I express my sincere gratitude to the members of the Editorial Board of World Neurology who have supported me with their wisdom and healthy criticism of my Editorship since June 1999. We have all been successful in publishing and mailing to WFN members all the issues of World Neurology produced since then, a total of 34. Two issues were printed in 1999 and the rest quarterly without any omission in the last eight years. I was merely the instrument, as Editor-in-Chief, through whom this collective responsibility was channelled. I enjoyed the full confidence of the three Presidents of the WFN during my tenure, for which I am grateful to James F. Toole, Jun Kimura and the current President Johan Aarli. Robert Daroff and Piero Antuono respectively, as Chairpersons of the Publications and Website Committee of WFN, were dear colleagues who were always forthcoming with newer ideas for improving the circulation of World Neurology. I cannot forget the co-operation which I received from Keith Newton and Susan Bilger of WFN Headquarters, London, and of course Peter Bakker and his associates at Elsevier, Amsterdam. Chandika Press of Chandigarh, particularly Desh Deepak Khanna, worked hard for the excellent printing and timely mailing of thousands of copies of World Neurology.

Acknowledgement: World Neurology is published with a generous grant from the Japan Foundation for Neuroscience and Mental Health.
World Neurology is going to change its appearance in 2008. It will be published in a tabloid format, with an increase in the number of pages from the current 16 to 24, but will continue as a quarterly publication. It will contain more scientific academic material in addition to WFN news and neurological advertisements to generate revenue for printing and circulation. It will still be published by Elsevier but the epicentre of printing and mailing will shift to the USA. The new Editor-In-Chief will be the internationally famous Prof. Mark Hallett of NIH to whom I extend my congratulations. With Mark as Editor, success is assured.

The President’s Column in this issue is fully devoted to the Roadmap of African Neurology. It has become a major task of WFN to spread awareness about the plight of people living in Africa leaving apart a few countries which are relatively strong in providing neurological services to their people. Many advanced countries in the world have eagerly joined WFN in helping those black African countries where there are few if any neurologists to train General Medical Practitioners in neurology. Prof Ryuji Kaji of the Japanese Neurological Society has offered to train young African fellows at Tokushima University. I hope the neurological societies of many more developed nations will offer similar incentives to African doctors.

The burden of neurological problems in black Africa has been fully discussed by Mayowa Owolabi, James Bower and Adesola Ogunniji in their article published in Arch of Neurology, Vol 64 (No 12) in the December 2007 issue. Their contribution is eye-opening and an excellent piece on neurology in Africa where it perhaps first originated. Africa is a vast continent of 53 countries of which 11 have no trained neurologists. Despite Africa being the cradle of Neurology with the Egyptians the first to describe the brain and to know about stroke, epilepsy, migraine, dementia, road brain injuries and traumatic spinal injuries, over the passage of time all this has changed which today is a continent with the scarcest neurological services in the world. Today’s African neurologists cannot match the rapid progress made in the developed world. The authors have described that only 11 countries of Africa have more than 10 neurologists each; there are five countries with 5-10 neurologists and 20 countries with from 1-4 neurologists.

The WFN is once again offering ten Junior Travelling Fellowships for young neurologists from countries classified by the World Bank as Low or Lower Middle Income, to travel to an approved international meeting in 2008. Applicants should hold a post not above that of Associate Professor and should be no older than 42 years of age. Applications should include the name and dates of the proposed meeting to be attended, a CV and bibliography, and a letter of recommendation from the Head of the applicant’s department. If a paper or poster is to be presented, the applicant should include an abstract. An estimate of expenses, to a maximum of £1,000, should be made.

Applications should be sent to the WFN office to arrive by 18th February 2008. Awards will be announced by the end of March.

**WORLD FEDERATION OF NEUROLOGY JUNIOR TRAVELLING FELLOWSHIPS – 2008**

The WFN is once again offering ten Junior Travelling Fellowships for young neurologists from countries classified by the World Bank as Low or Lower Middle Income, to travel to an approved international meeting in 2008. Applicants should hold a post not above that of Associate Professor and should be no older than 42 years of age. Applications should include the name and dates of the proposed meeting to be attended, a CV and bibliography, and a letter of recommendation from the Head of the applicant’s department. If a paper or poster is to be presented, the applicant should include an abstract. An estimate of expenses, to a maximum of £1,000, should be made.

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The 26 million population of 11 countries had no neurologists. The Atlas of Country Resources for Neurological Disorders (2004), a joint effort of WHO and WFN, illustrated that for every 100,000 population in Europe there were 4.84 neurologists. However, in Africa there were only 0.32 neurologists for similar number of population. What a contrast in neurological services for peoples of the world; especially sub-Saharan Africa. With the exception of South Africa, neurology training programmes, infrastructure, equipment and research facilities are very inadequate in sub-Saharan African countries. Moreover, neurologists trained in the developed world prefer to stay in these countries, rather than return to serve their own communities back home. Postgraduate training programmes are rarest in sub-Saharan African countries according to the Atlas. HIV infection, AIDS, stroke and cerebral malaria are the major killers in these countries.

It is my wish that the developed and industrialised countries of the world will join under the umbrella of WFN to mitigate the sufferings of people living in black Africa, not only to promote neurological services but also other specialities which are equally lacking.

On behalf of the WFN President and Trustees I would like to thank the Japan Foundation for Neuroscience and Mental Health for financially supporting World Neurology for the last five years. Their generous grant was a great source for the distribution of WFN news to neurologists in over 100 countries.

