

## Restructuring Hypertension Congresses and Scientific Meetings for Improved Hypertension Prevention and Control

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Increased blood pressure is the leading risk for death and disability globally.<sup>1,2</sup> Although there is substantive variation in different populations, approximately half of those with hypertension are undiagnosed and many remain uncontrolled when treated.<sup>1,2</sup> To reduce premature death and disability and promote economic development, the United Nations has prioritized prevention and control of noncommunicable diseases to include supporting a target to reduce uncontrolled hypertension 25% by 2025.<sup>1,3</sup>

Many hypertension organizations have indicated a desire to assist in hypertension prevention and control. In this brief editorial, we indicate a few important activities that can take place during annual meetings and hypertension congresses to augment prevention and control of hypertension. Making changes to the structure and function of meetings can attract professionals in disciplines whose skills are vital to hypertension prevention and control but who generally do not attend hypertension meetings.

Most hypertension organizations meet on a regular basis providing business meetings alongside educational and scientific sessions. The scientific and often specialty-focused education to include continuing education and professional development has a major function ensuring the advancement of science and enhancing hypertension specialty knowledge and skills. However, with restructuring, the same meetings can provide professional education opportunities to also enhance interdisciplinary knowledge and skills to implement programs for prevention and control of hypertension. These changes could cover a spectrum of: (1) changing the organizing committee membership and the organizational business meeting agenda; (2) inviting experts in public health, epidemiology, health economics, health services, education, and primary care; and (3) including a broader spectrum of topics for talks, workshop sessions, evidence-based curricula, and training sessions.

The first step in fostering prevention and control of hypertension is to ensure that the meeting committee has input from experts in public health, epidemiology, health economics, health services, and primary care. Ensuring that these experts are represented on the organizing committee will help build relevant topics into the meeting program and maximize its quality and fulfill requirements for accreditation expected by many health professionals. The Table lists potential topics that should be considered. Selecting influential leaders (also called key opinion leaders [KOLs]) from the disciplines of public health, health services, and primary care may also attract an audience that is interested in prevention and control as well as providing education to hypertension experts on relevant societal changes that are needed to facilitate hypertension prevention and control. From there, it is hoped that those attending will have impactful take-home messages to apply.

The format and content of the business meetings are also important. Ensuring that the same experts involved in planning the annual meetings are also helping plan and are involved in the organization's business meeting will help refocus national hypertension organization priorities to include prevention and control. Limited resources can be shared between the need to drive research and specialty education with the mandate to improve population health. An important agenda item in the business meeting should be the development of an organizational strategic plan to prevent and control hypertension. Recognition programs can be developed for individuals/organizations active in prevention and control (and those same individuals/organizations can be nominated for the World Hypertension League recognition awards). Rather than independently developing educational material for the public and for healthcare professionals, international educational resources can be adapted to the appropriate cultures and languages of the population.

The format of the educational and scientific meeting is also of relevance. A mix of didactic and small group sessions are key.<sup>4</sup> Plenary keynote presentations are important to increase awareness of the problems and potential solutions to hypertension prevention and control. This can be critical in attaining support from those attending the meeting to facilitate further changes in the meeting structure and topics. However, more

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**TABLE.** Potential Sessions in Hypertension Meetings That Can Aid Prevention and Control

<p>Plenary sessions</p> <p>The burden of hypertension and related diseases, the actions currently undertaken, and recommended actions for prevention and control</p> <p>The strategy and actions that the hypertension organization sponsoring the meeting is undertaking and how the membership can contribute</p> <p>National hypertension recommendations and how to put them into action</p> <p>Best global and national clinical, community, and public health practices—success stories for knowledge translation</p> <p>Overview of the current national program that is aimed to prevent and control hypertension (this may be a noncommunicable disease or cardiovascular disease strategy but should have aspects that are directed at hypertension)</p> <p>Why healthy public policies are required to prevent and control hypertension (featuring global recommendations) and what can be done to advocate for those policies</p> <p>The health economics of hypertension prevention and control</p> <p>Using interdisciplinary teams to improve hypertension control</p> <p>Why reducing dietary salt is important</p> <p>Healthcare reform—what it means for hypertension</p>
<p>Workshops and “train the trainer” sessions</p> <p>How to communicate to the public and media</p> <p>How to run a blood pressure screening program</p> <p>How to optimize a clinic for hypertension control</p> <p>How to train others to properly measure blood pressure</p> <p>How to train people to measure blood pressure at home</p> <p>How to perform and interpret ambulatory blood pressure readings</p> <p>How to conduct and analyze a blood pressure survey</p> <p>How to conduct a survey on people’s knowledge, attitudes, and behaviors towards hypertension</p>

substantive behavior change in attendees requires plenary talks to be supplemented by workshops, evidence-based curricula, and training sessions.<sup>4</sup> Requesting a commitment to change practice as part of an educational session substantively increases personal adoption of that change.<sup>5</sup> To increase the impact of episodic meetings, sessions can be structured to train interdisciplinary professionals (physicians, nurses, pharmacists) to train other people in the desired skills (“Train the Trainer” sessions\*). Train the Trainer sessions are designed to increase the capacity (empower KOLs or “champions” and equip them with tools for professional education). Given the huge care gap in hypertension prevention and control, these sessions are critically needed in nearly all countries.

