

# Uppsala Reports 39

UPPSALA REPORTS October 2007

For everyone concerned with the issues of pharmacovigilance

**Building capacity in Africa**

**The National Centres survey results**

***the UMC's 4 year plans***

**Research at *the UMC***

**New publications**



# DIRECTOR'S MESSAGE



Ralph Edwards  
Director  
the Uppsala Monitoring  
Centre

I am often concerned about the presence of incomplete information on the web, which can be accessed by anybody. This can leave doubts in patients' minds about their treatment. Certainly it puts a greater onus on prescribers, dispensers, and other health professionals to fully explain their actions to patients, but it would also help if there was an adequate evidence base to back their decisions. Collections of patient safety reports might help us throw some light on these 'near miss' situations, in time.

Occasionally members of the public contact me with queries about adverse effects during their management.

Recent questions have included such problems as:

- Should gentamycin be given for longer than two weeks? What should one do if renal function begins to deteriorate? (Gentamycin was given for 4 weeks in spite of deteriorating renal function, though at a lower dose)
- Can you ever use a penicillin with gentamycin if the dosage schedule means that they cannot be given more than two hours apart?
- Does gentamycin combined with morphine increase the chances of respiratory depression?
- Should one use tramadol and morphine together for pain relief?
- What should one do if morphine causes confusion but inadequate pain relief? (In this instance a benzodiazepine was added!)
- Should one use NSAIDs with warfarin? Is paracetamol safe?

Some answers to all the above are to be found by a quick look at a small sample of websites. Gentamycin is recommended for 2 weeks only and should not be given concurrently with penicillins without adequate spacing between doses (how much?), because of inactivation. Gentamycin dose should be reduced in renal failure, but does that include the situation where renal function is deteriorating? Gentamycin may reduce respiratory function given with opiates. Tramadol is a weaker analgesic than morphine and a partial agonist at the same receptor, therefore is an illogical combination. There are very few analgesic drugs that cannot add to confusion caused by morphine other than NSAIDs. It is not easy to find moderate analgesic without a possible interaction with warfarin: even paracetamol has been reported to cause increased warfarin activity with longer dosing.

Since each of the above questions relates to particular clinical situations where the well documented negative effect was possible or occurred, patients were concerned that their treatment was not correct. The web, however, does not give any indication of how common or serious the negative effects might be or what management alternatives there might be. In each case the clinician took some risk, but without telling the patient why (if they knew they were taking a risk!). Personally, I think that using morphine and a benzodiazepine, or tramadol, together is not a good idea, but I can imagine situations where the other questioned actions might be acceptable. In each example the patient did ask questions based on their acquired website information: why were the questions not answered satisfactorily?

As a footnote: if you had a pulmonary embolism following flight, how soon would you fly back home?

A handwritten signature in black ink that reads "Ralph Edwards". The signature is written in a cursive style and is underlined with a single horizontal line.

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The Uppsala Monitoring Centre (*the* UMC) is the field-name of the WHO Collaborating Centre for International Drug Monitoring, responsible for the management of the WHO Programme for International Drug Monitoring.

An independent centre of scientific excellence, *the* UMC offers products and services, derived from the WHO database of Adverse Drug Reactions (ADRs) reported from member countries of the WHO Programme.

With an independent and global perspective on drug safety, *the* UMC provides resources for regulatory agencies, health professionals, researchers and the pharmaceutical industry.

The UMC's important worldwide work is financed solely by the organisation itself, without support from WHO, the Swedish Government, member countries of the WHO Programme or any grant-making body.



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## Strengthening pharmacovigilance

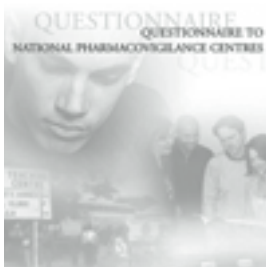
WHO training in Ghana aims to implement cohort event monitoring in parts of Africa



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National Centres in WHO Programme had a chance to comment on *the* UMC's services; we check on progress in responding



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## Research at *the* UMC

A closer look at one of the areas of research in drug safety currently being undertaken at *the* UMC

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## Pharmacovigilance in Uganda

### Background

The National Pharmacovigilance Centre at the National Drug Authority (NDA) was established in April 2005 and coordinates pharmacovigilance in Uganda. Pharmacovigilance takes the form of passive reporting although active surveillance is encouraged. The Centre issues forms to health workers to use to report ADRs, which, once completed and sent to the National Pharmacovigilance centre at NDA, are analyzed by the centre and the pharmacovigilance Advisory Committee of the NDA Board. Using VigiFlow, reports are sent to the Uppsala Monitoring Centre, where pharmacovigilance centres worldwide report ADRs. Since October 2004, 170 ADR reports have been received. Under-reporting is a challenge faced by nearly all pharmacovigilance systems at the onset, hence the need to increase awareness of ADR reporting.

### Links with WHO

The WHO has historically played a vital role in promoting the safety of medicinal products as a clinical and public health issue, particularly in Africa. In June 2007 Uganda became the 83rd member of the WHO Programme for International Drug Monitoring.

### Public Health Programmes (PHPs)

In response to the deficiencies in the provision of health care by existing health services, the concept of delivery of primary health-care through alternative systems such as trained non-medical, village workers, community medicine distributors, drug sellers and traditional healers has emerged. In the past, most medicines and vaccines used in public health had been in use for many years. Now new and more potent medicines, with which there is limited clinical experience (e.g. new antiretrovirals, Artemisinin-based Combination Therapies ACTs), or still undergoing clinical trials are used.

In Uganda, PHPs such as the AIDS Control Programme, Malaria Control Programme, Uganda National Expanded Programme on Immunization (UNEPI), Tuberculosis, Reproductive Health and Vector Control programmes are well-established and are considered essential for the health of the population. The resources in PHPs are often concentrated on reducing disease morbidity and mortality and very few programmes have a well-established pharmacovigilance system; only UNEPI has an adverse vaccine reactions reporting mechanism in place. It is essential that there should be adequate safety surveillance in order to deal with genuine adverse events, and to prevent or manage misplaced fear caused by false or unproven reports from patients and health workers that might adversely affect coverage and the life and performance of the product in Uganda. The pharmacovigilance system will undoubtedly help in the early detection and prompt management of adverse reactions, but will also assist in achieving the goals of the programmes.

To strengthen pharmacovigilance in Uganda, there is a need to:

- Increase awareness of pharmacovigilance using a three-pronged approach: increasing public awareness, ensuring advocacy for decision-makers, and sensitization of health workers

- Strengthen passive surveillance (spontaneous reporting)
- Standardize processes used for the distribution, completion and collection of ADR forms, management of reporting forms
- Establish district and regional ADR/Drug information centres
- Link with active surveillance studies in the country through public health programmes, universities, hospitals, research centres (operational research)
- Increase collaboration with PHPs within the Ministry of Health and integration of pharmacovigilance into PHPs
- Improve reporting by the pharmaceutical industry
- Incorporate pharmacovigilance into health care curricula.

### National symposium

To consolidate progress so far and further develop pharmacovigilance capacity in Uganda, a symposium was held on 28-29 August 2007 in Kampala, entitled 'Unleashing the potential of Pharmacovigilance in Africa'. The meeting was particularly aimed at creating a model pharmacovigilance scheme which is cost effective and sustainable for Uganda. It was officially opened by the Honourable Minister of State for Health, Dr Richard Nduhura.