[Editorial contd from page 1]
The national neurological society is composed. While previously only neurologists were eligible, we realize that in countries with few neurologists, a narrow definition may hamper the development of neurology. Neurosurgeons, psychiatrists and neurologists work together in their responsibilities for patients with neurological disorders and may form a neurological society, if there are too few (<5) neurologists to form a pure neurological society. A critical mass of neurologists is a requirement to profit from a CME programme. Being inclusive in the definition of a neurological society also brings possibilities for entering the international—and inter-African neurological community with access to the CME programmes. Until now, no-one has known how many neurologists there are in Africa. The first step will be to prepare a directory, with names, addresses and affiliations. Amadou Gallo Diop has worked intensely in obtaining this information which will be published in a Directory of neurologists for Africa. We are very grateful to him for this work, which is a basis for further work. It will be essential for the selection of candidates, preparation of training programmes and for networking.

The Japanese Neurological Society through Professor Ryuji Kaji has made a generous offer to receive young African fellows at the Tokushima University for training in neurology. The training will be composed of both clinical/hospital and laboratory programmes similar to those followed by Japanese neurology residents. South Africa will increase the number of training positions for colleagues from neighbouring African countries, and Morocco is prepared to provide training facilities in neurology from French-speaking sub-Saharan countries. Some sub-Saharan countries already provide training facilities for colleagues from other African countries. There is a need to establish on the African continent regional training centres and institutes of excellence for research in brain disorders.

The WFN Trustees and the Secretariat shall not make strategic decisions on the development of neurology in Africa, for example the localization of centres of excellence. This part of the strategy will be in the hands of the African neurologists through the Africa Committee, composed of neurologists from the southern, eastern, central, western and northern parts of Africa, with due consideration also to historic and linguistic aspects. The Africa Committee will meet for the first time during the Congress of the South African Neurological Association, in Stellenbosch, March 2008.

Africa is a huge continent and many areas are without an established medical infrastructure. The most promising approach for reducing the burden of neurological disorders in Africa is a comprehensive system of primary health care. Gretchen Birbeck is crucial for an important WFN-sponsored project, “Where there are no neurologists”, to improve the current quality of the medical education and medical care in Zambia. And we are grateful to the many European, American and other non-African neurologists who work in Africa today, often with an idealistic background, and whose work is a basis for public health activities in their regions.

It is impressive to see how many of them have found time also for excellent research, especially in neuroepidemiology.

The vastness of the African continent means the endeavours of the WFN will have to be limited. The first year of the WFN Africa programme has established parts of an infrastructure for further work, but professional awareness of public health aspects of neurological disorders needs to be raised. One important task is to reach key people of strategic influence connected with administrative government positions. We hope to approach this goal by an interplay between WFN, the Africa Committee and the international health organizations.

Johan A. Aarli
President WFN
Professor Jagjit Chopra is not only a most able neurologist with a proud record of clinical practice, teaching and research, but he has been an outstanding contributor to the work of the World Federation of Neurology for more years than I care to remember. He and his colleagues in his department in Chandigarh, alone and virtually unaided, organised a most magnificent World Congress of Neurology in New Delhi in 1989, which was one of the most memorable congresses I have ever attended. That in itself was a magnificent effort, but subsequently Professor Chopra became the indefatigable editor of World Neurology, an arduous and responsible post that he has held for many years. I am sorry to learn that he is now passing on the reins to another editor, as he has made World Neurology a most interesting publication which I have always enjoyed reading.

Quite apart from that major responsibility, he has served as Co-Chair of the Finance Committee of the WFN and has been a member of the Public Relations Committee, the Structure and Functions Committee, the Ethical Committee, the Publications and Website Committee and the Stroke Liaison Committee. If that were not enough, he has also been Co-Chairman of the Research Group on the Organisation and Delivery of Neurological Services. In India his record is almost unparalleled as he was Founder President of the Indian Academy of Neurology, and served with distinction as President of the Neurological Society of India, quite apart from fulfilling his major responsibilities as Chairman of the Department of Neurology at the Postgraduate Institute of Medical Education and Research in Chandigarh.

His 235 research papers and the many books which he has edited and chapters which he has written ensure for him a lasting reputation in the field of world neurology, and he has been throughout faithfully supported by his charming wife Amar. His daughter and son are both physicians, and we shall all miss his this contribution to the WFN; he has left a mark on the organisation which can never be erased.

John Walton (Lord Walton of Detchant)
Past President, WFN

Dr. Richard Masland, President and I as Secretary-Treasurer founded the WFN newsletter and later selected Professor Dr. Jagjit Chopra to be its editor in 1999. Professor Dr. Jagjit is a foremost neurologist in India and through his enormous effort the World Congress of Neurology in New Delhi in 1989 was an enormous success. There had been worry about both the organization of the congress and the safety of the attendees. Professor Chopra managed both the organization and the finances of the congress, a huge achievement. In previous congresses the WFN had received little or no funds from congress proceeds. For the Indian Congress, we forged an agreement with the Indian Society of Neurology and from then on this has been the means by which WFN Congresses have been managed, which has become the major source of its funds.

Because he lives in what was then termed a “developing” economy, despite its ancient roots, Dr. Jagjit from Chandigarh, with his knowledge of the tumultuous events following partition has influenced our field enormously by bringing to our attention the needs of people suffering with neurological disorders in lesser developed, as well as tropical regions. He has insisted that the WFN give time, energy and funds to them as part of its mandate.

Professor Chopra exemplifies the primary need for prevention and health care distribution as the everyday hard work of practicing physicians and neurologists and he has led by example. I visited his department in Chandigarh and saw in action the hundreds of people suffering the span of neurologic
disorders whom he services on a daily basis, many with disorders not seen elsewhere. Moreover, he has authored the major text book on Neurology in Tropics and has led internationally to focus the attention of the rest of the world upon these needs.