For prevention and control, topics for sessions could follow the framework provided by the Expanded Chronic Care Model.<sup>6</sup> This spans healthy public policy, healthy supportive environments, empowered and strengthened communities, enhanced self-efficacy, healthcare system design, decision support (eg, guidelines), and information systems (eg, surveillance, monitoring, and evaluation). A short overarching, high-level

talk on the current epidemiology of hypertension and the impact of current prevention and control efforts is of interest to all and is a good meeting opener—it reflects our *raison d’être*. Talks and workshops featuring best national or global practices stimulates a competitive spirit and also provides learnings of what is feasible and what is achievable. Such talks could be broad or focus on public policy and community programs, enhancing patient self-efficacy, optimized clinical practices, implementing guidelines, and using hypertension registries and other information systems. Further, success stories are not only engaging but offer a platform for knowledge translation while saluting those whose efforts should be commended. Healthcare system design talks provide insights into the needed changes and potential future roles for specialists and primary care healthcare providers. Healthcare system change is highly topical for prevention and control of chronic diseases such as hypertension. Sessions relating to hypertension guidelines are of use but should be tailored to include how the recommendations can be implemented in clinical practice. In general, hypertension specialty guidelines do not reflect the reality of primary care practices and need substantive adaptation if they are to aid hypertension control. How to develop and use a hypertension registry may assist clinic efforts to improve hypertension control.

Debates can be entertaining and highlight differences of scientific opinion. Debating critical public health issues where there is a strong public health consensus of the needed actions, however, can potentially undermine

\*Train the Trainer sessions (TTTs) can be for KOLs or for natural leaders who may be unaware that they are leaders. TTTs are aimed at empowering attendees for lecturing, facilitation techniques, educational small group, problem-based workshops, skill development for specific techniques, and public communication. By training people to train others, capacity is more rapidly expanded than by simply training those in the audience.

the effort to prevent hypertension.<sup>7,8</sup> For example, fostering the controversy on dietary salt that is largely driven by individuals without expertise in public health, who have conducted low-quality controversial research and many of whom have strong food industry ties, undermines efforts to prevent hypertension.<sup>7,9</sup> Approximately 30% of hypertension is caused by high dietary salt and the evidence supporting causation and impact is stronger than that for other causal factors (physical activity, low dietary potassium, low intake of fruits and vegetables, obesity, and excessive alcohol consumption).<sup>10</sup> Debating the impact on public health of financial interests, low-quality research, and clinicians with no public health expertise who critique public health guidance might be entertaining, be of positive societal impact, and provide insights into why there are many controversies that are out of proportion to ongoing scientific weaknesses.

It is recognized that the content of the meeting needs to appeal to those attending. Hence, a transition in topics over many meetings will facilitate a gradual increase in the interests of those attending and also make the meetings more attractive for those interested in prevention and control. In general, a program that starts with plenary sessions from highly regarded expert speakers and that is followed by workshops and training sessions and then to “Train the Trainer” sessions will gradually increase interest in the audience and the capacity to drive the change.

The World Hypertension League Executive hopes this brief editorial stimulates consideration by those overseeing hypertension meetings to examine the membership of the meeting committee, the meeting structure, and the topics that would aid hypertension prevention and control. Further, applied together, these concepts may infuse energy and enthusiasm for more impactful outcomes.

If you would like to incorporate these concepts into your meetings or sessions and would like some guidance (eg, outreaching public health experts) in the effort,

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## References

1. Campbell NR, Lackland DT, Niebylski ML; World Hypertension League and International Society of Hypertension Executive Committees. High blood pressure: why prevention and control are urgent and important—a 2014 fact sheet from the World Hypertension League and the International Society of Hypertension. *J Clin Hypertens (Greenwich)*. 2014;16:551–553.
2. World Health Organization. *A global brief on hypertension: silent killer, global public health crisis*. World Health Day 2013. Report, 1–39. 2013. Geneva, Switzerland: World Health Organization; 2013.
3. United Nations General Assembly. *Note by the Secretary-General transmitting the report of the Director-General of the World Health Organization on the prevention and control of non-communicable diseases*. Report, 1–19. 12-10-2013. New York, NY: Department for General Assembly and Conference Management; 2012.
4. Mansouri M, Lockyer J. A meta-analysis of continuing medical education effectiveness. *J Contin Educ Health Prof*. 2007;27:6–15.
5. Lockyer JM, Fidler H, Hogan DB, et al. Assessing outcomes through congruence of course objectives and reflective work. *J Contin Educ Health Prof*. 2005;25:76–86.
6. Barr VJ, Robinson S, Marin-Link B, et al. The expanded Chronic Care Model: an integration of concepts and strategies from population health promotion and the Chronic Care Model. *Hosp Q*. 2003;7:73–82.
7. Campbell NR, Lackland DT, MacGregor GA. Dietary sodium: a perspective on recent sodium evidence—its interpretation and controversies. *J Clin Hypertens (Greenwich)*. 2013;15:765–768.
8. Campbell NR, Lackland DT, Niebylski ML. 2014 Dietary Salt Fact Sheet of the World Hypertension League, International Society of Hypertension, Pan American Health Organization Technical Advisory Group on Cardiovascular Disease Prevention through Dietary Salt Reduction, the World Health Organization Collaborating Centre on Population Salt Reduction, and World Action on Salt & Health. *J Clin Hypertens (Greenwich)*. 2015;17:7–9.
9. Campbell NR, Appel LJ, Cappuccio FP, et al. A call for quality research on salt intake and health: from the World Hypertension League and Supporting Organizations. *J Clin Hypertens (Greenwich)*. 2014;16:469–471.
10. Committee on Public Health Priorities to Reduce and Control Hypertension in the U.S. Population, Institute of Medicine of the National Academies. *A population-based policy and systems change approach to prevent and control hypertension*. Report, v-173. Washington, DC: National Academies Press; 2010.