INTERNATIONAL SOCIETY OF HYPERTENSION

A Scientific Council of the
World Heart Federation

Hypertension News – an Electronic Newsletter

Opus 3

January 2004

Dear member,

First we would like to thank you for the positive and encouraging comments you have sent us after Opus 1 and 2 were distributed last year. In the present issue, Opus 3, we have made a few changes. Two examples are: a new contribution from the treasurer and a page by a young investigator. Last time (Opus 2) about 100 e-mails came back, which is 25 less than after Opus-1 – so, some improvement but still a long way to go until we reach all our ISH members. Could you therefore please ask your colleagues and friends, who you know are members of the ISH, if they are receiving the newsletter and, if not, ask them to get in contact with Susan Davenport (susan.davenport@worldheart.org).

This issue, Opus 3, will also be included in the congress bags at the ISH meeting in São Paulo. In the version sent out by e-mail there is a short questionnaire (only 4–5 questions) which we hope you will fill in and return to Ms Malin Larsson (malin.larsson@fammed.umu.se) as soon as possible.

Membership Dues
A large number of you have still not paid your fees for 2003. Reminders were posted to you at the beginning of October. Please take the time to complete the invoice with payment details and return it to the Secretariat in Geneva. Remember that membership will automatically cease upon failure to pay the annual subscription fee for two consecutive years.

New Membership
Please encourage your colleagues to join the Society.
Click on www.worldheart.org/science/scientific_council.html#hypertension
and scroll down for further details including membership application forms.
Membership applications received by end of the year will be put forward to the Membership Committee that meets in São Paulo on 14 February 2004. As you know, being a member of ISH entitles the successful applicant to a substantially reduced subscription fee for the Journal of Hypertension and reduced registration fees at the biennial scientific meeting of the ISH.

Membership Handbook 2004–2006
This contains all contact details of ISH Members and will be produced after the 20th Scientific Meeting of ISH and distributed to all who have paid the membership fee for 2003.

Change of Contact Details
IMPORTANT Please don't forget to advise the Secretariat (susan.davenport@worldheart.org) of any change of contact details and especially your e-mail address.

Best wishes and a Happy New 2004!
Lars H. Lindholm, ISH Newsagent

Opus 3 has the following content:

President's Letter

Lawrie Beilin
Perth, Australia

Have Hypertension Societies outlived their usefulness? This may seem like strange rhetoric to be used by an outgoing President but is a question worth considering in the light of current trends in both clinical management and biomedical research. Consider first of all clinical management: the arguments against societies focussed predominantly on blood pressure revolve around the move to absolute risk factor assessment and global risk management for cardiovascular disease. Until recently most hypertension clinics and most initiators of major hypertension outcome trials focussed on drug treatment of hypertension, with scant attention to control of concomitant major risk factors such as dyslipidaemia, diabetes, and smoking, let alone lifestyle factors such as physical inactivity, nutrition and high alcohol consumption. Unfortunately, the same restricted approach could be said of diabetes clinics which, until the UKPDS studies, concentrated almost exclusively on blood sugar, foot care and eye examinations, lipid clinics where interest was in, well, lipids, cardiology clinics, where investigations for acute care predominated and post-coronary rehabilitation was largely restricted to exercise programs for the few, stroke units where blood pressure was not on the horizon unless general physicians with an interest in hypertension were involved, and endocrine clinics which excelled in investigating Cushing's syndrome, phaeochromocytoma and primary aldosteronism in hypokalaemic patients.

Anecdotally, only renal physicians showed a long-standing interest in good blood pressure control per se, having recognized for decades that lower blood pressures are crucial to maintenance of renal function in patients with chronic renal disease and malignant hypertension. Even with the 'expert' practitioners of hypertension such as clinical pharmacologists in hypertension clinics or the family practice where most hypertensives are managed, how many in day-to-day practice use or achieve targets for blood pressure control, standardize methods of blood pressure measurement amongst medical and nursing staff, fully utilize home blood pressure monitoring and ambulatory blood pressure measurements or seriously attend to lifestyle issues? Practice lags way behind International Guidelines.

The situation is changing fast. Recent trials indicate that antihypertensives in some form should be given to most stroke patients, most patients with coronary or peripheral vascular disease, all those with diabetes or renal disease who can tolerate them, and the majority of patients over the age of 70 years. Moreover, preventive measures need to be instituted early in the majority of all adults in the growing number of countries worldwide in which blood pressure levels as a continuum constitute the biggest single risk factor for cardiovascular disease.

