Editorial

Managing Pre-Hypertension – Reducing a Global Burden or Preventing a Global Catastrophe?

What is ‘pre-hypertension’? Is it a problem and if so, what, if anything, can we do about it? Given the changing definitions of hypertension I will not address arbitrary cut off points. Individuals with blood pressures above the median of pressures in childhood or early adult life have a high risk of having pressures over 140 systolic or 90 diastolic by mid life and a 50% or more chance of being hypertensive should they survive to 70 years. Recent data from Framingham indicates that the residual lifetime risk for developing hypertension in middle aged and elderly people is 90%. However, this is just the beginning of the problem. These estimates are based on figures from the affluent nations in the 1980’s from which extrapolations to 2020 predicted an increasing contribution of hypertension to the global burden of disease as infectious disease and malnutrition diminish in the developing world. These are probably gross under estimates as they fail to predict the rapid increase in rates of obesity worldwide with accompanying hypertension, diabetes and vascular disease. The effects of increasing hypertension on cardiovascular morbidity and mortality will be further exacerbated by continued high smoking rates in the developing world and increasing rates in young women. Decreasing physical activity and increasing use of junk foods with high saturated fat, sugar and salt are further increasing blood pressure levels both directly and via obesity. These lifestyle patterns have spread rapidly throughout all major continents and are reflected in

WHL News

WHL Hypertension – Obesity Project

Despite the progress that the medical community has made in treating hypertension, we are still far short of our goals. Many factors contribute to this failure. One such factor is the worldwide epidemic of obesity that is also spreading to the underdeveloped world. Anything we can do to control obesity will have a positive impact on our ability to control hypertension.

The WHL is organizing a committee of experts from different regions of the world to produce an action plan that will reduce the prevalence of obesity and, hence, the prevalence of hypertension. The action plan will be published and distributed to the WHL membership. Our WHL President, Dr. Claude Lenfant, wrote to all of the Presidents of the WHL hypertension societies asking them to recommend an obesity expert in their region who might become a member of this committee. The responses from the Presidents were excellent. From this pool of names, the Executive Board helped to select the committee members. Unfortunately, we were limited in the

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in epidemic-like rates of hypertension and diabetes in South East Asia, in some former Eastern Block nations and in economically disadvantaged indigenous populations in North America and Australasia. For example, in the MONICA study middle aged men in Poland had an alarming 57% prevalence rate for hypertension (140/90 or more) compared with 32% for US surveys, with hypertensives having twice the overall mortality rates of normotensives. Sedentary lifestyles and unhealthy eating patterns in the developed world have tripled rates of obesity and diabetes in young and middle aged adults in the last twenty years and will likely reverse the falling rates of heart attack and stroke.

Although advances in drugs have made life far more tolerable for hypertensives, over 75% of treated patients have inadequate blood pressure control. This is probably, at least in part, because by the time treatment is started there are already irreversible changes in large artery stiffness as a consequence of lifelong exposure to gradually increasing pressures. This is especially likely to be the case in isolated systolic hypertension where the problem is primarily one of reduced arterial compliance. Moreover in most communities, less than half the hypertensives are receiving treatment, giving little cause for complacency about current management practices.

We know the main lifestyle or environmental factors that can keep blood pressures normal and reverse pre- and mild hypertension. They include avoiding excess body fat, regular physical activity in day to day life, dietary patterns typified by the DASH study with several servings of fruit and vegetables, and substitution of saturated fat products with low fat dairy foods. When these habits are coupled with moderation of salt intake to around 5 g a day and avoidance of heavy alcohol consumption, few will develop hypertension or diabetes.

How can we achieve these changes in the face of major cultural shifts and globalisation of behavioural patterns based on urbanisation, cars, computers, television, fast food, jumbo size portions and high calorie soft drinks. It presents an enormous challenge and a call for action at many levels. If we just talk about it we will be no more effective than King Canute sitting on the seashore telling the tide to go back. Let's not mince words, we are talking about the need to prevent hypertension, obesity, diabetes and related cardiovascular disease from becoming a global health catastrophe. Action means putting good nutrition and physical activity along with smoking prevention as priorities for governments, national and international bodies, health professionals, public health personnel, the food industry, the media, town planners, schools, parents and the public at large. Efforts need to include a major focus on children and their families to encourage early lifelong healthier eating and activity to prevent childhood obesity. Pre-hypertension is endemic. Hypertension and diabetes rates have already increased dramatically in the most heavily populated nations. The causes are obvious. The solutions are not. They will require resolve, concerted effort, ingenuity, education, substantial resources, legislation and above all, both community and political will, to counter the advertising and legal budgets of the food and tobacco industries.

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A reference list is available upon request from the Newsletter editorial office in Berlin.