*The Minister for Health (7th from right, front row) and participants in the Kampala symposium.*

The symposium gave an opportunity to compare information, experiences and roles of stakeholders in Uganda and some other selected African countries. The countries included Tanzania, Zanzibar, Zambia, Namibia and Ethiopia. The meeting also looked at ways of improving dissemination and management of drug safety information in Uganda and selected African countries.

### The target audience consisted of virtually all potential players in Uganda:

- Ministry of Health
- Public health programmes, NGOs/Clinics involved in treatment of HIV/AIDS
- Researchers for clinical trials; Ugandan drug safety researchers
- Uganda National Council for Science and Technology

- Regional referral hospitals – pharmacists and district health personnel
- Professional bodies
- Drug importers, distributors, manufacturers
- Training institutions – medical, nursing, pharmacy; clinical officer schools
- Development partners: Axios (Access to Treatment), PMI (President's Malaria Initiative), PEPFAR (President's Emergency Plan for AIDS Relief), MSH (Management Sciences for Health), Uganda Red Cross
- Uganda National Health Consumers Association
- Parliament: Social services committee
- Media (health journalists)
- National Drug Authority staff.

The Erice Declaration (1997) challenges all players: public health administration, health professionals, pharmaceutical industry, government, drug regulators, the media, and consumers, to strive towards the highest ethical, professional and scientific standards in protecting and promoting safe use of medicines. It is hoped that the symposium and other initiatives will move forward in strengthening pharmacovigilance in Uganda.

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## Barbados, new Associate

Following the UMC pharmacovigilance training course last May, Maryam Hinds from Barbados contacted her Minister of Health to request that a letter be sent to WHO for Barbados to begin the process of becoming a member of the WHO International Drug Monitoring Programme. Although currently an Associate member, we hear that reporting forms have been approved by the Ministry and seminars and workshops are lined up to disseminate them as a pilot programme.

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## ISoP Training 2008

*Welcome to Amazing Thailand!*

The ISoP 2008 training courses and first Executive Committee meeting of the year will take place in Bangkok 16-18 March next year.

On 17-18 March, there will be two concurrent, two-day courses:

1. Basic course in pharmacovigilance
2. Advanced course in pharmacovigilance; pharmacogenomics and patient safety

There is provision for thirty places per course, and speakers will include Nicholas Moore, Kenneth Hartigan-Go, Marie Lindquist, Brian Edwards, Alex Doodoo, and Eugene van Puijenbroek.

The meetings, planned and managed in collaboration with the Thai FDA and PReMA (the Thai Research and Pharmaceutical Manufacturers' Association) will take place at the Chaophya Park Hotel, a fine, stylish hotel near the Bangkok Metro ([www.chaophyapark.com](http://www.chaophyapark.com)).

*For more details, go to [www.isoonline.org](http://www.isoonline.org).*

## 16<sup>th</sup> Meeting of the Global Advisory Committee on Vaccine Safety

The Global Advisory Committee on Vaccine Safety (GACVS), an expert clinical and scientific advisory body established in 1999 to respond, independently from WHO, promptly, efficiently, and with scientific rigour to vaccine safety issues of potential global importance, held its sixteenth meeting in Geneva, Switzerland, on 12–13 June 2007. Issues discussed were: vaccine safety monitoring; the safety of vaccine formulations; a mumps vaccine virus strain repository; the safety of BCG, human papillomavirus (HPV), rotavirus and influenza vaccines; and the safety of the meningococcal vaccine Menactra®.

### Safety of HPV vaccines

Current evidence of the safety of HPV vaccines is reassuring. As with the introduction of any new vaccine, it will be important to conduct surveillance to identify possible, rare unexpected effects, especially as good quality information on the rates of a variety of diseases before widespread vaccination introduction is generally lacking in the target age group for HPV vaccination (i.e. 9 to 26 years). Also, careful surveillance for specific adverse effects during pregnancy will be important as the target group includes females of reproductive age.

### Safety of rotavirus vaccines

Data were presented on the Merck vaccine RotaTeq® and the GSK vaccine Rotarix®. GACVS concluded that the data regarding intussusception are reassuring, noting that most data currently relate to developed countries. It was also noted, however, that the present data relate mainly to vaccines administered to young children at the recommended age. Intussusception should be monitored in developing countries as rotavirus vaccines are introduced, especially as infants are likely to present for their first dose of vaccine at slightly older ages, on average, than is the case in developed countries.

Information was also presented on rare cases of Kawasaki disease observed following rotavirus vaccination. While the evidence is at best a hint of a signal, the data do not yet permit a full evaluation of a possible risk. There is a need for careful assessment of Kawasaki disease in the existing data and to ensure that ongoing and future studies incorporate surveillance for Kawasaki disease following vaccination.

### Influenza vaccines

Among other issues discussed, a brief description of allergic events occurring after administration of Grippol®, a polyoxidonium adjuvanted split virus influenza vaccine produced in the Russian Federation, was presented. There is a lack of information regarding these events, and WHO has not been able to secure additional information on the investigation. As such it is unclear if events reported in the media were compatible with expected rates of allergic reactions or represented an increase and possibly some manufacturing problems. GACVS nevertheless recommends that countries using this vaccine put in place a surveillance system for the upcoming influenza season so that its safety profile can be

better characterized. Improved information sharing regarding the safety profile of influenza vaccines is critical for pandemic influenza preparedness.

The report of the meeting was published in the WHO Weekly Epidemiological Record on 20 July and has been posted on the GACVS web site at [http://www.who.int/vaccine\\_safety/en/](http://www.who.int/vaccine_safety/en/)

## First Certificate Course in India

Symogen, an organisation based in New Delhi, has launched the first Certificate Course in Pharmacovigilance and Pharmacoeconomics in India. This course is open to physicians, post graduate pharmacists, postgraduate scientists, regulatory personnel and academia. It will take place beginning in September 2007 to December 2007 in New Delhi; and January 2008 to April 2008 in both Mumbai and Chennai. This pattern will be followed every year. The inauguration ceremony took place on 1st September 2007.

### Inauguration

Dr Susan Bews (President, Faculty of Pharmaceutical Medicine, Royal College of Physicians, UK) inaugurated the programme and addressed dignitaries from the Drug Controller General of India's office, Ministry of Health, Department of Science & Technology, Department of Biotechnology, business process outsourcing (BPO) and contract research (CRO) companies, and others. Dr S K Gupta, Dr Y K Gupta, Dr Nilima Kshirsagar and Professor K C Singhal, were also present along with other faculty members from academic institutions and hospitals.



*Dr Susan Bews talks to students at the course inauguration in Delhi*

## Need for experts

In her address Dr Bews reiterated the need for a pharmacovigilance system and laid stress on the need for qualified and trained experts. She motivated and encouraged the students on the betterment of clinical research in India, stating that India is 'the centre' for conducting many studies due to swift regulatory approvals for clinical and post-marketing studies, and multi-dynamic, multi-faceted, multi-ethnic patient groups.



*Dr Bews and Dr Biswas in conversation*

Dr Venketaswaralu, the Drug Controller General of India (DCGI), spoke about the National Pharmacovigilance Programme and mentioned the difficulties faced by the DCGI's office with non-compliance of guidelines by pharma companies and CROs. He stressed the need for a dynamic, voluntary and able system to meet the needs for pharmacovigilance in India and encouraged the private sector to join with the public sector to support the programme.

