Control of Hypertension
Is the Goal Reached?

Denis L. Clement

Hypertension is one of the most prevalent risk factors in the development of cardiovascular diseases and events, and on the bright side it can perfectly be controlled in the vast majority of patients. Physicians for years have taken action to control it by instituting several means to decrease blood pressure in hypertensive patients and the population at large. Initially, this effort was successful from what can be observed by comparing the data from the 1970s and those available in the 1990s. Surprisingly, physicians’ interest in the topic dropped thereafter and as a consequence, the figures of blood pressure control hardly showed any further improvement. Interest rose again when after some time, surveys like EuroAspire1 sent out alarming new information; the investigators had checked the existing risk factors and their control in patients who had a coronary event. Results showed a surprisingly high prevalence of all risk factors and particularly, hypertension was found in ≅50% of the patients. In hopes to obtain an improvement of these disappointing findings, results were made public and advice were clearly given. Yet, in the next survey, using the same protocol, no significant improvement was found, even not for hypertension; only cholesterol level clearly decreased.2 This lack of pressure control may have had far reaching consequences as reports came out describing sustained high prevalence and even increases in cerebrovascular events in several countries worldwide.3

In reality, we are facing here a remarkable contradiction. On one hand, we have seen an encouraging increase in the available means of improving on blood pressure control such as lifestyle correction, which includes better food habits with the accent made on reduction of calories and salt,4 also we could witness a booming increase in new and effective antihypertensive drugs and research in this area. On the other hand, there is clearly less improvement in the control of high blood pressure in both hypertensive patients and at population level, which the new available means of controlling hypertension would have warranted us to expect!

The results of the National Health and Nutrition Examination Survey study published in this issue5 are therefore encouraging.

The data on 9255 adult participants in the National Health and National Examination survey 2003 to 2012 were used to determine the number of hypertensive patients showing controlled blood pressure defined as <140 and <90 mmHg. In general, the number of hypertensive adults with controlled hypertension clearly increased; among patients taking antihypertensive medication, uncontrolled hypertension decreased from 38% to 30% (P trend <0.01).

The results of the National Health and Nutrition Examination Survey study are in line with other articles reporting on a higher number of treated hypertensive patients reaching target blood pressure.6 It is a pity that most studies in this topic only produce data from cross-sectional surveys and that no long-term follow-up data of the same individuals are available; this would give a more realistic insight in the progress of the actual care given to hypertensive patients all during the years. Also, comparison of the evolution of blood pressure control in countries worldwide is important as inequalities in prevalence of hypertension are reported.7

The National Health and Nutrition Examination Survey results should not put us in a state of total optimism. Although the data indeed show an improvement in the control of blood pressure in treated hypertensive patients, it should be realized that the numbers of patients who are not at control are still far too high. Several factors may play a role.

Doctor’s inertia is often cited as a first possible cause. Inertia means that the physician detects a blood pressure figure not at target but does not take action to improve on it. Often this is because of a lack of realizing the risk of hypertension, especially in totally asymptomatic patients. In some individual cases, physicians could fear to induce side effects; also, the presence of specific conditions such as orthostatic hypotension may withhold the physician’s taking action. In many instances, physicians do not take action because they presume that blood pressure measured at the office is not representative of the true value at home. Indeed, it is well recognized that ambulatory blood pressure correlates better with long-term prognosis than office pressure.8

Low adherence of the patient to treatment is another important issue in this respect. This again could be linked to the fear of side effects, to a complex treatment schedule and to the costs of the drugs; also in large part it may be because of underestimation of the substantial benefit treatment could bring in preventing life-threatening events. Motivation of patients and their family is essential—they need to understand that treatment is not only crucial but also a life-lasting program.

Healthcare systems should help in the pursuit of these goals. In this respect, longitudinal studies should be encouraged.
and inequalities of the care all over the world should be outlined. The population at large should be informed on the risk of hypertension but also on the tremendous possible means to combat it. Everyone, not only physicians busy in the cardiovascular domain should help. In Europe, at the European Union of Medical Specialists, a Thematic Federation on Hypertension is recently formed, which could help in giving information to all physicians, whatever their function, including their collaborators (nurses, technicians); in this respect, we should not forget the important role of pharmacists.

Summarizing on what can be done (Table), we should reorient the teaching in hypertension to the topic of blood pressure control. It should be clear that blood pressure in hypertensive patients can be controlled in the majority of the patients; unfortunately, we are not there yet: the goal is not reached although we have the means to attain it! Physicians should obtain crystal clear information on the blood pressure levels in their patients recorded by validated instruments; the format of the information should be easy to grasp with a visible warning each time pressure is too high. The ability to compare the values obtained with the target blood pressure as indicated in the different guidelines published recently is an essential tool to go ahead. The National Health and Nutrition Examination Survey study published in this issue helps us to remain alert on the progress achieved to date.

Acknowledgments

We would like to thank Jocelyne Planche for her great help in improving the syntax and the style of the text.

Disclosures

None.

References


Table. Recommendations to Improve Blood Pressure Control

| Make repeated blood pressure measurements with validated instruments. |
| Realize that in many patients, goal pressure is not reached! |
| In doubt: order ambulatory or home recordings. |
| Teaching needs to be more focused at this issue. |
| Authorities should support actions on measurement and control of blood pressure. |

by guest on July 11, 2017 http://hyper.ahajournals.org/ Downloaded from
Control of Hypertension: Is the Goal Reached?
Denis L. Clement

Hypertension. 2015;65:25-26; originally published online November 16, 2014;
doi: 10.1161/HYPERTENSIONAHA.114.04256

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
http://hyper.ahajournals.org/content/65/1/25

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Hypertension can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Hypertension is online at:
http://hyper.ahajournals.org//subscriptions/