The renewed interest in blood pressure now crossing so many clinical disciplines and once again recognized as a major public health issue stems from a variety of sources of evidence. Much of this evidence has been driven and collated by hypertension society members. Who is going to implement this new knowledge or pursue research to take us forward to the next levels of understanding if not those with a strong primary interest and expertise in the many facets of hypertension research and a broad understanding of the metabolic, cardiac, renal, cerebrovascular and psychosocial context in which blood pressure elevation occurs?

This brings me to the second issue that has been used as an argument for the ‘use by’ date for Hypertension Research Societies, which is that biology knows no arbitrary boundaries. Research into the pathophysiology of hypertension and its complications now extends far beyond the traditional areas of autonomic control, the renin angiotension system and salt which dominated the first three quarters of the last century, to vascular and endothelial function, glucose and insulin metabolism, appetite control, exercise physiology, psycho-social stress, complex dietary factors, alcohol consumption, lipid metabolism inflammation, immunology, monogenic and polygenic disorders, cognitive function, population research and anthropology.

The danger of not maintaining a strong national, regional and international focus for hypertension research is even greater now with few new antihypertensive drugs on the horizon and a corresponding fall in pharmaceutical industry support for clinical hypertension research. Clearly those interested in hypertension prevention and management must be drawn from a broad arc of disciplines embracing not only those recent converts to hypertension control mentioned above, but those from cognate disciplines who can help identify and hopefully modify the cultural and social trends underlying so much of hypertensive cardiovascular disease.

Similarly, Hypertension Societies should increasingly be the catalyst for cross talk and collaboration between laboratory-based researchers, and experts in clinical and population health with common interests in the causes and consequences of disturbances of blood pressure regulation. Such exchanges are all the more vital today as we increasingly recognize the interdependence of biological systems and human behaviour. Hypertension Societies will only continue to be a resource for generating and disseminating new information provided they are prepared to embrace expertise, ideas and interests from cognate disciplines. The International Society of Hypertension, along with the strong regional and local hypertension societies, should work to continue to provide the greatest expertise to deal with blood pressure elevation as the most important preventable and reversible risk factor for cardiovascular disease. We will all need to continue to adapt to increasingly provide a focus for multidisciplinary approaches to this superficially narrow but fundamentally broad and fascinating area of human biology and behaviour.

Seasons greetings and a happy New Year to all

Treasurer's Report

Alberto Morganti
Milan, Italy

Since August 2000 when I was elected as Treasurer of ISH, the administrative organization of our society has undergone a profound restyling.
Indeed, at the Chicago meeting it was decided that ISH needed a stable secretariat that has been established in Geneva because of the presence in that town of WHF, with which we share the office space and some facilities. A new secretary, Mrs. Susan Davenport, was employed to coordinate the activities of the office and also to offer a permanent reference point to the members of ISH, and it is my pleasure to acknowledge here Susan's work which has been instrumental in realizing the projects of the ISH Council. One of these, very relevant in my opinion, has been the revision of the names and the addresses of our members, who number 799 in November 2003.

This preliminary work has made possible the transfer of the collection of the membership fees from Lippincott, the publisher of the Journal of Hypertension, directly to our secretariat; so far 500 members have renewed and paid their membership for year 2003. Through Susan's work we have also revitalized our contacts with several corporate members whose contributions for fees and awards amounted to 94,000 USD in 2002.

Another major source of income has been the 2002 joint ESH-ISH meeting in Prague, from which each society has earned a total 200,000 USD. A significant profit also comes from the royalties of the Journal of Hypertension; for the year 2002 the contributions from Lippincott were 28,203 USD, but a substantial raise is expected to occur in future years as a result of negotiations with the publisher. In addition our Society possesses titles and securities to an estimated value of 300,000 USD, which generated an interest of 18,139 USD for the year 2002 and cash flow for 200,000 USD in current accounts in the UBS branch of Lausanne.

The inevitable negative side of the growing activities of ISH has been a substantial increase of the expenses, mostly due to the rental of the office space in Geneva and to the salary for the secretary, for a total of 50,000 USD per year. Also, in the year 2002, 28,200 USD were spent for the administrative counselling of the Société Fiduciaire Suisse, which keeps our books, and for the audit of PricewaterhouseCooper, which annually controls our balance.