Patrick J. Mulrow, M.D.
Secretary General
World Hypertension League
Reports from WHL Member Leagues

Conference of Hypertension and Related Diseases

The 3rd International Symposium on Hypertension and Related Diseases was held in Beijing, China from October 18–21, 2001. The conference was organized by the Chinese Hypertension League, the Chinese Journal of Cardiovascular Diseases, and the Beijing Hypertension League Institute. The main proceedings of this conference included a training course on CVD clinical trials and “discussions on the latest progress and developments in the control of hypertension in developing countries.” Professor Liu Lisheng gave a talk on the epidemiology and control of stroke in Asia. Professor J. Reid (University of Glasgow, UK) emphasized the management of hypertension and the primary and secondary prevention of stroke.

The training session on CVD Clinical Trials discussed and introduced the meaning, methodology and organization of clinical trials. Professor T. Hedner (Sweden) lectured on the aim and content of the practical clinical trials on cardiovascular diseases. Professors S. Kjeldsen (Norway) and T. Hedner introduced the clinical trials in hypertension. Professor L. Jungersten (Sweden) talked about the clinical trials of hyperlipidemia in Northern Europe. Professor A. Waldenström (Sweden) demonstrated the clinical investigative methodologies for ischemic heart disease and congestive heart failure. Professor Woodward (Australia) and Professor J. Lanke (Sweden) presented the statistical methodology for the clinical trials. They also introduced many multi-center clinical trials that were active worldwide to emphasize the importance and meaning of clinical trials. During the last 10–20 years the results of multi-center randomized double blind clinical trials have improved medical care substantially.

The conclusions of large-scale randomized clinical trials have already delivered reliable answers to many medical questions. If we do not engage in large scale randomized clinical trials, the level of our medical sciences will fall behind the world medical ranks. This training session on CVD clinical trials won the support of a large audience.

The national and international experts described clinical trials being carried out around the world, including China. A "randomized trial of a perindopril-based blood pressure lowering regimen among 6105 individuals with previous stroke or transient ischemic attack" (PROGRESS) was followed-up for an average of 4.1 years: 1520 Chinese patients were randomized by 26 hospitals. The observed reduction in stroke risk was 28% and 26% in major coronary events. A previous blood pressure lowering study (PATS) in China in 1993 also demonstrated that antihypertensive therapy prevented secondary strokes.

Professor Liu Lisheng
President
Chinese Hypertension League

The Venezuelan Foundation against Hypertension and Ischemic Heart Disease has been very active in the last years. Three Latin-American congresses on hypertension have been organized, at which a very important topic has been to educate our Venezuelan community, particularly in preventive measures on hypertension, diabetes and hyperlipidemias. These activities have been published in the Journal of Human Hypertension, Excerpta Medica, and by Gustav Fisher.

Another aim of our Foundation is to define the prevalence of hypertension in several Venezuelan cities, such as Caracas, Maracaibo and oriental states. We are now planning to initiate a Latin-American program to define hypertension, diabetes and hyperlipidemia with the sponsorship of the IASH, Inter-American Heart Foundation, and WHO.

In 2004 we plan to support the organization of the International Congress of Hypertension in Sao Paulo and we are having good cooperation with the American Society of Hypertension, European Society of Hypertension, and International Society of Hypertension.

Since 2001, I have been a member of the Editorial Board of the Journal of Hypertension and our Hypertension Foundation will be more active, not only in the education of our community, but in research and teaching in universities and hospitals in our country.

Manuel Velasco, M.D.
President
Venezuelan Foundation against Hypertension and Ischemic Heart Disease
People

The address of the Venezuelan Foundation for Hypertension and Ischemic Heart Disease has changed: Professor Manuel Velasco, President, Apartado Postal 76.333, El Marques, Caracas 1070 A, Venezuela.

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Dr. Basden J.C. Onwubere was elected president and Dr. R.O.O. Babalola secretary of the Nigerian Hypertension Society, University of Nigeria Teaching Hospital, Department of Medicine, Enugu, Nigeria.

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Impressum

The objectives of the WHL are to promote the detection, control and prevention of arterial hypertension in populations. The World Hypertension League (WHL) is a federation of leagues, societies and other national bodies devoted to this goal. Individual membership is not possible. The WHL is a division of the International Society of Hypertension (ISH), and is in official relations with the World Health Organization (WHO).

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Calendar

10th Annual Scientific & General Meeting of the Nigerian Hypertension Society
April 19, 2002
Benin-City, Nigeria
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19th World Hypertension League Council Conference and Workshop on Hypertension & Obesity
June 22, 2002
Prague, Czech Republic
Information: Dr. Patrick J. Mulrow
(for address see impressum)

6th Annual Conference “Improving Cardiovascular Outcomes in the Patient with Hypertension”
June 28–30, 2002
Charleston, SC, USA
Information: Southern Medical Association
35 Lakeshore Drive, PO Box 190088
Birmingham, AL 35219-0088, USA
Website: www.sma.org

4th Annual American Heart Association Hypertension Summer School
July 20–24, 2002
Williamsburg, VA, USA
Information: Beth Croll
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7272 Greenville Ave, Dallas, TX 75231, USA
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26th Scientific Meeting of the German Hypertension Society
November 13–16, 2002
Dresden, Germany
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February 23–27, 2003
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