In addition to his work as a physician, he is an eminently successful father of two physicians and in partnership with his wife, Amar, the running of the household in which I was a guest. In it, I experienced one of the high points of my life when I was made an honorary uncle of his daughter, Roby, betrothed to a young man with whom she had corresponded but had not met. She told me, “My father would do only the best for me and I trust his judgment and will do anything he asks.”

I, myself have the same feelings about Jagjit, even though our relationship is different. I trust his judgment. Electronic communication and a “flat world” to which we all are adapting has made our bond a reality and through his editorship of World Neurology the tie that binds us together.

In addition to his being Editor-in-chief of World Neurology, he has served on many WFN committees: Finance, Ethics, Structure and Functions, Public Relations and Publication and Website. His editorship has led the way and I know he will continue to contribute in his retirement. He deserves accolades for fighting on the front lines of disease. He retires with glory, dignity, admiration and gratitude from all of us.

James F. Toole, M.D.
The Walter C. Teagle Professor of Neurology and Professor of Public Health Sciences
Past President WFN

A Salute to the Departing Editor of the World Neurology and a longtime supporter of the World Federation of Neurology

Dr. Jagjit Chopra will be stepping down at the end of this year as Editor-in-Chief of World Neurology, an official journal of the World Federation of Neurology (WFN). He was appointed to this job in June 1999 following the meeting of the Publications and Website Committee held in London under the chairmanship of Dr. Robert Daroff. Since then two issues of World Neurology were published in the year 1999 and its four issues have appeared regularly in the subsequent years ending with this issue.

In addition to this assignment, Jagjit has served WFN in a multitude of capacities. These include Secretary General, XVIIIth World Congress of Neurology (New Delhi, October 1989), Vice Chairman, WFN Research Group on Organization and Delivery of Neurological Sciences, member and later Co-Chairman of Finance Committee, and member of Public Relations, Ethics, Structure and Functions, and Publications and Website Committees. Old-timers, like myself, and new-comers alike must agree that he has contributed to our association with distinction and devotion throughout his long professional career. During his leadership, our organization grew rapidly in reputation for its efficient and effective delivery of news items to its membership.

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His insistence on perfection has made the journal one of the main attractions to some 25,000 neurologists of the member societies. He has played a key role for the development of WFN in general and World Neurology in particular. As a former President, I am grateful for his long-time support of our organization and wish him well for his future endeavours. Jagjit tells me that Mark Hallett will succeed him as the new Editor-in-Chief, which promises the continued well-being of our journal. Mark will be properly introduced as his term begins in the coming year, but I would like to take this opportunity to wish him the best for a successful transition and operation of the Editorial Office in 2008 and beyond.

Jun Kimura, MD
Past President, WFN

Report of WFN Education Executive Committee Meeting
Brussels, August 2007

A meeting of the WFN Education Executive Committee was held at Brussels EXPO, Belgium on Monday 27th August 2007 attended by several of the WFN Trustees. Dr Munsat chaired the meeting and summarised the committee’s task as to put together a list of proposals and specific recommendations for the Trustees’ consideration.

CME Programme
The lack of a CME Programme Manager had been a cause of concern to Dr Munsat for some time and he perceived a fall-off in the programme in terms of daily activity, number of participating countries, and number of evaluation forms being returned. Strong CME Coordinators made for good national programmes, but others needed constant encouragement. The CME Manager’s job required enthusiasm and an understanding of what was going on in the various countries. Some CME Coordinators did need to be chased and this had not been happening. Their motivation had dropped a little as a result. The solution was to rectify this deficiency in staffing. A job description was already available and a new person should be hired by the Secretariat to report to Mr Newton and the Secretary-Treasurer General, Dr Shakir, and to work very closely with Dr Munsat. The Education Executive Committee gave their support to the appointment of a
part-time manager. A background in health education was important for the new person, as was experience in working with doctors and ideally with doctors in developing countries.

Dr Shakir pointed out that following the departure of the original CME Manager, a very experienced replacement had been found but had left after only a few months. The work had then been assigned to an Association Management Company (AMC) as part of their contract with the WFN and they had allocated someone familiar with the Federation to do it. She too had been excellent but after a short while, the work had been handed over to a less experienced person. The contract with the AMC ran for one year initially and the CME Programme was a significant but not exclusive component of it. If the AMC were not doing the job to the Committee’s liking and the programme was suffering as a result, there could be changes. But the Treasurer wondered if the drop in numbers was due purely to non-chasing of the CME Coordinators or whether there were other factors.

Those present recounted their personal experiences of developments. It was much easier, for instance, to deal with a specially designated person who knew all about the programme. The AMC might do the job quite well, but it would be better not to have to explain why diplomas, for example, were needed at a particular time. There also seemed to be a variation in the receipt of Continuum mailings with some countries having received their copies as normal but others not having received materials at all. This was the first time the Treasurer had heard that material had not been received. The London Office should have been informed earlier. He asked that Keith Newton be copied in on any future correspondence.

The Trustees were very appreciative of what the committee was doing and this situation needed to be put right straightaway. They had already offered to appoint a part-time CME Programme Manager. It was a very important programme and it brought in new members to the WFN as well as forming the basis of fund-raising.

Continuum was also now accessible online via the AAN website and the access code had been distributed to everyone. As a consequence, a gradual change in the CME Programme was predicted. Some of the best CME Coordinators were not overly enthusiastic about the electronic version, though the trend in publishing was definitely in the direction of everything becoming available online. All those present were urged to look at the AAN website; it had not been possible to create it on the WFN platform.

