

CORRESPONDENCE

Hypertension Management in Primary Care—a Cluster Randomized Trial of a Physician-Focused Educational Intervention

by Prof. Dr. med. Birgitta Weltermann, MPH; Christine Kersting, MA; and Dr. rer. medic Anja Viehmann in issue 10/2016

Blood Pressure and Lifestyle

The article by Weltermann et al. is to be welcomed as a valuable contribution to health services research in the area of arterial hypertension. They collected important data in a methodologically sound way, by using cluster randomization and, remarkably, completely on the basis of 24-hour ambulatory blood pressure monitoring. These data may provide a basis for further investigations (1). What would have been desirable, however, is for results to be presented not only for blood pressure measurements, the number of antihypertensive drugs, or changes to clinical practice management, but also for lifestyle factors. These are mentioned as an endpoint in the methods section, but they are omitted from the results section. An effect on lifestyle is a factor that is neglected in clinical practice. According to a recent study, less than 10% were questioned about physical activity (2).

The positive effect of different, non-medication measures on blood pressure control is undisputed (3). Even if—for reasons clearly and persuasively discussed in the article—the present study did not show an unequivocal difference in blood pressure between the intervention and control groups, a focus on patients’ lifestyles might potentially have given indications of long-term effects relating to blood pressure and total cardiovascular risk. Such effects would be easy to study in the setting that the authors selected to conduct their study.

DOI: 10.3238/arztebl.2016.0604a

REFERENCES

1. Weltermann B, Kersting C, Viehmann A: Hypertension management in primary care—a cluster randomized trial of a physician-focused educational intervention. *Dtsch Arztebl Int* 2016; 113: 167–74.
2. Gabrys L, Jordan S, Behrens K, Schlaud M: Prevalence, current trends and regional differences of physical activity counseling in Germany. *Dtsch Z Sportmed* 2016; 67: 53–8.
3. Appel LJ, Champagne CM, Harsha DW, et al.: Effects of comprehensive lifestyle modification on blood pressure control: main results of the PREMIER clinical trial. *JAMA* 2003; 289: 2083–93.

Prof. Dr. med. Burkhard Weisser
Christian-Albrechts-Universität zu Kiel
bweisser@email.uni-kiel.de

In Reply:

Our study collected data on physicians’ guideline-based lifestyle recommendations as well as on patients’ actual lifestyle modifications (1, 2). Methodologically, the lifestyle factors were co-factors, not endpoints. Additional details from our study:

- At baseline, 96% of the study patients had at least one lifestyle factor that could be optimized.

- Intervention practices recommended to reduce body weight and alcohol consumption significantly more frequently than control practices: physicians’ recommendations for weight reduction: 71% versus 50%, $p=0.032$; alcohol reduction: 25.8% versus 7.5%, $p=0.020$; increase physical activity: 77.4% versus 72.5%, $p=0.573$; reduce salt intake: 56.6% versus 50%, $p=0.523$; stop smoking: 27.4% versus 15%, $p=0.143$; reduce licorice consumption: 11.3% versus 10%, $p=1.00$. This was notably higher than in the study cited by Professor Weisser (3).
- Although 92% of patients in the intervention arm and 88% of patients in the control arm received recommendations for lifestyle modifications, no aspect changed to a relevant extent during the short 5-month follow-up period.
- In contrast to the PREMIER study (patient-centered behavioral intervention in patients with hypertension that is not treated medically) cited by Professor Weisser, the patient population in our study was clearly sicker: patients’ hypertension had been known for an average of 9 years (range 0–34 years), 56% had ≥ 1 cardiovascular sequela(e) and/or type 2 diabetes, and 95% were taking ≥ 1 antihypertensive medication(s).

Blood pressure lowering without medication requires particular motivation and adherence on behalf of the patients (4). Especially in secondary prevention, medication-mediated blood pressure lowering is reasonable until lifestyle modifications have an impact and, if possible, medications can be reduced or stopped. This approach leads to an early reduction of the cardiovascular risk, rather than tolerating years of insufficient blood pressure control while pointing out to patients that lifestyle modifications are required. We agree that intervention studies addressing lifestyle modifications which may include behavior therapeutic strategies will be useful in the general practice setting.

DOI: 10.3238/arztebl.2016.0604b

REFERENCES

1. Mancia G, Fogard R, Narkiewicz K, et al.: 2013 Practice guidelines for the management of arterial hypertension of the European Society of Hypertension (ESH) and the European Society of Cardiology (ESC): ESH/ESC Task Force for the Management of Arterial Hypertension. *J Hypertens* 2013; 31: 1925–38.
2. Weltermann B, Kersting C, Viehmann A: Hypertension management in primary care—a cluster randomized trial of a physician-focused educational intervention. *Dtsch Arztebl Int* 2016; 113: 167–74.
3. Gabrys L, Jordan S, Behrens K, Schlaud M: Prevalence, current trends and regional differences of physical activity counseling in Germany. *Dtsch Z Sportmed* 2016; 67: 53–8.
4. Dickinson HO1, Mason JM, Nicolson DJ, et al.: Lifestyle interventions to reduce raised blood pressure: a systematic review of randomized controlled trials. *J Hypertens* 2006; 2: 215–33.

Prof. Dr. med. Birgitta Weltermann, MPH (USA)
Institut für Allgemeinmedizin
Universitätsklinikum Essen
Universität Duisburg-Essen
birgitta.weltermann@uk-essen.de

Conflict of interest statement

The authors of both contributions declare that no conflict of interest exists.