## Support for national programme

Dr Pipasha Biswas (Director, Symogen UK) promised to support the National Pharmacovigilance Programme and, along with Cognizant Technology Solutions, Chennai, will help develop a national level Indian safety database for adverse drug reactions. Symogen would also help BPOs, CROs and pharma companies on pharmacovigilance services and requirements. Sairam Kumar Jayaraman (Head of Life Sciences, Cognizant Technology Solutions) spoke on how Cognizant will support the programme. He also interacted with the students, encouraging them and, emphasizing the need for pharmacovigilance, guided them on their future prospects. Current demand for trained and qualified people can be met by absorbing successful students into BPO, CRO and pharma companies.

# Pharmacovigilance at the DIA

The UMC contributed to sessions at the DIA in June in Atlanta, USA, with oral presentations and Andrew Bate chairing a session entitled 'Data Mining in Pharmacovigilance: Misconceptions and Misunderstanding in Data Mining and Signal Detection'. He spoke on 'Data Mining Patient Records versus Spontaneous Reports: What Can and Cannot Be Done' (as well as another paper in a later data mining session).

With data mining being heavily promoted as a useful adjunct to conventional signaling techniques in pharmacovigilance, the session challenged misunderstandings, misconceptions, and fuzzy concepts in the use of data mining.

The speakers also included Manfred Hauben, Medical Director, Risk Management Strategy, Pfizer Inc, USA and David Goldsmith, President, Senior Consultant, Goldsmith Pharmacovigilance Systems, USA.

The meeting contained an excellent session entitled 'Approaches to Quantifying Benefit-risk Assessments: Going beyond Intuition' an important developing area of pharmacovigilance with Stephen F Hobbiger of GlaxoSmithKline UK, Sam Salek, of the Welsh School of Pharmacy, UK, Richard Hill, from the Australian Therapeutic Goods Administration, and Larry D Lynd of the Faculty of Pharmaceutical Sciences, University of British Columbia, Canada.

The reception was held at Atlanta's 'Georgia Aquarium', whose 8 million gallons of water contain 100,000 animals of 500 different species – an awesome setting for the meeting's networking.

# Great mate leaving

Ian Boyd, a friend from many annual meetings of representatives of national pharmacovigilance centres, has advised that he is retiring from the Australian Therapeutics Goods Administration. Although still quite a young man he has decided to give full attention to his interests outside of work. We all wish him well but also hope that he might be interested in coming back to pharmacovigilance as a consultant some time in the near future. People of Ian's calibre with a vast knowledge and experience in patient safety will be in demand as pharmacovigilance is expanding around the world.



## Strengthening Pharmacovigilance in Africa

### Two weeks of intensive training

*Bruce Hugman reports from Accra*

Two significant training events to boost pharmacovigilance in Africa were held in Accra, Ghana, earlier this year (25 June–6 July). Both were sponsored by WHO (Geneva) with funding from EuropeAID and involved WHO and UMC staff and experts from around the world.

The first week was devoted to cohort event monitoring (CEM) for antimalarials, with particular focus on the increasing use of WHO-recommended artemisinin combinations therapies (ACTs). Representatives from Nigeria, the United Republic of Tanzania and Ghana spent the week under the tuition of Dr David Coulter (formerly Director of the Intensive Medicines Monitoring Programme (IMMP) in New Zealand).

Participants in this week were taken through an intense course in the practice of CEM, and in its planning and implementation, and each country prepared a detailed action plan. A comprehensive handbook of CEM practice was produced by Dr Coulter and revised in the light of the experience of the course. The three countries will report their progress to WHO after a year.

#### Concerns about safety

The urgent public health priority in recent times to ensure the availability of drugs for major diseases (Malaria, TB, HIV/AIDS, especially) has sometimes overshadowed the need for subsequent safety monitoring, and for the establishment of effective surveillance of patients being treated. WHO has sponsored several

courses to address the issues (Lusaka, 2003 and 2007; Pretoria, 2004, for example). The CEM training in Accra was prompted particularly by concerns that, in widespread use to treat uncomplicated acute falciparum malaria, the safety of ACTs had not been comprehensively assessed and that their impact needed to be closely followed.



*Mary Couper, Emmanuel Agyarko, CEO Ghana Food and Drugs Board, Edith Andrews NPO/EDM WHO Ghana office, and Alex Dadoo at the opening ceremony.*



*The Accra Consultants training programme group photo: (kneeling) Alex Dadoo (Ghana); (front row) Wiltshire Johnson (Sierra Leone), David Coulter (WHO Advisor), Ralph Edwards (UMC), Jennifer Nyarko, Ghana, Shanthi Pal (WHO), Mary Couper (WHO), Raja Benkirane (Morocco), Henry Luma (Cameroon), Edinam Agbenu (Togo), Jayesh Pandit (Kenya); (middle row) Henry Irunde (Tanzania), Alda Mariano (Mozambique), Sten Olsson (UMC), Juhan Ruut (WHO consultant); (back row) Ambrose Isah (Nigeria), Bruce Hugman (WHO Consultant), Jackson Sillah (WHO African Region).*

#### Building capacity

The second week was designed to build on existing expertise and enthusiasm in African countries, by providing participants with the authority and confidence to become regional advocates for pharmacovigilance and consultants in the establishment and development of pharmacovigilance systems. Representatives from eight countries were present. Pharmacovigilance systems in these countries ranged from newly-emergent to long-established and mature.

Out of fifty-four countries in Africa, only twenty-one are full or associate members of the WHO Programme for International Drug Monitoring. The effectiveness of drug regulation and safety systems within those twenty-one varies greatly, while beyond them in the further thirty-three countries, pharmacovigilance barely has a presence. It is WHO's hope that, by building regional networks of trained consultants, pharmacovigilance can be actively promoted, further personnel trained, systems developed, and more countries encouraged to make serious provision for the safety of their drugs and their citizens.

A detailed report was produced on the week's work, with a wide range of recommendations and action points. The group will meet again after twelve months to report on progress.



## Good hosts

Both weeks were hosted by the University of Ghana Medical School, Accra, with Dr Alex Dodoo carrying the bulk of the burden for the arrangements and the splendid hospitality. Many friendships were renewed and formed during both weeks, and members of the consultants group have since established an e-mail forum for continuing contact and support; it's already been active in the exchange of news and information – as well as more personal items like the arrival of babies and changes in jobs.

## The Challenge

The degree of energy, enthusiasm and goodwill generated during the two weeks were considerable, and it now remains for the participants and the staff to follow up on all their commitments and to make things happen on the ground. We'll be reporting on progress to you in the future. In the meantime, if you have any comments or ideas about pharmacovigilance in Africa, please do contact Sten Olsson (sten.olsson@who-umc.org).

# Meetings in China

*Sten Olsson reports*

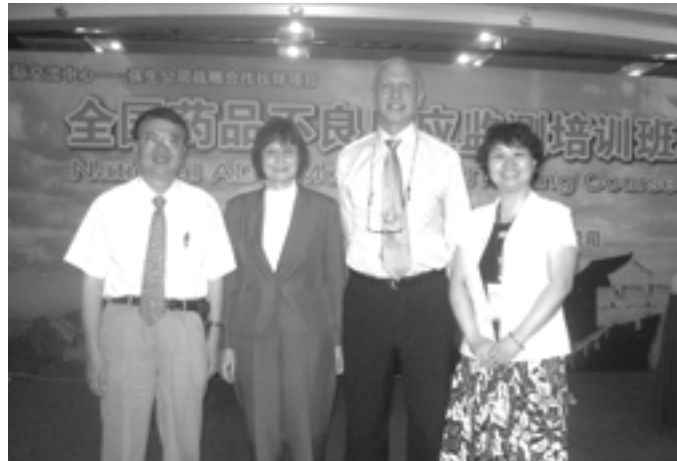
## The national Chinese pharmacovigilance programme

A major drug safety training course for more than 150 participants from all the 31 regional pharmacovigilance centres in China was organized in Beijing 28 -29 August 2007. In addition to me the foreign lecturers brought in were Heather Sutcliffe from the national pharmacovigilance centre in Canada and John Knight and Adrian Thomas from Johnson Et Johnson company, main sponsors of the training course.