Turkey had around 1,500 neurologists and about 1,000 young members. Dr Siva said. He feared that if the password were distributed too widely they would lose track of which neurologists were participating in the programme. They would continue to hold small discussion groups but not in the same way as before. He thought that people who had access to Continuum on-line would probably not complete evaluation forms. It was already difficult to get them to do so. He recommended having country-specific passwords and restricted access to Continuum to make it more valuable. Participants should only be allowed to go to the next Continuum when they had returned a completed evaluation form. Participants should have to complete an evaluation form in order to receive a new password for the next course; or maybe the password should be time-limited. Access was too easy with the existing code. In Turkey and Russia, incomes were improving and the main idea was to be part of the WFN. The CME programme was the strongest tie with the WFN and it was important to maintain it.

With everything accessible on line, it seemed likely that form filling and certificate numbers would probably decline. It was not known whether anyone kept track of who was accessing the programme. It would possibly be feasible to monitor whether someone had logged in but probably not whether or not he/she had downloaded. The certificates were thought to be of lesser importance.

In summary, the Education Executive Committee expressed their concern about the present electronic availability of Continuum and the possibility of its being made available to those who were not part of the CME Programme. There was a lack of clarity as to the end user. How might it be guaranteed that the end user completed an evaluation form? (A certificate may not be needed).

Book Exchange Programme

The Book Exchange programme matched people wishing to donate books and CDs to people in developing countries who wanted to receive them. In 2005, there had been close to 7,500 exchanges of books and other CME material. However, this had ceased. It was labour-intensive to match material to the appropriate recipient but the donor normally paid the shipping charges and there was a critical need in developing countries where textbooks were in very short supply. The AMC were not contracted to take this on. Dr de Visser said that several Dutch neurologists she knew wanted to donate but did not know whom to contact. Another possibility was that publishers might be able to obtain a 50% discount on NEW books. The publishers could also ship directly to the recipient.

Another idea was to send books through Book Aid. It might be easier and cheap-
er. Dr Munsat considered it an important programme and someone was needed to coordinate it. He thought it should be part of the CME Programme Manager’s job.

WCN 2009 Education Programme
Dr Siwaporn Chankrachang outlined the draft education programme for WCN 2009. They had received feedback and names proposed for the Meet-the-Professor sessions. These would be sent to the committee. Chairs of sessions should be asked to choose their own speakers but to pick people from other countries; each person chosen should also be used for other purposes, for cost reasons. For the teaching courses, a chairman and maybe 2 or 3 others would be needed for a half-day session. This committee had been asked to submit names of speakers and topics, and coordination of all suggestions would be undertaken in Bangkok. It was very important to have an international distribution of speakers. At least 30-40 countries should be included in the educational programme.

Dr Kaji agreed it was very important for a society to have a good programme with an international balance of speakers so that not everyone was from only one or two geographical areas; it decided the future success of the meetings and of the organisation itself. The WFN should aim to have the best educational programme imaginable and the current programme should be circulated to the Trustees before the final letters of invitation were sent out.

Dr Grisold thought the outline was good, but while members of the committee had made suggestions for speakers, they did not know what other names had been proposed. About 500 excellent speakers from at least 60 countries had been suggested. It would be helpful if they could see the full list of names. Dr Munsat pointed out that coordination between the scientific programme and the education programme would be needed because the same speakers would be used. It was also important that each speaker in the Education Programme should prepare a fairly detailed synopsis, which would become the property of the WFN and should be posted on the website. The Thai group were asked to send the education programme, as it was now, to the Secretariat for forwarding to the full Education Committee so that they could help fill in the missing details.

Africa Project
Dr Aarli had made Africa a key focus of his presidency. With the increasing number of African member countries in the WFN, the need for a CME Programme Manager to help develop the programme in Africa was extremely important. Some countries may have only 6-12 neurologists, but the CME Programme could get them to work together and meet together for a discussion group and to provide CME. They were very keen to obtain additional education. Those new member countries who expressed interest would be enrolled in the CME Programme. It would be necessary to find out who had Internet access. There were CME Coordinators in the existing African member countries. Because the delivery of hard copies to these countries could be so difficult and expensive, Internet access would be very important for them.

Certification of Training Programmes
The WFN had been asked by the Association of Neurological Sciences of Ethiopia to provide an evaluation of the training programme at Addis Ababa University. This sort of assessment had been done very successfully for Honduras, Guatemala and Mexico. Drs Munsat, Birbeck and Diop would be going to Ethiopia for a preliminary site visit in December and would report back. The Education Committee would have a very important role to play in the future, helping to develop a certification and re-certification programme in developing countries. A programme of visits was needed. Departments would be asked to list in advance what they already had in place and this would be measured against WFN’s own scheme of what a department should contain.

The Membership Committee had brought in several new countries as a result of WFN education programmes. As Malawi too had now received a Visiting Professor programme through Dr Birbeck, Dr de Visser asked if that country too might join WFN in the near future, and were there any other countries in the pipeline? It would be important for the Membership Committee and the Education Committee to have this information. People in many of the African countries spoke only French and none of the Education Committee was fluent in that language. However, links were being developed with the neurologists in Limoges, France who had long-term experience of working with people in Africa.

Details of these various African projects should be published in World Neurology. Dr Bergen had agreed to take on the task of Coordinator for the Africa Project.

Congress in Africa in 2011
There had been a positive discussion at the Council of Delegates about having a World Congress in Africa in 2011 – maybe in South Africa and maybe in Cape Town; or perhaps Morocco. It had been virtually unanimous but not yet binding. The Africa Project needed a focus. Dr Diop had a task force for the distribution of neurological care in Africa; but there had never been a World Congress in Africa and there was a moral commitment to hold one there. There seemed to be no better way to bring neurological care to African neurologists; to share ideas; to get them to know one another; to develop educational programmes across national boundaries; and to have research projects and clinical trials. The legacy in India from the 1989 New Delhi Congress was palpable. Great care should be taken, however, not to impose anything. We needed to know not what we thought was required but what the Africans themselves thought the needs were.