Overall, it appears that ISH has a modest financial foundation which can support the initiatives planned by the Council for the further expansion of our Society. Obviously, for the realization of these plans, the scientific and financial success of our biannual meeting is extremely important as well as the continuing support from the corporate members, which, so far, has never been withdrawn in spite of the present difficulties for the pharmaceutical industry.

Report from a Developing Country

Worsening coronary risk factor profile in a rural community in Malaysia: The Raub Heart Study

Khalid Yusoff et. al.
Kuala Lumpur, Malaysia

Cardiovascular and cerebrovascular diseases are expected to continue to be the two most important diseases afflicting human beings over the next two decades, in both developed and developing countries. There is a differential risk for these diseases between countries, and within countries. While their incidence has reduced in most developed countries, the reverse is true for many developing countries. As lifestyle contributes to the increasing prevalence of these diseases, and urban populations often undergo marked unfavourable lifestyle changes, it is assumed that rural communities are least affected by this change in disease demography. This cross-sectional, community-based study which compared the prevalence of coronary risk factors (CRFs) over a five-year period (1993 and 1998) sought to examine whether this assumption was correct.

This study was conducted in the rural Raub District, 160 km from Kuala Lumpur. Eight hundred adults were randomly recruited in 1993 (41.6% were males; age 50.9±15.0 years and 48.2±8.9 years for males and females, respectively) and 627 in 1998 (43.5% were males, age 45.2±8.9 years and 43.9±9.6 years for males and females, respectively). A history of cigarette smoking, blood pressures (BP), height and weight and fasting venous blood were taken. Between 1993 and 1998, there had been marked, consistent worsening of most CRFs:

Blood pressure. In males, the distribution of both systolic and diastolic BP has shifted adversely. The mean systolic BP was 123.7±16.3 mmHg and 130.6±21.9 mmHg in 1993 and 1998, respectively ($p<0.0001$) and the mean diastolic BP was 73.9±12.8 mmHg and 81.3±17.0 mmHg ($p<0.001$). Hypertension (BP>140/90 mmHg or on medications) was present in 26.2% and 30.6% in 1993 and 1998, respectively ($p>0.05$). In females, a similar shift in BP was present. The mean systolic BP was 122.7±18.9 mmHg and 129.2±24.4 mmHg in 1993 and 1998, respectively ($p<0.0001$), and the mean diastolic BP was 76.8±15.7 mmHg and 81.6±10.9 mmHg, respectively ($p<0.001$). Hypertension was present in 29.4% and 31.7% in 1993 and 1998, respectively.

Total cholesterol (TC). Fasting TC distribution in males and females shifted unfavourably in 1998 as compared to 1993. The mean TC for 1993 and 1998 in males was 4.4±0.9 mmol/L and 6.5±2.4 mmol/L, respectively ($p< 0.0001$). The prevalence of TC>5.2 mmol/L in 1993 and 1998 was 21.1% and 75.5%, respectively ($p<0.01$). In females, the mean TC in 1993 and 1998 was 4.6±1.1 mmol/L and 5.9±1.9 mmol/L, respectively ($p<0.0001$). The prevalence of TC > 5.2 mmol/L in 1993 and 1998 was 23.5% and 61.6%, respectively ($p < 0.01$).

Diabetes mellitus (DM). The prevalence of diabetes in males was 4.4% and 4.7% in 1993 and 1998 and in females, 3.5% and 7.5% respectively ($p<0.01$).

Cigarette smoking. Cigarette smoking had decreased significantly among males (63.8% in 1993 and 51.5% in 1998; $p<0.01$) and females (14.0% and 4.1% respectively; $p<0.01$).

Body mass. 17.7% and 30.9% of males were overweight ($25<BMI<30$) in 1993 and 1998 ($p<0.01$) and 25.3% and 31.1% of females were overweight ($p<0.05$). Obesity ($BMI>30$) was present in 3.1% and 5.2% in 1993 and 1998 respectively in males ($p>0.05$) and 10.5% and 12.3% respectively in females ($p>0.05$) in 1993 and 1998.

Even in these apparently healthy adult males and females residing in a rural area, the prevalence of classical CRFs was high and increasing substantially even within 5 years.