Heather's presentation covered basic management of ADR reports, causality assessment, signal analysis and regulatory actions. I then gave presentations on the WHO Programme and 'Current Challenges in Pharmacovigilance'. Heather and I had lunch with the head of the ADR centre, Professor Jin Shaohong and Dr Yan Min, director at the SFDA Department of Drug Safety and Inspection.



*Heather Sutcliffe and Sten Olsson arriving at the SFDA Center for Drug Re-Evaluation, with Mr Raymond Yu, Dr Wu Zhi Ang and Dr Wu Gui Zhi*



*Professor Jin Shaohong, Heather Sutcliffe, Sten Olsson and Dr Yan Min at the training event for regional centres*

In the afternoon we were given the opportunity to visit the new offices of the SFDA Centre for Drug Re-Evaluation which includes the ADR monitoring centre; they have only been there for some two months. We were received by deputy director Dr Wu Zhi Ang and four colleagues, among them Dr Wu Gui Zhi who has represented China at WHO meetings in the past. They presented the operations and achievements of the national pharmacovigilance programme, followed by a lengthy and open discussion about future collaboration between SFDA and the UMC.

One area of particular interest to the WHO Programme is the integration of the Chinese ADR database with the WHO global database at the UMC. In 2006 alone some 370,000 individual case safety reports were collected in China but since they are computerized in Chinese there is a major translation challenge. The WHO recently made an official request for a joint project to be set up for attaining compatibility. the UMC is offering to send database specialists to work in Beijing to achieve this goal. Questions over databases and data analysis were also touched on in the discussions.

## FIP pre-conference workshop

After the national centre visit, I contributed for the third consecutive year to the International Federation of Pharmaceutical Sciences (FIP) workshop on pharmacovigilance and patient safety prior to their annual conference. Main contributors were Andy Grey (South Africa), Graeme Vernon (Australia), Alex Dodoo (Ghana) and myself. Marja Airaksinen (Finland) and Alan Lyles (USA) were responsible for the medication error sessions. The only sad point was that unfortunately, fewer people had signed for the workshop than in previous years.

# SURVEY OF PARTNER NEEDS –

In early 2006 the UMC sent a questionnaire to all national pharmacovigilance centres participating in the WHO Programme. It was the first time ever that we had systematically asked our pharmacovigilance partners regarding views of the products and services offered by the UMC and the WHO Programme. Considering that it was quite an extensive questionnaire we had a good response rate; after reminders, we received responses from 58 out of the 101 countries approached. Although only 57% of our Programme countries took the opportunity to express their views we still think that we got a good idea of how the UMC and its services are perceived in the WHO pharmacovigilance network. A detailed account of all responses was presented as a poster at the 29th Annual Meeting of National Centres in Liège, 2006.

The reason for going through the effort of finding out about partner satisfaction is of course to adapt routines and products to the needs expressed by the respondents. The findings of the survey are provided below together with a UMC statement on how the concerns have been or will be dealt with. The overall structure of the original questionnaire is followed.



## 1. Sending Reports to the UMC

Communications between the technical contact persons responsible for submission of reports in countries and UMC staff seem to be operating well. Acknowledgements by the UMC of submitted reports are normally received. Many countries experience difficulties in adapting their systems to current E2b standards. There is a general misunderstanding regarding the VigiFlow report management tool. It is often not seen as a free-standing system for management of individual case safety reports (ICSR) by national centres but only as a tool for submission of reports to WHO. Consequently the license fee charged becomes obscure. There is much uncertainty regarding the routines for submission of reports on herbal medicines and the ways to exploit UMC publications in this area.

**UMC position:** Presently the UMC routines for receiving ICSRs from member countries are being completely rebuilt and streamlined. The new system will be launched in late 2007. All submitted reports will be searchable, even though they may not meet the validity standards of the UMC in E2b or Intdis format. Internal resources will be freed to be engaged in country communications and support. VigiFlow will be further promoted as the only ICSR management tool needed for a national centre. The data input module of VigiFlow will be developed as a stand-alone free of charge service for national centres to submit ICSRs to WHO. UMC resources for providing guidance and support for management of reports on herbal medicines are currently restrained. A special session on vigilance of herbal medicines is being considered for the 2008 annual national centres meeting.

## 2. Terminologies

A majority of countries responding use WHO Adverse Reaction Terminology (WHO-ART) for coding adverse reactions. A few are shifting to MedDRA to comply with regulations. 70% of WHO-ART users say that it meets their needs, although some countries would like more support on how to use it.

A copy of the WHO Drug Dictionary (WHO-DD) is sent to national centres on a quarterly basis but only 20 countries claim to use it as a reference source. It is considered difficult to understand and use. There were comments about inconsistencies in the coding structure for vaccines.

**UMC position:** The adverse reaction terminology area has developed considerably since the questionnaire was developed in 2006. An official 'bridge' has been built linking WHO-ART terms to MedDRA. The UMC is presently introducing MedDRA as a second terminology in Vigibase. Information retrieved from Vigibase can, once this process is completed in 2008, be displayed either in WHO-ART or MedDRA hierarchy. WHO-ART will be maintained as a useful terminology for national centres. UMC is considering projects to further enhance its functionality, but resources for providing better support on the use of WHO-ART are still insufficient.

The distribution of the full WHO-DD to national centres will cease. Instead countries will be offered access to the on-line search facility 'WHO-DD Browser' available as a tool for searches in the WHO-DD for commercial customers. The UMC is currently negotiating with the WHO vaccines safety department regarding expert support in improving the vaccine section of the dictionary.

## 3. Search tools

A vast majority of countries use the UMC internet-based search tool VigiSearch on a regular basis. Most users seem to be happy with its functionality but concerns are raised about it not being user-friendly or completely logical. More printing options and integration with the UMC data-mining analysis were requested. Comments were made regarding lack of availability of up-to-date case information from certain countries in the database or the lack of quality of data.

**UMC position:** Some of the suggested improvements to VigiSearch have already been implemented e.g. better printing facilities. A new version of VigiSearch is currently being developed and integration with the data-mining analysis is also being considered. Delays in submission of ICSRs from many countries are a continuous concern to the UMC as is the lack of completeness of case information provided. To a great extent these factors are beyond the influence and control of the UMC.

# AND WHAT THEN?

## 4. Combinations database

National pharmacovigilance centres regularly receive a CD with the 'Combinations database' containing the results of the recurrent UMC data mining analysis of Vigibase, using the BCPNN methodology. The database provides current IC and IC025 values for new drug-reaction combinations and information on how these have changed from the previous period. The CD is provided with a search tool to facilitate browsing of the information. Only a small minority of countries are confident about the proper use of the Combinations database and the significance of the IC values. There is a strong demand for more training on these issues.