A travel grant programme would probably be essential so that people from other parts of Africa would be able to travel to the meeting. These funds should ideally come from a sponsor but that brought up the difficult question that, for the pharmaceutical companies, there was no market in Sub-Saharan Africa. E-conferencing and the Internet generally might be very helpful in this sort of activity but there was no substitute for going physically to a meeting and having professional interaction.
Nevertheless, something had to be initiated, not just discussed. A World Congress would have an enormous effect on the African Continent.

At the Africa Project meeting in Boston it had been decided WFN would organise training courses and the one in Senegal was almost underway. However, there had been no response from Ethiopia and perhaps they were not interested. It could just as easily be done in a different African country if that were the case. To get African neurologists both to attend the congress and to teach there would bring a lasting legacy to the people of Africa. But it required action, not just talk and it would not be easy. It would be on the Trustees’ agenda and they would make a recommendation to the Council of Delegates next year. Dr Grisold said it was very fortunate that Dr Munsat would be going to Ethiopia soon; he may find someone there to work with him. Dr Hachinski also wanted to do something there with stroke. Dr Munsat envisaged a similar situation in Ethiopia to the successful Honduras programme. He would report back to the committee after his visit.

The Education Committee wished to recommend to the Trustees their full support for the organisation of a major educational congress in Africa, to include teaching courses.

Seminars in Clinical Neurology
This series of seminars was now chaired by Professor Engel and all were now being made available on line via the WFN Website. Malnutrition by Professor Marco Medina was the latest title.

Education Executive Committee Meetings
The Executive Committee used to meet annually in London in December, but the Trustees favoured instead holding them at the time of an EFNS or AAN meeting. The issue was discussed thoroughly with various views expressed and the Executive Committee concluded that they would like to see a return to a strategic planning meeting, if and when required, every other year.

Received from WFN Headquarters London

Reviews of Articles Published in Journal of Neurological Sciences

Axonal and astrocyte injury markers in the cerebrospinal fluid of Kenyan children with severe malaria

Isabelle M. Medana, Richard Idro, Charles R.J.C. Newton

JNS 258 (2007): 93-98

Malaria is a systemic parasitemia characterized by episodes of severe fevers and chills, myalgias, headaches, and prostration which last a few days with a periodic pattern. Reinfections occur, but eventually most of the population eventually becomes resistant to disease. The mortality rate appears to be about 0.1%.

Cerebral malaria is a not uncommon complication of malaria in both adults and children in endemic regions of the world. This manifests as seizures and encephalopathy, often culminating in coma. The usual quoted mortality rate is about 20 - 30%. The survivors, especially children, have a high rate of residual complications, including focal weakness, ataxia, cortical blindness and seizures, in about 20% of patients, although these may decrease over the long term. Whether long-term cognitive and behavioral changes occur is not known.

The mechanism of cerebral malaria is not entirely clear and it can easily be confused with other diseases. Furthermore, it appears to be an independent entity and not just the usual toxicity that occurs in acute febrile illnesses, or febrile seizures associated with the fever of malaria or a coma coexistent with malaria. In this study, CSF markers of neural damage were measured in patients in the different categories of cerebral malaria, malaria with one of the following: seizures or coma due to noncerebral malaria or prostration, and nonmalarious patients with other neurological symptoms. The markers were the tau protein, which is present in axonal microtubules and is regarded as a marker of axonal integrity, and the S-100 protein, a marker of astrocytes.

There was systematic variation of values of these markers in the various diagnostic categories, but there was sufficient overlap in this series of patients that measurement of these markers in the CSF would probably not be of great diagnostic value, so that the neurologist seeing such patients would have to consider using standard diagnostic procedures to evaluate each individual patient.

The CSF levels of the tau protein were increased in the cerebral malaria group compared to malaria patients with prostration or malaria with seizures. This suggests an effect of the malaria parasites directly or indirectly on neurons. Such patients tend to have anemia and metabolic acidosis, as well as heavier parasite loads, which may in part be responsible for the increase in the tau protein and thus also cerebral malaria. It was interesting that an increase in S-100 was associated with a higher risk of seizures.

Diagnostic markers for diagnosing dementia with Lewy bodies: CSF andMIBG cardiac scintigraphy study

Kenji Wada-Isoe, Michio Kitayama, Kazuhiro Nakaso, Kenji Nakashima


It can be difficult to differentiate at times between different dementing illnesses. For example the most common cause of dementia, Alzheimer’s disease (AD), can be difficult to differentiate from Lewy body dementia (LBD), which is not rare. While effective treatments are not available for either disease, dif-
ferentiation between these diseases is not crucial at this point, but this will undoubtedly change. Furthermore methods which can distinguish one disease from another may shed light on the pathogenesis of these diseases. Finally, some of these methods may involve peripheral structures. An example of this is discussed in this paper.

In this paper, CSF markers and cardiac scintigraphy using 123I-MIBG (met- iodobenzylguanidine) were systematically measured in patients with AD, LBD, and other neurological diseases (which served as controls). The CSF markers measured were amyloid \( 1-42 \) (A\(^{\beta} \) 42) and 181-Thr phosphorylated tau (ptau). A\(^{\beta} \) 42 is the pathogenic fragment of amyloid precursor protein (APP) found in the plaques of AD, and ptau is the abnormal hyperphosphorylated tau protein which is associated with neurofibrillary tangles, also found in AD brain.

The labeled MIBG is a norepinephrine analog and binds to postganglionic cardiac sympathetic receptors.

