Editorial

‘Manage it well!’ (MIW) – A complex hypertension program for better blood pressure control

According to recent epidemiological surveys, 53% of total mortality in Hungary is of CV origin with more than 25% of the adult population being hypertensive [1]. Although benefits of effective blood pressure (BP) lowering are known, only small portion (3–30%) of treated patients reach target BP [2]. The ‘Effective Control of Hypertension Project’ (ECHP) among general practitioners in Budapest, Hungary, found BP control rates (<140/90 mmHg) 14.5–25.5% at baseline, which increased to 34.5% by education of the physicians [1].

One of the most important barriers in successful treatment of hypertension (HT) is poor patient compliance [3, 4]. Previous studies have identified education of patients and physicians, home BP monitoring, improved doctor/patient relationship and once daily drug regimen as key factors of success [4–6]. Compliance could be increased by each of the above methods, most effectively, if combined [6, 7]. BP control rates are substantially higher in randomized trials [e.g. 8], mainly due to the strict follow-up visit system. Although it is evident that such trials do not represent the ‘real-world’ setting, the ‘Manage it well!’ (MIW) program demonstrated that a tight follow-up schedule is possible in the routine practice too [9].

Before the MIW program, no prospective, large-scale clinical trial has been performed to determine the role of a comprehensive patient-oriented intervention on HT control. The method of MIW included elements of the recommendations proven to improve patient compliance, which would fit the everyday practice setting [9].

We recruited 6941 HT patients in 504 (348 primary, 156 secondary care) centers. During the program, patients received information and educational materials about risks of elevated BP, measures of lifestyle changes (smoking, salt, alcohol, exercise), body weight management, dietary advices, stress tests and management, and a home BP recording diary. We also organized regular education events for the participating physicians. Important elements of the MIW were a frequent office visit plan and regular home BP monitoring periods, for which home BP recording devices were provided to be circulated among the patients.

According to the HT guidelines, state-of-the-art, once-daily pharmacotherapy was applied with dose-titration and/or add-on therapy as needed. The patients received ACE-inhibitor (trandolapril)-based (56%) or a calcium antagonist (verapamil SR)-based regimen (44%), according the physician’s decision (‘real world setting’). At the end of follow-up, 42% were on monotherapy, 58% on combinations.

The minimum follow-up was six months, at the end of which results of 5468 hypertensive patients were evaluated. At baseline, only 2.9%...
of treated patients were well controlled (<140/90 mmHg), but during the program this increased to 40.9% (p<0.001). Systolic BP control alone (<140 mmHg) was 3.8% at baseline, which changed to 45.0% at the end of follow-up. The same values for diastolic control (<90 mmHg) were 13.8% and 75.8% (Figure 1). No differences in BP control were found between trandolapril- vs. verapamil SR-based regimen. Average systolic BP decreased from 168±19 mmHg to 139±13 mmHg, diastolic BP from 97±11 mmHg to 83±7 mmHg (p<0.001). Thus, both mean systolic and diastolic BP went below target (<140 mmHg and <90 mmHg) during the program. Office BP was higher than home BP at baseline (168±19/97±11 vs. 151±17/89±10 mmHg, p<0.001), but this difference disappeared at six month (139±13/83±7 vs. 140±13/84±7 mmHg, respectively).

The antihypertensive therapy used in the MIW program was well tolerated and occurrence of side effects was low and showed a significant decline over the follow-up (6.7% vs. 2.8% vs. 1.4% after 1, 3, and 6 months, respectively). The low and declining incidence of side effects suggest that patient information and education may have a beneficial effect on the tolerance of antihypertensive pharmacotherapy as well. The most important finding of the MIW program is a significant improvement in BP control induced by an integrated intervention package increasing patient compliance or concordance and improving physician’s attitude toward more stringent therapy. The program validates this concept on a large-scale population (>5000 patients). The intervention included elements only, which could be applied in the everyday clinical practice. We believe that maximum benefit can be achieved if measures of intervention are applied simultaneously. Our detailed analyses showed that frequent office visits, home BP monitoring, change in physician behavior and more stringent drug therapy appear to be the major contributors to the program’s success.