**UMC position:** Before the questionnaire was distributed the UMC had published extensively in scientific literature about the BCPNN methodology and the interpretation of IC values. As a result of the survey further descriptions of the Combinations database were published in *Uppsala Reports*. A tutorial was held at the annual meeting of representatives of national centres in 2006. The longer term strategy is to replace the Combinations database with a new tool, which will make analyses more intuitive and provide better software support. One option being considered is to integrate this new software with VigiSearch.

## 5. Courses and meetings

*the UMC* regular pharmacovigilance training courses are very well known by national centres. The main reason given for not sending a staff member for training is the cost involved. Common suggestions are:

- More UMC participation in training courses given locally
- More frequent UMC courses
- Web-based training to be developed.



Many positive comments are given about the annual meetings of representatives of national centres, with a common statement that they have become more interesting and rewarding over the last few years. The main reason given for not attending is, again, the cost involved.

**UMC position:** *the UMC* has no specific funding for carrying out pharmacovigilance training courses. All direct costs have to be covered by participant fees. Limited administrative resources and access to experienced trainers restricts capacity in terms of frequency of courses. UMC courses are over-subscribed by applicants from national centres capable of organizing financial support themselves. *the UMC* has not found a donor prepared to financially support pharmacovigilance training other than for individuals. UMC staff do take part in a great number of training activities in various countries. Since traveling is very time-consuming there is a trend towards training over the internet. Web-based training is being considered with technological requirements being available. The first web-based module is expected to be launched at the end of 2008.

Annual WHO Programme meetings are organized by WHO Headquarters in collaboration with *the UMC* and a local national centre host. Efforts are made to provide a diverse agenda attractive to both newcomers and more experienced Programme members. Each year participants are encouraged to provide post-meeting

feedback which has contributed to meetings being perceived as rewarding. The chances of delegates being supported financially for future meetings are very slim.

## 6. Publications and communications

*Uppsala Reports*, *WHO Pharmaceuticals Newsletter* and *Signal* are read by virtually every respondent. Very many have also read *Viewpoint Part 1* (81%) and *Part 2* (77%). The two guidelines *How to set up and run a pharmacovigilance centre* and *The Importance of Pharmacovigilance* have been read by about 70%. The other guideline read by a majority is *Expecting the Worst* on crisis management (60%). *Uppsala Reports* and *Signal* are often circulated at national centres, the most frequent number of readers being three.

The Vigimed e-mail exchange service is very much appreciated but its guidelines are not so well known. There are concerns about 'out of office' responses to messages, lack of contributions from major countries, the insignificance of topics and the lack of a subject index.

*the UMC* web site is popular with 86% of respondents having visited the site during the last three months. It is considered to be up-to-date, informative and user-friendly. Some suggestions for improvements were made.

**UMC position:** It is encouraging that many UMC/WHO publications are considered relevant to Programme partners. The 'Signal' document should have a wider distribution e.g. to regional pharmacovigilance centres, and *the UMC* can extend the distribution list to such centres as advised by national centre heads. There is a need for *the UMC* to improve its administrative systems for keeping up with the rapid change of contact details for all its partners.

*the UMC* is currently assessing potential new platforms for Vigimed with the ambition of providing additional functionalities as suggested by the users. The new system will be operated both as a web site and as an e-mail service.

Most suggested improvements of *the UMC* website have been implemented. The plan is to gradually add more values and functions to the site, turning it into a true pharmacovigilance portal. It should for example become the natural starting point for access to the on-line tools offered by the UMC like VigiSearch, VigiFlow and Vigimed.

The WHO Programme for International Drug Monitoring is in a state of continuous growth. Every year new countries join the programme either as full members or as associates. The demand for UMC resources and support grows with each new partner. *the UMC* does not have any external funding for its operation and just maintaining the existing service level to a growing number of partners requires rationalization of present processes or that the commercial side of UMC activities are increasingly successful. Improvements and developments as outlined in *the UMC* positions above can only occur if *the UMC* manages to increase its financial capacity.

*We wish to thank warmly all those centres who completed the UMC questionnaire. Individually and as a group the feedback and comments were invaluable. We welcome comments at any time and will endeavour to respond to suggestions as positively as possible.*

Sten Olsson

## UMC research at ISPE 2007

At this year's International Society for Pharmacoepidemiology (ISPE) meeting in Quebec, Canada, the Uppsala Monitoring Centre research department made various contributions related to the identification of suspected drug-drug interactions based on individual case safety reports.

In the 'Aspects of Patient safety' session, Johanna Strandell presented the issue of on-going reporting of well established drug-drug interactions in Vigibase. The results illustrate a long-standing international problem of continued co-prescription of contraindicated drugs, and the serious nature of many of the reported adverse drug reactions (ADR) makes this a major patient safety issue. It seems that often the potential interaction is not recognised, which strongly suggests insufficient impact of drug information. Further efforts are needed to improve the communication between health care providers and patients in this area. Spontaneous reports of known ADRs can help highlight inappropriate co-prescribing patterns and can be utilised to identify preventable ADRs through active screening for potential drug-drug interactions.

In the 'Current trends in pharmacovigilance' session, Niklas Norén presented a new measure of disproportionality for the purpose of drug-drug interaction surveillance. The new measure of

disproportionality differs from previously proposed such measures in its definition of interaction as departure from a baseline model with additive risk of concomitantly prescribed drugs. Empirical results indicate that this may help to highlight examples of drug-drug interactions that have previously gone undetected. (For further details, see box on p13.)

Finally, the UMC research team presented a poster with a more holistic view of early signal detection of suspected drug-drug interactions, with a broadening of the basis for screening to reporting characteristics such as the number of countries having provided reports on a specific issue, the seriousness of the reported ADR. The established and clinically important suspected interaction between rosiglitazone, insulin and cardiac failure was used for illustration. A retrospective analysis indicates that a three-way disproportional reporting rate for cardiac failure under concomitant use of rosiglitazone and insulin could have been highlighted already in the first quarter of 2001 and that the strength of this association has continued to increase since, which is in line with existing evidence in the literature. In the future, the temporal pattern between the prescription of the two drugs and the onset of the ADR, as well as dechallenge or rechallenge information should be assessed.



*Johanna Strandell (left) talks to an ISPE delegate, while Marie-Louise Johansson of the Swedish Medical Products Agency discusses the UMC poster with Niklas Norén (right)*

## A new measure of disproportionality for drug-drug interaction surveillance

Interactions between drug substances may yield excessive risk of adverse reactions when several drugs are taken in combination. The identification of suspected drug-drug interactions is important both from the individual patient safety and the public health perspectives as it may allow drug combinations of high risk to be avoided in the future and drugs that would have otherwise been withdrawn to remain on the market with warnings concerning co-medication. Collections of individual case safety reports provide the core data source for regular adverse drug reaction surveillance but they have yet to reach their full potential as a basis for drug-drug interaction surveillance. In collaboration with Stockholm University, the Uppsala Monitoring Centre research department has developed a new statistical measure of interaction to help highlight excessive ADR reporting rates indicative of possible drug-drug interactions<sup>1</sup>.