The patients were diagnosed according to standard clinical criteria. The CSF ptau to A\(^{\beta} \) 42 ratios were high, medium, and low in AD, LBD and controls, respectively, a result consistent with previous studies. Interestingly, the cardiac MIBG scintigraphy showed that AD patients had a high heart-to-mediastinum (H/M) ratio (indicating strong binding to the heart), with a slow washout, indicating preserved postganglionic norepinephrine receptors, while LBD patients had low H/M ratios with a fast washout, suggesting looser binding to the receptors.

The results were analyzed to explore the diagnostic power of the various CSF markers and scintigraphy to differentiate AD and LBD. The results were remarkable. Cardiac scintigraphy had considerably more diagnostic power (ie positive and negative predictive value) to differentiate AD and LBD than the CSF markers and their combinations. The ratio of CSF p-tau to A\(^{\beta} \) 42 was also useful but less so than the scintigraphy. The H/M ratio in AD and controls was significantly higher and washout rate lower, than in LBD, which means that the cardiac effects were particular to LBD. This of course must be reproduced by larger prospective studies, but the scintigraphy results are very interesting and suggestive, indicating wider systemic involvement with LBD.

**History of the Pan Arab Union of Neurological Sciences**

The Pan Arab Union of Neurological Sciences was conceived in 1973 when some representatives from the Pan Arab countries attending the World Congress of Neurology held in Barcelona, met and discussed their problems and came up with the idea of forming a Pan Arab Union of Neurological Sciences. However, it was not until 1975 when the Egyptian Society of Neurology, Neurosurgery and Psychiatry took the initiative and held the first Pan Arab meeting in Neurosciences in Cairo that PAUNS was effectively established and the late Dr. Ahmad Benhawi was nominated to be the first President. Accordingly, the Union was officially founded in 1975 from a combination of various neurosciences societies in the Arab world, including specialists from countries lacking such societies. Moreover, from the beginning, Psychiatry and Neurosurgery were included to represent the cluster of specializations that are directly interactive in the term Neurology. Since then, specialists in all fields of neurology such as neuroradiology, neuropathology, neuropsychology, neuropaediatrics and neuropathology have been involved and the door remains open for other fields to be included some of which already have been.

Since its early beginnings the PAUNS established strong ties with the European Neurosurgical societies and this was chaired from the Arab side by Dr. Sayed Al Jundi. As a result of this link, eight postgraduate courses were held in different parts of the Arab world mainly administered as teaching courses for young neurosurgeons.

The PAUNS has been very active in meeting and developing the organization of the Union. In addition to hosting meetings and seminars targeted at developing the quality of services offered and in developing the standard of Neurology practice in the Arab World, PAUNS has been busy updating members in the latest developments in neurology, linking the Union with international bodies and expanding through off-shoot societies that stem from the same basic values of the PAUNS.

Accordingly, since 1975 ten regional conferences have been held in different parts of the Arab World, all under the auspices of the World Federation of Neurology. These included:

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Additionally and under the umbrella of the PAUNS, many meetings were held in different parts of the Arab world such as the Egyptian society’s annual meeting for neurology which was held in different parts of Egypt and included an invitation to regional and international members to participate. Additionally, the first Syrian Congress of Neurosciences was organized in 1987 in the historic city of Tadmur and the Syrian Society held several local conferences and some international ones in collaboration mainly with the French. In 1988 seminars on neurology update were held in Kuwait and in 1992 another neurology update seminar was held in Amman. In 2006 and 2007 annual meetings were held in Dubai with Arab and...
International participations and since then many other seminars were held in various Arab countries, the last one was recently held in Syria in August 2007. It has to be stressed that members from international societies attended the annual PAUNS meetings.

In addition to such meetings there were other meetings between the PAUNS and the International League Against Epilepsy (ILAE) and in 1989 the PAUNS was accepted as an active member in the World Federation of Neurology (WFN) which resulted in two members from the Pan Arab region becoming Vice Presidents and several members becoming Chairmen and officers in the various committees of the WFN. Additionally other members were elected as Associate Editors in the Journal of the Neurological Sciences published by the WFN.

As neurosciences have been expanding in the Arab World a few important societies have been established and others are still in the pipeline. In 1984 Psychiatrists formed a Pan Arab Psychiatric Association and in 1994 the Pan Arab Neuroradiological Society was formed. In 1995 the Arab Neurosurgical Society was founded and recently the Pan Arab Pediatric Neurology Society was established.

Moreover, in terms of global similarity to International best practices, the constitution of the PAUNS was revised to conform to the constitution of the WFN by forming a committee from different senior members in the Arab countries that met in Alexandria and is still an ongoing process that needs follow up and updates. Additionally PAUNS formed many research committees with some active members of different international societies and PAUNS has had a significant presence and participation in the various congresses held around the world.

To that effect, recently PAUNS joined the European Federation of Neurological Societies (EFNS) and agreed to collaborate on regional and international meetings. In all its activities the WFN has always encouraged and cooperated with PAUNS for any difficulties they faced. Examples of such support are when the WFN Education Committee supported various Arab Neurological societies by sending books, journals, scientific papers, seminars to all Arab countries including Iraq and Palestine. Additionally two members from PAUNS were elected, one for the scientific committee and the other for the education committee in the next WCN Congress to be held in Bangkok 2009.

On this and for supporting information about the WFN and the collaboration with PAUNS check the WFN website (www.wfneurology.org)

In the area of information exchange, PAUNS has also been very active at the regional and international levels. In 2004, members of PAUNS shared information with the WFN and the World Health Organization (WHO) in the initiative of developing an “Atlas for Neurological Disorders”, and in addition information on the public health challenges of neurological disorders and information for the African initiative of the WFN. Moreover, PAUNS has shared with the American Academy of Neurology (AAN), ILAE and the World Congress of Stroke information on Movement Disorders such as dementia, Parkinson’s Disease, Multiple Sclerosis, Stroke and muscle diseases which was presented in conferences and other specialized meetings in different parts of the world.

