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Wednesday, November 18, 2009

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At-Risk College Students Reduce High Blood Pressure, Anxiety, And Depression Through Transcendental Meditation

The Transcendental Meditation® technique may be an effective method to reduce blood pressure, anxiety, depression, and anger among at-risk college students, according to a new study to be published in the [*American Journal of Hypertension*](#), December 2009.

“[The Transcendental Meditation Program](#), a widely-used standardized program to reduce stress, showed significant decreases in blood pressure and improved mental health in young adults at risk for hypertension,” said David Haaga, PhD, co-author of the study and professor of psychology at American University in Washington, D.C.

This study was conducted at American University with 298 university students randomly allocated to either the Transcendental Meditation technique or wait-list control over a three-month intervention period. A subgroup of 159 subjects at risk for hypertension was analyzed separately. At baseline and after three months, blood pressure, psychological distress, and coping ability were assessed.

For the students at risk for developing hypertension, significant improvements were observed in blood pressure, psychological distress and coping. Compared to the control group, students practicing the Transcendental Meditation program showed reductions of 6.3 mm Hg in systolic blood pressure and 4.0 mm Hg in diastolic blood pressure. These clinically significant reductions are associated with a 52% lower risk for development of hypertension in later years.

The findings are timely. Today, an estimated 18 million students are dealing with mental health issues on college campuses. Statistics from colleges nationwide indicate there has been a 50% increase in the diagnosis of depression, and more than twice as many students are on psychiatric medications as a decade ago. According to [recent national surveys](#) of campus therapists, more students than ever are seeking psychiatric help on college campuses all across the United States.

“This is the first randomized controlled study to show in young adults at risk for hypertension reductions in blood pressure that were associated with changes in psychological distress and coping,” said Sanford Nidich, EdD, lead author and senior researcher at the Institute for Natural Medicine and Prevention at Maharishi University of Management. “Previous research has shown that psychological distress such as anxiety, depression, and anger contribute to the development of hypertension in young adults,” said Dr. Nidich.

College students are particularly prone to psychological distress caused by interpersonal and social problems, pressures to succeed academically, financial strains, and uncertain futures. For the entire sample in this study, there was a significant improvement in students' mental health.

“Hypertension is a common risk factor for cardiovascular disease in adulthood. Yet, decades of research show that high blood pressure begins in youth. This well-controlled clinical trial found that blood pressure can be effectively lowered in students with a stress-reducing intervention. This has major implications for the prevention of hypertension, heart attacks and strokes in adulthood,” said Robert Schneider MD, FACC, specialist in clinical hypertension, Director of the Institute for Natural Medicine and Prevention and study co-author.

This study was supported, in part, by a Specialized Center of Research Grant from the National Institutes of Health–National Center for Complementary and Alternative Medicine, and by the Abramson Family Foundation, David Lynch Foundation, and other private donors.

Facts on Stress and Young Adults

Hypertension affects approximately one-third (33%) of the US adult population.

College-age individuals with blood pressure (BP) elevated beyond the optimal range are three times more likely to develop hypertension than normotensives.

Psychological distresses such as anxiety, depression, and anger/hostility have been found to contribute to the development of hypertension in young adults.

In 2007, around 15% of students [reported](#) having been diagnosed with depression at some point in their lives — up from 10% in 2000.