The detailed analysis of MIW revealed differences according to the definitions used for control. Higher portions of patients met target BP, if values of 140 and 90 mmHg were also accepted. The differences can be explained by the ‘rounding off’ when using mercury sphygmomanometer. The impact of this phenomenon on control rates can be shown by introducing the ‘responders’ category (≤140 mmHg or ≤90 mmHg), where the baseline level was already 36.5% and that increased to 95.6% during follow-up (Figure 1). These data warn us, if definitions for BP control are not uniformly followed, it might largely influence the results, as it might sometimes be seen in the literature as well. However, the significant improvement during MIW was consistent whatever definition was applied. In conclusion, the MIW program shows that an integrated, patient-focused approach during HT management significantly increases the success of therapy, most likely due to better education and improved concordance of patients. This is a promising direction for the future in the treatment of high BP. The MIW intervention package has been integrated into the new Government Public Health Program of Hungary in 2001. In order to ensure full impact of this method on the everyday practice, simplification of the program elements are needed. Such simplified patient program (PROJECT = PROgram Justifying improvement in Education and Controlled Tension) is ongoing at present in our country [10].

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Editorial continued

References

WHL News

World Hypertension Day 2005

The activities of the Paraguayan Society of Hypertension and the National Institute of Cardiovascular Prevention have been a great success: Our week of activities started on May 8th with numerous blood pressure controls, oral presentations and the distribution of educational materials. These activities took place in churches, private and public enterprises, schools and universities and continued for the entire week. On the last day of that week, activities concluded with a central event in a sports arena.

This event included: blood pressure measurements, weight and waist circumference measure-ments, blood glucose control, presentations of healthy cooking, art performances and a lottery.

Our activities called the broad attention of the mass media; both television, radio stations and various newspapers reported about our activities and the intention of the World Hypertension Day. Thereby, a large number of persons were reached by our messages.

Dra. Miryam O. Ayala R.
President
Paraguayan Society of Hypertension

The Thai Hypertension League set up the following activities for the World Hypertension Day on May 14, 2005:

(i) Two posters and a short message about the detection, prevention, treatment, and danger of hypertension were prepared. Around 2,000 copies of these posters were distributed to both governmental and private hospitals throughout the country. (ii) The WHL NEWSLETTER was translated into the Thai language and distributed to medical personnel and Thai people along with the posters. (iii) On behalf of the Thai Hypertension Society all hospitals were asked to set up some special activities to mark the importance of the first WHD campaign. Some hospitals organized a special service on that day like blood pressure measurement, poster presentation, and patient education delivered by cardiologists, neurologists, and nephrologists. (iv) The Thai Hypertension Society, in collaboration with the Bangkok Metropolitan Administration and support from Sanofi-Aventis (Thailand), organized a campaign in the public garden right in the heart of Bangkok called ‘Metropolitan People Join Hands Fighting against the Danger of Hypertension’. People who joined this campaign had their blood pressure measured along with a consultation with the mobile healthcare team if they wished. An aerobic dance exercise was offered as physical activity to prevent hypertension.

We will pursue these kinds of activities this year to promote the awareness of hypertension in the public and also encourage our medical personnel to give better care to Thai people.

Yingnoi Uboldejpracharuk
President
Thai Hypertension League
People

At the General Assembly of the Peruvian Society of Hypertension in November 2005, Dr. Patricio Wagner was elected President of the Society.
Vice President is Dr. Alfredo Benavides and Secretary General is Dr. Raquel Bajtner.
The address remains the same: José del Llano Zapata 331 Of. 7D, Miraflores, Lima, Peru.
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WHD 2006

The World Hypertension Day – May 13, 2006 is fast approaching. The theme for this year is ‘Treat to Control’. The WHL will provide limited quantities of pamphlets and few posters to all member leagues/societies.

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

WORLD HYPERTENSION DAY
May 13, 2006

Information: WHL Secretariat
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XIII Argentine Congress of Arterial Hypertension
May 11–13, 2006
Buenos Aires, Argentina

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Viamonte 2790, Capital Federal
C1213 ACB, Argentina
Tel/Fax: (+54-11) 4961-6970
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21st Annual International Interdisciplinary Conference on Hypertension and Related Cardiovascular Risk Factors in Ethnic Populations
June 23–26, 2006
Atlanta, GA, USA

Information: ISHIB
100 Auburn Avenue, NE Suite 401
Atlanta, GA 30303, USA
Fax: (+1-404) 880 0347
Website: http://www.ishib.org/ISHIB2006/confinfo-asp

Hypertension Update XVIII
September 27–29, 2006
Cambridge, UK

Information:
Hampton Medical Conferences
113-119 High Street, Hampton Hill
Middlesex, TW12 1NJ, UK
Fax: (+44-20) 8979 6700
Website: http://www.hamptonmedical.com

10th Annual Symposium of the Pakistan Hypertension League
November 4–5, 2006
Peshawar, Pakistan

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