Additional highlights of the level of diversity and activity of the PAUNS were:
—The establishment of a journal “Neurosciences” by the Saudi Society of Neurology for the PAUNS,
—The establishment of committees in the PAUNS such as a research committee, nominating committee, stroke, headache, MS and many others,
—Establishment of a neurology board in some Arab countries,
—The establishment of a Pan Arab neurosciences symposium in the World Congress of Neurology in 2001 which held its first meeting in London and was chaired by Prof. Saleh Al Deeb from Saudi Arabia,
—Specialized meetings in neuroradiology, stroke, epilepsy, movement disorders,
—Holding several courses on neuroimaging in Saudi Arabia.

PAUNS continues to work hard towards being the premier platform for Neurologists of the Arab World through education, global integration and continuous development.

**Regional News**

**News from the annual European Charcot Foundation Symposium, 2007**

Treatment of Multiple Sclerosis (MS) should start at the first onset of the disease. All patients, regardless of the type of MS, should receive adequate drug treatment after a first attack. This was one of today’s main conclusion at the international medical scientific conference on New Targets of Treatment in Multiple Sclerosis, organized by the independent European Charcot Foundation, November 29 - December 1, 2007, Italy. More than 320 scientists and clinicians in the field of MS from across Europe and abroad discussed the newest developments in treatment strategies.

Most current drug treatments are aimed at the suppression of relapses of Multiple Sclerosis. "In applying the available treatments, the neurologist has to know on which part of the immune sys—
tem the therapy is aimed: the peripheral part of the immune system, the blood-brain barrier and/or the brain itself”, Professor O.R. Hommes, chairman of the European Charcot Foundation stated.

Unfortunately, there is no treatment to stop the progression of the disease yet. During the congress, top level scientists in the field of MS thoroughly discussed a number of targets for new MS treatments and reliable measurement of clinically relevant effects. Today, medical science is increasingly supported by accelerating technical possibilities to analyze vast amounts of immunological samples in short time against low costs. The growing knowledge about a set of new biomarkers and the rapidly improving MRI imaging techniques were also mentioned as important developments to boost the search for accurate treatment.

It is apparent that a promising line of new oral treatments is currently being developed, some of which are already being examined in phase III clinical trials. “These drugs are all potentially 1st line treatments for MS and favor a high degree of tolerability for MS patients”, as was stated by Prof. G. Comi (Milan, Italy). Nowadays only injectable therapies are available.

The enormous scientific efforts that are being undertaken throughout the world and the tremendous build-up of knowledge about the disease in recent years, give rise to an optimistic outlook at finding several curative treatments of MS in the next decade. “Precise, predictive and personalized MS drugs against acceptable cost can be anticipated by 2020”, according to Prof. L. Steinman (Stanford University, USA) in his keynote lecture.

Multiple sclerosis (MS) is an inflammatory and degenerative disease of the central nervous system leading in time to severe disability. This chronic disease is affecting 70 to 200 per 100,000 persons in Europe.

European Charcot Foundation, Molenhoek (region Nijmegen), the Netherlands.

17th World Congress on Parkinson’s Disease and Related Disorders (WCPD) in Amsterdam

Findings from a new observational survey show that around one in five patients with troublesome symptoms related to Parkinson’s disease may benefit from deep-brain stimulation (DBS) and should be considered for the treatment. The survey was conducted in four European countries (Belgium, Germany, Italy, Spain) and Canada with the support of a new screening program, STIMULUS, that has the potential to help neurologists identify patients who could benefit from DBS. “Deep-brain stimulation has been proven to be a very effective solution for certain patients with Parkinson’s disease, who have not achieved an acceptable level of control over their motor symptoms with medication alone” stated Doctor Jan Herzog, Department of Neurology, Christian-Albrechts-Universität in Kiel, Germany and member of the expert panel that developed the STIMULUS program. “However, the complexity of Parkinson’s disease makes it very challenging for general neurologists to identify the appropriate candidates for DBS. Good patient selection is critical to get the most effective results with deep-brain stimulation” added Doctor Herzog. There are over one million patients with Parkinson’s disease in Europe. However, a large number of patients who could benefit from DBS are never referred, and as many as 63 per cent of those who are referred disappointingly find out that they are not eligible for the procedure.

DBS in Parkinson’s Disease

The benefits of DBS have been shown in clinical trials in patients with Parkinson’s disease. Results from a randomized trial show that DBS combined with medication significantly improves quality of life compared to conventional medical treatment alone. Additionally, DBS has been shown to improve motor symptoms substantially and maintain overall function for at least five years in patients with advanced Parkinson’s disease. A recent literature review shows that DBS is the most efficacious treatment for improving quality of life in patients with Parkinson’s disease. “Deep-brain stimulation is a treatment that has been shown to improve both motor function and quality of life in patients with Parkinson’s disease” said Stephen Pickard, President of the European Parkinson’s Disease Awareness (EPDA). “Enabling people to regain control of their body and under-

**STIMULUS Program Screening Criteria:**

**Absolute Criteria**

- Idiopathic Parkinson’s disease patient
- Severe motor disability
- Insufficient response to treatment with levadopa
- Not having any medical condition that prevents Surgery
- Not having a medically resistant mental disease symptoms

**Relative Variables**

- Age
- Duration of Parkinson’s disease
- Severity of OFF symptoms
- Severity of dyskinesias
- Levadopa-resistant axial
- Refractory tremor
- Intellectual impairment
**International Classification of Functioning, Disability and Health**

**Children and Youth Version**

ICF-CY

The International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY) is a derived version of the International Classification of Functioning, Disability and Health (ICF, WHO, 2001) designed to record characteristics of the developing child and the influence of environments surrounding the child. This derived version of the ICF can be used by providers, consumers and all those concerned with the health, education, and well being of children and youth. It provides a common and universal language for clinical, public health, and research applications to facilitate the documentation and measurement of health and disability in child and youth populations.