Previously proposed methods for drug-drug interaction surveillance include methods based on logistic or log-linear regression models. Unfortunately, they have met with limited success with respect to routine prospective drug-drug interaction surveillance. Recently there has been a shift in focus towards more simple methods. We believe that the limited success of the above mentioned regression methods is their implicit assumption that absence of interaction is equivalent to having risk factors that essentially multiply. There are arguments both from the public health and the individual patient safety perspectives to instead define interaction in terms of departure from a baseline model with additive risk contributions. From the public health perspective, this indicates whether the absolute number of ADR incidents in a given population depends on to what extent two different drugs are co-prescribed. From the individual patient safety perspective, it indicates whether the increase in absolute risk from one drug is modified by the co-prescription of the other. Based on a baseline model with additive risk contributions from co-prescribed drugs, we define a new measure of interaction and investigate its performance for drug-drug interaction surveillance in Vigibase. The new measure highlights excessive relative reporting rates related to established drug-drug interactions that go undetected with previously proposed regression methods. One of the most striking examples is the well-established interaction between gemfibrozil and cerivastatin to cause rhabdomyolysis, for which the relative reporting rate under concomitant use is 75%. Further research will be carried out to determine more precisely the strengths and weaknesses of the new measure of interaction as a component in a general framework for drug-drug interaction surveillance. We will also investigate how it can best be complemented by effective triage strategies to prioritize the clinical review of suspected drug-drug interaction.

### Reference:

- 1 Norén GN, Sundberg R, Bate A, Edwards IR. A statistical methodology for drug-drug interaction surveillance. *Research report*, 2007:6. Mathematical Statistics, Stockholm University.

## ADR bulletins

Both the Medicines and Healthcare products Regulatory Agency (MHRA) in the UK and the US Food and Drug Administration (FDA) in the USA produce regular accessible bulletins of current drug issues.

The MHRA recently revamped its *Current Problems in Pharmacovigilance* into *Drug Safety Update* as a monthly electronic bulletin for health professionals. Volume 1, Issue 1 (August 2007) contained drug safety advice on Gadolinium-containing MRI contrast agents,  $\alpha$ -1 adrenoreceptor antagonists, Cabergoline, Dopamine agonists and antidepressants. Although with a British slant, much of the material will be of interest to health professionals elsewhere.

Although there is a subscription fee for the FDA's *Adverse Event Reporting News*, it too contains lots of drug safety information and updates, alongside more 'administrative' news from the USA and beyond.

First port of call for each is respectively

<http://www.mhra.gov.uk/mhra/drugsafetyupdate>

<http://www.fdainfo.com>

The FDA has also just launched a *Drug Safety Newsletter*. This publication "provides postmarketing information to healthcare professionals to enhance communication of new drug safety information, raise awareness of reported adverse events, and stimulate additional adverse event reporting".

The first issue includes:

Postmarketing Reviews

Rituximab: Progressive Multifocal Leukoencephalopathy (PML)

Modafinil: Serious Skin Reactions

Temozolomide: Aplastic Anemia

New Molecular Entity (NME) - Early Safety Findings

Deferasirox

It can be downloaded from the main FDA site:

[www.fda.gov/default.htm](http://www.fda.gov/default.htm)

# VISITORS TO STORA TORGET

## Thai visitors

During one week in September *the UMC* was visited by Pakawadee Sriphiromya and Sareeya Wechwithan, pharmacists working at the National Centre in Thailand. They attended presentations on various



*Sareeya Wechwithan (left) and Pakawadee Sriphiromya (right), with Marie Lindquist*

topics including the UMC organization, the reporting process, terminologies, the WHO Drug Dictionary, signal detection and review as well as traditional medicines. *the UMC* tools VigiFlow and Vigisearch were also presented.

Problems with reporting and duplicates were discussed which will result in improved quality of future reports. Pakawadee Sriphiromya made an interesting presentation about the work at the Thai Centre. A visit to the Swedish Medical Products Agency was also included in the programme.

## September guests

### From afar

On September 7 *the UMC* had the pleasure of welcoming two visitors from Australia, Mary Murray and Andrew Gilbert, University of Adelaide. They met with Niklas Norén, Johanna Strandell and Sten Olsson at the Centre. A major part of the discussion



*Mary Murray, Kristina Star, Niklas Norén, Andrew Gilbert*

concerned experiences with longitudinal patient records and their interpretation and use. Professor Gilbert is maintaining a patient database of Australian war veterans. He described how this database is being used for treatment follow-up and for providing advice on rational drug therapy to treating physicians. The service has been very well received and has provided excellent results. Niklas Norén gave an outline of the UMC approach to data mining of longitudinal patient records in a large database.

### An Indian

Gurumurthy Parthasarathi from JSS hospital, Mysore, Karnataka, India, spent 19–26 September at *the UMC*. Professor Parthasarathi is head of Department of Pharmacy Practice at the JSS College of Pharmacy in Mysore and is also heading a clinical pharmacy service at the JSS hospital there.



*Andrew Bate and Gurumurthy Parthasarathi*

This visit was a return to Uppsala for him since he attended *the UMC* pharmacovigilance training course in 1999. Since then he and his colleagues have carried out a number of studies on the burden of adverse reactions and medication errors in their hospital. Currently he has a grant from the Indian Council of Medical Research to carry out baseline studies on the incidence of drug-related problems in five hospitals in Karnataka (see Uppsala Reports 36). Data has been collected for four months from a department of internal medicine and Professor Parthasarathi consulted UMC experts on technical matters of data management and analysis. During his visit he also made a preliminary review of all Indian case reports submitted to the WHO database, Vigibase. He had the chance of comparing the spectrum of reactions reported with the data collected from his own hospital. Before leaving he gave a talk to UMC staff about the current status of pharmacovigilance in India.

After Uppsala, Professor Parthasarathi visited the Drug Policy and Standards department at WHO headquarters in Geneva. He also gave a lecture there on pharmacovigilance in India.

## UMC planning ahead

Your thoughts welcome about what the UMC is doing and where it is going

At about this time every year, staff at *the* Uppsala Monitoring Centre (UMC) spend time reviewing past work and planning for the future. There is a detailed one-year operational plan, and a strategic four-year plan. The plan for 2008-2011 is now taking shape, and readers of Uppsala Reports are warmly invited to consider the review of its content below and to provide comment and input.

"*the* UMC's business is to provide service," says Ralph Edwards, UMC Director, "and you can provide effective service only if you find out what people need from you. The opinions of member countries of the WHO Programme and other clients, customers, partners and colleagues are welcome. I hope this glimpse of our thoughts for the future will provoke comment and debate about how others feel we should order our priorities."

### Core activities

*the* UMC will, of course, continue to receive, process and analyse ADR reports from member countries with a view to detecting signals of suspected safety problems, and develop all the core activities associated with international pharmacovigilance. These include maintenance and development of UMC's major tools and services, such as WHO-Drug Dictionary, WHO-ART (Adverse Reaction Terminology), VigiFlow, herbals classification, the support of existing national centres, the establishment of new national centres, and so on. This review focuses on emerging new priorities and concerns.