The prevalence of hypertension had not increased significantly, but the burden of hypertension in both genders was particularly and persistently heavy, with about a third of the community having hypertension. Other CRFs, especially hyperlipidaemia and body mass, showed significant worsening in 1998 as compared to 1993. The prevalence of diabetes in females doubled in the 5-year period. However, smoking decreased significantly in both genders. What had led to this significant success requires further study for possible use in combating other CRFs. This study also shows that CRFs occur in clusters, emphasizing a multifaceted approach to controlling CRFs.

It can be concluded that in this rural community, marked worsening of CRFs is taking place rapidly, forming an important substrate for a substantial cardiovascular and cerebrovascular disease epidemic in the future. Recognition of this impending public health disaster by health workers and policy makers as well as the general public is required. Resources have to be employed to reduce this CRF burden soon in order to prevent such an epidemic. Effective and cost-efficient ways of combating this impending epidemic are urgently needed.

Acknowledgement: The authors express gratitude to the Ministry of Science and Technology Malaysia for providing the IRPA Research Grant.

A ‘Young’ Investigator’s Perspective on ISH Meetings

Bronwyn Kingwell, Melbourne, Australia

I was pleased to accept the invitation to give a ‘young’ person’s perspective on ISH meetings, although slightly concerned about the inverted commas around young! I’ve been to every ISH meeting since Madrid in 1992 and thoroughly enjoyed them all. It’s become a bit of a habit (a good habit) and I continue to go for two main reasons. First and foremost it is a good forum for scientific interaction; for presentation of my own work and for me to be updated on the state of play internationally. The second reason is that I’ve established a network of colleagues who provide a basis for collaboration and exchange. I am definitely going to São Paulo but am also conscious of pressures which may eventually mean that I forgo ISH meetings for alternatives. Hypertension does not, of course, occur in isolation, and increasingly my work is moving into the related areas of diabetes, lipids and atherosclerosis. The 2003 WHO/ISH Statement on Hypertension Management published recently (November 2003 issue of Hypertension) also emphasizes the need for decisions about the clinical management of hypertension to be made in conjunction with assessment of other risk factors. Hypertension meetings should in my opinion reflect current guidelines and embrace the expertise offered by other related societies.

While it is true to say that ISH meetings are certainly broader than hypertension per se, it is also true that there are other forums which provide a richer interaction for related areas. Every year we all face the dilemma of choosing which meetings to attend. For most of us the number we can attend is limited by both time and financial constraints, the latter being of particular importance for young researchers. To maximize the benefit of conference travel, decisions will be rationalized on the basis of where we can obtain the ‘biggest bang for our buck’. Increasingly therefore large meetings such as the American Heart Association or the American Diabetes Association meetings may, from a scientific perspective, become more attractive.

Joint or concurrent meetings of several societies is another trend fostering interaction between disciplines. In 2002 I convened a multi-disciplinary Congress in Australia (the Australian Health and Medical Research Congress) on behalf of the Australian Society for Medical Research. Twenty-five medical research societies participated in this Congress. The programme content was diverse, ranging from symposia on cancer to cardiovascular disease and from clinical to the most basic intra-cellular signalling. While such areas may seem disparate, in fact there is considerable overlap in relation to both technology and themes. Such forums provide a rich environment for exchange and cross-pollination between delegates and high-calibre speakers that rarely meet but have scientific interests in common. With a skilful programme committee it is also possible to get the feel of a small meeting within these larger forums by conducting focussed symposia. From the financial perspective there are economies of scale associated with larger meetings. Sponsors are enthusiastic about large meetings and such support is important to defray expenses and attract young researchers.

What’s all this got to do with ISH? Well I’m not suggesting the radical move of combining ISH meetings with those of other societies at this stage. I do however wonder whether we should give thought to at least running ISH back to back with a meeting from a related discipline like cardiology, vascular biology, atherosclerosis, diabetes, genetics or cell signalling.

This could be done on a rotating basis and perhaps include some joint symposia between one or more societies. We no longer view risk factors in isolation, and I think our scientific meetings should reflect that fact.

Scientific meeting of the International Society of Hypertension in São Paulo – Brazil is the destiny

Artur Beltrame Ribeiro
São Paulo, Brazil

Our 20th Scientific Meeting to be held in São Paulo, Brazil, February 15–19, 2004, is just around the corner. The programme is great, with state-of-the-art lectures, debates, how-to sections, breakfasts, workshops, symposia, hypertension specialist teaching, as well as oral and posters presentations. People from 62 countries are coming.