As a version for children and youth, the classification builds on the ICF conceptual framework and provides a common language and terminology and recording problems involving functions and structures of the body, activity limitations and participation restrictions manifested in infancy, childhood and adolescence and relevant environmental factors. The ICF-CY belongs to the “family” of international classifications developed by the World Health Organization for application to various aspects of health. The ICF-CY can assist clinicians, educators, researchers, administrators, policy makers and parents to document the characteristics of children and youth of importance for promoting their growth, health and development.

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**STIMULUS Survey Results**

The survey presented at WCPD was conducted among 106 neurologists in Belgium, Germany, Italy, Spain and Canada, who screened 1,530 patients with the help of the STIMULUS program. This is a computer-based patient screening program developed by an independent international panel of 12 movement disorders experts, (including Doctor Herzog) who identified five absolute criteria that a patient with Parkinson’s disease must meet, plus an additional seven relative clinical variables, that determine if a patient should be referred for treatment with DBS. The STIMULUS program was developed for use in Europe and enables neurologists to quickly and accurately determine a patient’s suitability to be considered for treatment. Survey results found that of the patients examined, 70 per cent fulfilled the five absolute criteria and almost two thirds of these were confirmed as eligible for DBS consideration when assessed against the relative variables. The most prevalent reasons cited for patients to not be eligible for DBS consideration were insufficiently severe motor symptoms, mental contraindications and medical conditions preventing surgery.

The STIMULUS program can be accessed online at http://test.stimulus-dbs.org.

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**XV Indian Academy of Neurology Conference: A Joint meeting with Association of British Neurologists**

4-7th October, 2007, NCPA, Mumbai

The XVth Annual Conference of Indian Academy of Neurology was organized by Bombay Neurosciences Association (BNA) and Maharashtra Association of Neurologists. Following were the special features of the conference:

The Conference was very well attended by a record number of 1,010 delegates. A special feature was the participation by delegates from the United Kingdom, SAARC countries including Sri Lanka, Nepal, Bangladesh and Pakistan, Kenya, Taiwan and New Zealand. The venue of the conference was the iconic National Center for Performing Arts (NCPA) located at the southern tip of Marine Drive (Queen’s Necklace) Mumbai. Twenty two distinguished speakers from India, UK and USA formed an internationally acclaimed faculty and lectured in the breakfast seminars, CMEs and various symposia. The Presidential, IAN, B.S. Singhal and Baldev Singh Orations were also of a very high calibre. A record number of 231 scientific papers were presented during this conference. Sixty five were accommodated in the platform sessions and 165 during the poster session. The facilities provided by the Organizing Committee were appreciated by everyone. The abstract book was printed as a supplement of the Annals of Indian Academy of Neurology and distributed at the time of registration to all the participants.

Another unique feature of the conference was the dance drama “Krishna” performed by differently abled children of the Indian Society for the Rehabilitation of the Handicapped (ISRH) after the inaugural function. One marveled at the talent of these children, many of whom were auditorily (deaf mutes) or visually challenged. A noteworthy feature was the participation of the delegates during all the Scientific Sessions from 7.30 am (Breakfast Seminars) till the end of the conference on all four days.
The members of the local organizing committee gratefully acknowledge the support given by the Executive Committee of the IAN, BNA and MAN.

S.M. Katrak  
Nirmal Surya  
Chairperson  
Organizing Secretary  
Mumbai—India  
Mumbai—India

**WFN Fellowship: A Report**

The Laboratory of Clinical Neurophysiology of the Dr. Agostinho Neto Hospital of Guantanamo City in Cuba and I in particular would like to express my sincere thanks to World Federation of Neurology for awarding me with the travelling fellowship scholarship. I attended the XII Pan American Congress of Neurology in Santo Domingo from 7-11 October 2007.

I had a golden opportunity to hear and meet with important experts in all fields of neurology and neurophysiology. I enjoyed many of the sessions and free discussion. This project taken by the WFN in enabling young professionals to attend prestigious meeting is highly appreciated.

**Dr Roilan Lorenzo Sancho**
Laboratory of Clinical Neurophysiology  
Agostinho Neto Hospital  
Gauantamo City, Cuba
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- HTLV-1 infection and the viral etiology of multiple sclerosis
- Bacterial toxins and Multiple Sclerosis
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- Gender-specific influence of the chromosome 16 chemokine gene cluster on the susceptibility to Multiple Sclerosis
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Journal of the Neurological Sciences publishes articles on Alzheimer’s and dementia!

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Oxidative stress and oxidative DNA damage is characteristic for mixed Alzheimer disease/vascular dementia

A pilot study to evaluate the effects of Cerebrolysin on cognition and qEEG in vascular dementia: Cognitive improvement correlates with qEEG acceleration

Diagnostic markers for diagnosing dementia with Lewy bodies: CSF and MIBG cardiac scintigraphy study

Special issues

Vascular Dementia - Proceedings of the Fourth International Congress on Vascular Dementia, Porto, Portugal on October 20-23, 2005

Dementia in Parkinson's Disease: International Symposium, Dementia in Parkinson's Disease, Salzburg, Austria, 24-27 October 2004

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