### Future priorities and plans

- 1. Patient safety:** widening of the scope of pharmacovigilance beyond attention only to the safety of drugs, to embrace broader concerns relating to the safety of patients taking medicines; exploring methods for capturing richer and more sensitive data about the concerns of healthcare professionals and patients about their medication; discussing the possibility of patient reporting direct to UMC via VigiFlow; preparing to add patient organisations, healthcare organisations and health insurance companies as partners and collaborators
- 2. Developing and emerging countries:** paying particular attention to the needs of these countries (selecting as an achievable minimum China, India and Africa); supporting them in strengthening pharmacovigilance knowledge, skills and practice; including Chinese pharmacopoeial products in Vigibase, and also Japanese and Indian products
- 3. Safety in public health programmes:** supporting the development of safety monitoring in WHO programmes such as malaria, TB, HIV/AIDS
- 4. Signal detection:** seeking broader and richer data sources for the detection of signals (UMC's Clinical Insights project) and for risk/effectiveness analyses; continued development of data-mining for use in large data sets; improved methodologies and tools for risk management; up-to-date database systems and advanced filtering tools

- 5. Promoting harmonisation and coherence:** continued efforts to influence and collaborate with international bodies of all kinds, to protect the WHO network of countries, to maximise resources and avoid wasteful effort and duplication
- 6. Influenza pandemic:** discussions to prepare to contribute to optimal ways to manage safety information on adverse events during immunisation and treatment; plans to maintain routine work during such a crisis
- 7. Communications:** continued efforts to improve knowledge and skills in effective communication of drug and patient safety information for all players, promotion of the work of *the* UMC and the WHO Programme to existing and wider audiences
- 8. Funding:** in the absence of any external funding, continued efforts to secure income through the development of existing high quality products and services and the diversification of the product portfolio; other sources of funding pursued in collaboration with WHO or beyond
- 9. Impact assessment:** significant efforts to assess the impact of
  - (a) international pharmacovigilance activities for the safety of patients in member countries, and
  - (b) the needs and levels of satisfaction of all partners, clients, customers and users in relation to UMC services
- 10. Education and training:** development of wide-ranging, distance learning materials in pharmacovigilance and communications (primarily web-based); development of publications strategy
- 11. Research:** methods for identifying predictors for preventing ADRs and reducing medication risks; state of the art visualisation for all UMC products and services; new classifications mapped to MedDRA, Snomed, etc.

**So, what do you think? What's missing? What's present but incomplete? What's unimportant?**

*Please send your comments and thoughts to [marie.lindquist@who-umc.org](mailto:marie.lindquist@who-umc.org). Contributions are really important, and will be fed into the ongoing planning process.*

## Recent publications from *the UMC*

### Crisis management

An article describing a model collaboration between the Ministry of Health, Ghana, the University of Ghana Medical School and the WHO Programme for International Drug Monitoring which sought to prevent a scare over the safety of deworming medicine (including public disorder) from undermining an important public health programme.

Dodoo A, Adjei S, Couper M, Hugman B, Edwards IR. When rumours derail a mass deworming exercise. *Lancet*, 2007, 370: 465-466.

### Data mining

The worldwide yearly survey of new data and trends in adverse drug reactions includes a 'guest essay' which sets out to help newcomers to data mining to navigate this complex multidisciplinary body of work, with an expository but technically explicit introduction. Readers from different backgrounds are given information on what data mining algorithms are, how they work, their strengths and limitations, and recent notable developments.

Hauben M, Bate A. Data mining in drug safety: Side effects of drugs essay. In: *Side Effects of Drugs Annual*, Aronson JK, Ed. Elsevier, 2007, Volume 29, pxxxiii-xlvi.

### Allergic reactions to a geranium-derived medicine

The interest at *the UMC* in the safety of herbal medicines is illustrated by an article in the latest issue of *Drug Safety* about acute hypersensitivity reactions to drugs derived from geranium species (*Pelargonium sidoides* DC. and *Pelargonium reniforme*). The study was done in collaboration with BfArM's Dr Ulrich Hagemann of the German agency BfArM and Dr Hugo de Boer from the Department of Systemic Botany of Uppsala University. According to spontaneous reports in Germany the ingestion of a drug called Umckaloabo can promptly be followed by the development of an itching rash, urticaria, angioedema and even anaphylaxis. Although all reports came from Germany, this experience is of value to other countries around the world where also pelargonium-derived drugs have recently been introduced.

De Boer H J, Hagemann U, Bate J, Meyboom RHB. Allergic Reactions to Medicines Derived from Pelargonium Species. *Drug Safety*, 2007; 30(8):677-680.

### Vigimed

A paper which analyses one hundred consecutive questions and responses in Vigimed, measuring geographical levels of participation and categorising the types of drug problem raised.

Johansson K, Olsson S, Hellman B, Meyboom RHB. An analysis of Vigimed, a global e-mail system for exchange of pharmacovigilance information. *Drug Safety*, 2007, 30 (10):1.

## Staff changes

### Shalini joins the team

Shalini George Tharakan recently began working at the Centre as a System Developer. "I was born in Kerala, the south-west state of India, and moved to Sweden in 2004 with my husband Siju John who joined a Swedish organisation in Stockholm."



Her principal area of work "is design, engineering and programming of software systems in the Production, Development and Quality team".

She graduated with a Masters degree in Computer Applications from the University of Bangalore, and has six years experience in software development both in India and in Sweden.

Prior to joining UMC, Shalini worked with GlobeSoft Business Systems in Stockholm as a Programmer.

During her free time she likes light reading and travelling. Dancing is another relaxation which she particularly enjoys. She especially enjoys the warm atmosphere at work and the international exposure working at the Centre entails.

### Farewells

#### We are sad to say goodbye to three staff members:

Lars Magnusson, who has played a key role in the expansion of *the UMC* over the last five years, has decided to step down as General Manager and return to his business and training consultancy. He will still be involved in occasional projects for *the UMC*.

Anne Kiuru joined *the UMC* in April 2000 and most recently worked in the Signals team. She is not moving far, however, having found a position 'up the road' at the Swedish Medical Products Agency.

William Frempong was at *the UMC* since January 2002 and he is moving on to a major pharmaceutical company in the UK.

We thank Anne, William and Lars for their contributions to *the UMC* over the years.

## WHO-ART in Spanish

The Spanish translation has recently been completely updated, thanks to our colleague Mariano Madurga from the Spanish national centre.

It will be made available shortly, and please let *the UMC* know if you would like, but do not receive a copy.



## Assessment of the risk of hepatotoxicity with kava products

ISBN-13 978 92 4 159526 1 © World Health Organization 2007

### Summary

There has been international concern over the association of kava products and serious hepatotoxicity. Regulatory action banning these products in Europe has been controversial. The objective of this 90-page report is to investigate the possibility of hepatotoxicity with kava. It contains a description of kava and provides safety information as well as information on regulatory issues, conclusions and recommendations by the Committee appointed to handle this enquiry.

## Promoting Safety of Medicines for Children

ISBN-13 9789241563437 ISBN-10 9241563435 © World Health Organization 2007

### Summary

Monitoring the safety of medicine use in children is of paramount importance since, during the clinical development of medicines, only limited data on this aspect are generated through clinical trials. Use of medicines outside the specifications described in the licence (e.g. in terms of formulation, indications, contraindications or age) constitutes off-label and off-licence use and these are a major area of concern.

These 59-page guidelines are intended to improve awareness of medicine safety issues among everyone who has an interest in the safety of medicines in children and to provide guidance on effective systems for monitoring medicine safety in the paediatric populations. This book will be of interest to all health care professionals, medicine regulatory authorities, pharmacovigilance centres, academia, the pharmaceutical industry and policy-makers.

Systems for monitoring medicine safety are described in Annex 1. Pharmacovigilance methods and some examples of recent information on adverse reactions to marketed medicines are discussed in Annex 2.

## ALS and statins in the Wall Street Journal

As mentioned in UR38, a couple of articles arising from ALS and statins were featured in the Wall Street Journal. The online references are:

Johnson A. A risk in cholesterol drugs is detected, but is it real? Wall Street Journal, 2007, [http://online.wsj.com/article\\_print/SB118342971456956235.html](http://online.wsj.com/article_print/SB118342971456956235.html)

Edwards IR. 'This is at least a Signal'. Wall Street Journal, 2007, [http://online.wsj.com/article\\_print/SB118314239102053337.html](http://online.wsj.com/article_print/SB118314239102053337.html)

## New French glossary

The French national regulatory authority has produced a booklet consisting of a glossary of terms encountered in drug safety (as well as safety of cosmetics and personal hygiene).