REMEMBER:

1. December 30 is the deadline for reduced registration.

2. Check if you need a visa to come to Brazil.

3. For those who like fishing, there is a special offer at rubinhopesca@uol.com.br

4. Prepare your summer clothing.

5. A special programme for Tuesday 17 with the famous São Paulo Phylarmonica is prepared. Our Gala Dinner will be a Carnival Dinner.

6. Get carnival and tourist information.

Please enter our site www.Hypertension2004.com.br for all details of our meeting.

We look forward to welcoming you in São Paulo and Brazil, for science, good food, samba and soccer.

The Editors' Corner: 'Looking back, looking forward'

Alberto Zanchetti and Giuseppe Mancia
Milan, Italy

Centro Interuniversitario di Fisiologia Clinica e Ipertensione, Universities of Milan and Milano Bicocca, Ospedale Maggiore and Istituto Auxologico Italiano, Milan, Italy

At the beginning of a new year, which for a Journal means a new volume, it is obvious that the Editors look back at the quality of the scientific content of the previous year volume and the problems encountered in running the Journal, in order to be able to foresee the new year problems and steer the journal to suit readers' expectations.

The major problem of the Journal of Hypertension during the year 2003 has been a healthy one, i.e. the increasing number of submitted papers, over 650 original papers and over 100 editorial commentaries. The quality of the submitted material, coupled with obvious constraints about the number of pages available, is causing some backlog of manuscripts and some regrettable delay between acceptance and publication. This problem the Editors are keen to solve promptly, with the kind collaboration of the Publishers and the guidance of the Management Committee.

We feel that the Journal in 2003 has continued to attract excellent manuscripts from all over the world, substantiating its international character, and on all the major aspects of hypertension and related pathologies. In this way, the Editors have been able to keep what they think has been a sound balance between clinical and basic research.

In the year 2003, several new guidelines or official statements on the management of hypertension have appeared, and most of them have been published in the Journal of Hypertension: two ISH statements on prevention of stroke and on antihypertensive therapy in acute stroke in the April issue, the ESH recommendations on conventional, home and ambulatory blood pressure measurement in May, the ESH-ESC guidelines on hypertension management in June, followed in the October issue by the Practice guidelines prepared by the two Societies, the WHO-ISH statement on hypertension management in November, and the recommendations for Sub-Saharan Africa, also in November.

These documents have been often accompanied by commentaries or editorials. Results of intervention trials and an extensive meta-analyses of antihypertensive treatment trials have also been published, and several editorials and letters have debated the results of outcome studies. A number of epidemiological studies have touched the issue of awareness, treatment and control of hypertension in different parts of the world, and the Editors have been rather liberal in accepting several papers on this topic, as they feel better control of hypertension is the real challenge in front of us during the next years. The readers may be interested in seeing a large review and meta-analysis of the information so far available worldwide about this problem in the current issue of the Journal.

During 2003, several articles have also covered practical management problems, such as cost-effectiveness of treatment, patients' utility, current trends in prescriptions, assessment of diagnostic procedures, management of hypertension in children, gestational hypertension. The Editors are well aware, however, that progress in the management of hypertension would be very poor without continuing progress in the understanding of the mechanisms of blood pressure regulation and dysregulation, thanks to both basic and clinical research. A considerable number of manuscripts on the genetic aspects of hypertension has been published in 2003, and despite the fact that many of them have generated negative results, the Editors are planning to continue to devote all necessary space in the Journal to genetic issues, although they are keen to encourage more papers on several gene interactions and studies in large populations of subjects.

All research methods, from the molecular approach to integrative physiology or pharmacology and epidemiology, from research on animal models to clinical investigation, have found hospitality in the Journal of Hypertension, and have made it, we hope, informative and intellectually stimulating for our readers.

What about 2004? The Editors – we feel – are like fishermen. They cast their nets and are able to choose the best fish if many are caught. Our bait for 2004 is the quality of what we have been able to publish in 2003, and our readers are those who ultimately decide what they will read next, thanks to the nature and the quality of the manuscripts they submit. In the meanwhile, the Editors would appreciate receiving as much feedback as possible from readers, and having their comments on the journal content, on the balance between the various topics, the relative space devoted to original papers, reviews, editorial commentaries, correspondence. We are looking forward to hearing from you.