differential effects of mind–body interventions on CVD clinical events.

Conclusions
This randomized, controlled trial found that a selected mind–body, stress reduction intervention, the TM program, significantly reduced risk for mortality, MI, and stroke in black men and women with coronary heart disease. These changes in clinical events were associated with lower BP and psychosocial distress. Thus, the TM program may be a clinically useful behavioral intervention in the secondary prevention of CVD in this and perhaps other high-risk populations.

Acknowledgments
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Disclosures
Dr Schneider has served as an investigator on research grants from the National Institutes of Health and US Department of Defense and is a consultant to Maharishi Foundation USA, a nonprofit educational organization. Dr Grim’s spouse is president and sole owner of Shared Care Research and Education Consulting. Dr Rainforth has served as an investigator on research grants from the National Institutes of Health and US Department of Defense and his spouse is an independent contractor to Maharishi Foundation, USA. Dr Nidich has served as an investigator on research grants from the National Institutes of Health, US Department of Defense and David Lynch Foundation and his spouse is an independent contractor to Maharishi Foundation, USA. Dr Gaylord-King has served as an investigator on research grants from the National Institutes of Health, US Department of Defense and GMDO, a nonprofit organization. Dr Salerno has served as an investigator on research grants from the National Institutes of Health and US Department of Defense. The other authors report no conflicts.

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