e-quilibrium

- "electronic briefs on behavior and health"

Volume 8, Number 6
June 2012

Zs and BP

One out of every three or four adults in the United States has hypertension, or high blood pressure. Unless blood pressure is extremely high, a person with hypertension typically experiences no symptoms. The risks associated with untreated hypertension are foreboding: heart disease, stroke, kidney disease, aneurysms, and visual problems, among others. Fortunately, blood pressure screening, monitoring, and treatment have become common for persons who get regular medical care.

The treatment of high blood pressure normally involves encouragement to make lifestyle changes and prescription of medications, depending upon the severity of the hypertension. The lifestyle changes recommended in existing treatment guidelines include following a healthy diet, limiting alcohol intake, engaging in regular exercise, losing weight if overweight, and limiting sodium intake. Smoking cessation and stress management are also commonly recommended. Adherence to an antihypertensive medication regimen is often a behavioral challenge, especially if the medication has side effects whereas the condition itself usually has no symptoms.

Persons with obstructive sleep apnea (OSA) are at increased risk for high blood pressure, and it is known that effective treatment of OSA aids in blood pressure management. More recently, investigators have been trying to determine the extent to which sleep duration affects blood pressure.

Depriving otherwise healthy individuals of sleep has been shown to increase blood pressure. Using existing

longitudinal data, investigators have found a relationship between getting less than 6 hours of sleep per night (commonly used as the benchmark for sleep deprivation) and the incidence of high blood pressure, a link not attributable to the presence of obesity or diabetes. Higher rates of hypertension have been found among shift workers and those who regularly have long workdays, individuals who ostensibly are getting less sleep. A very recent French study found that the risk of hypertension was nearly two times greater among adults getting 5 hours of sleep per night, compared to those getting 7 hours per night. Also, a recent systematic review of studies examining the link between sleep duration and blood pressure concluded that this association is most evident for women and/or adults under age 60.

Suffice it to say that more research is needed to conclusively say that sleep deprivation is a risk factor for high blood pressure. Even more research is needed to conclusively say that improving sleep duration can help reduce blood pressure. The Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC – 8), containing new treatment guidelines for the treatment of hypertension, is to be released this year. It will be interesting to see if getting adequate sleep is among the lifestyle recommendations for blood pressure management.

Of course, there are numerous other reasons to get adequate sleep that pertain to health, effective functioning, and safety. Getting 7-8 hours of sleep per night is a very important health behavior, whether or not the link between sleep duration and blood pressure is substantiated.

Paul J. Hershberger, Ph.D.

… is a clinical health psychologist. He is Professor of Family Medicine and Director of Behavioral Science for the Family Medicine Residency Program, Wright State University Boonshoft School of Medicine. His clinical practice includes psychotherapy, consultation, and coaching.

If you wish to read previous newsletters, you may find them at:
www.med.wright.edu/fm/equilibrium/

To contact Dr. Hershberger:
e-mail: paul.hershberger@wright.edu
phone: (937) 734-2021