The Glossaire des vigilances – Juillet 2007 is downloadable as a pdf file from the 'Documentation' section of the French agency's website: <http://www.agmed.sante.gouv.fr/>.

It is aimed at health professionals to assist in the collection, storage and transmission of safety data. The authors also hope that it will facilitate the understanding of safety terms among the general public, and is envisaged to be the first edition of an evolving glossary of such terms.

## Pharmacovigilance for antiretrovirals in resource-poor countries

WHO – Health Technology and Pharmaceuticals – Medicines Policy and Standards

A 20-page A4 introduction covering all angles of the subject and concluding with five sample forms has recently been produced by WHO. The publication is available for download at:

[http://www.who.int/entity/medicines/publications/PhV\\_for\\_antiretrovirals.pdf](http://www.who.int/entity/medicines/publications/PhV_for_antiretrovirals.pdf)



## Classroom Training in the USA

As previously reported, a set of training courses has been developed with PSI International Inc., *the* UMC's official partner for training in north America.

The training courses are:

- **Overview of the WHO Drug Dictionaries.** A four-hour course describing the basic concepts necessary to optimize the use of the dictionaries.
- **Coding.** An eight-hour course in how to best use the dictionary for coding.
- **Data retrieval and analysis.** A four-hour course describing how the dictionaries can be used for querying, aggregation of statistics and analysis of the coded data.
- **IT.** A 4-hour course describing how to best set up the dictionary in databases, user interfaces and dictionary repositories in order to optimize coding and analysis. Versioning of the dictionary is also included.

Please visit [www.psiint.com](http://www.psiint.com) (Health Science) or contact [byork@psiint.com](mailto:byork@psiint.com) to learn more about the training on offer.

## FAQ document

This time of year many companies take the opportunity to upgrade their subscriptions – to make sure that they have the correct licences, number of sites and users etc.

A document that answers some frequently asked questions such as 'what is the definition of a site?', or 'How do I make a validation request?' has been posted at the web-shop and the User Group portal.

<http://usergroup.unc-products.com/>

## WHO Drug Dictionary User Group

A WHO Drug Dictionary User Group meeting was held in Europe in May and a US meeting was held on October 11, in Clark, New Jersey.

At these meetings *the* UMC presented the latest developments of the dictionaries, and a number of users made presentations about their experiences with the dictionary and gave some useful suggestions and ideas. Minutes from the meetings are posted at the WHO Drug Dictionary User Group portal.

Please contact us via the portal if you would like to join the user group.

## Meet the team

Staff from *the* UMC's Marketing team are planning to be at the following forthcoming conferences:

- **October 14–19, 2007**  
17th Annual CDM EuroMeeting  
Auditorium Madrid Hotel,  
Madrid, Spain
- **April 14–16, 2008**  
17th Annual Partnerships with Contract Research  
Organizations Conference  
Las Vegas, USA
- **April 25–29, 2008**  
2008 Association of Clinical Research Professionals  
Hynes Convention Center,  
Boston, USA

## Priority process

We are working on the prioritization of the development of future additional tools and improvements of the WHO Drug Dictionaries. A number of ideas have been suggested by the user community and made available at the WHO Drug Dictionary User Group portal. A survey is being conducted in order to prioritize the many suggestions. A plan for the development and implementation of the agreed tools and improvements will be made for 2008 and 2009.

Your input is important; please register at the User Group portal – <http://usergroup.unc-products.com/> and participate in the discussions.

## Release – WHO Drug Dictionaries

The third release of WHO Drug Dictionary/WHO Drug Dictionary Enhanced was distributed on September 1. The dictionary now contains more than 27,000 entries, compared with the March 1 release. Nearly 36,000 entries have been added since September 1 last year.

At the same time the second release of the WHO Herbal Dictionary was distributed – it is seamlessly integrated with WHO Drug Dictionary and WHO Drug Dictionary Enhanced, but requires a special licence.

# COURSES & CONFERENCES

DATES	TITLE	PLACE	ORGANISER/CONTACT
14-15 November 2007	Case Narrative Writing for Reporting Adverse Events	Southampton, UK	DSRU Tel: +44 (0)23 8040 8621 Fax: +44 (0)23 8040 8605 E-mail: jan.phillips@dsru.org
16 November 2007	Médicaments au Maroc : Usage et Mésusage	Rabat, Morocco	Contact: Dr Amina Tebaa, E-mail: atebba@yahoo.fr
20-23 November 2007	Audits and Inspections for Clinical Trials and Pharmacovigilance	Prague, Czech Republic	Informa Life Sciences Tel: +44 (0) 20 7017 7481 E-mail: registrations@informa-ls.com
22 November 2007	Combating Counterfeit Medicines Seminar	London, UK	MHRA: <a href="http://www.mhra.gov.uk/mhra/conferences/register.htm">www.mhra.gov.uk/mhra/conferences/register.htm</a> , E-mail: <a href="mailto:mhraconferences@mhra.gsi.gov.uk">mhraconferences@mhra.gsi.gov.uk</a> Tel: +44 (0)20 7084 2316
23-25 November 2007	7th Annual Conference of Society of Pharmacovigilance, India	Jaipur, India	Contact: <a href="http://www.freewebs.com/sopi2007/">http://www.freewebs.com/sopi2007/</a>
3-4 December 2007	2nd Cardiac Safety Conference (DIA Europe)	Prague, Czech Republic	E-mail: <a href="mailto:tatjana.topalovic@diaeurope.org">tatjana.topalovic@diaeurope.org</a> <a href="http://www.diahome.org">www.diahome.org</a>
6 December 2007	An Essential Guide to Pharmacovigilance	London, UK	Management Forum Ltd Tel: +44 (0)1483 570099 Fax: +44 (0)1483 536424 Website: <a href="http://www.management-forum.co.uk">www.management-forum.co.uk</a>
17-19 December 2007	Basic Pharmacovigilance	London, UK	Management Forum Ltd Tel: +44 (0)1483 570099 Fax: +44 (0)1483 536424 Website: <a href="http://www.management-forum.co.uk">www.management-forum.co.uk</a>
23-25 January 2008	Medical Aspects of Adverse Drug Reactions	Southampton, UK	DSRU Tel: +44 (0)23 8040 8621 Fax: +44 (0)23 8040 8605 E-mail: jan.phillips@dsru.org
27-28 February 2008	Monitoring Safety in Clinical Trials and Drug Development	Southampton, UK	DSRU Tel: +44 (0)23 8040 8621 Fax: +44 (0)23 8040 8605 E-mail: jan.phillips@dsru.org
3-5 March 2008	20th Annual DIA EuroMeeting	Barcelona, Spain	DIA Tel: +1 (215) 442 6100 Fax: +1 (215) 442 6199 E-mail: <a href="mailto:dia@diahome.org">dia@diahome.org</a>
17 and 18 March 2008	Pharmacogenomics and patient safety	Bangkok, Thailand	International Society of Pharmacovigilance Tel/Fax: +44 (0) 203 256 0027 E-mail: <a href="mailto:administration@isoponline.org">administration@isoponline.org</a> <a href="http://www.isoponline.org/">http://www.isoponline.org/</a>
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26-29 April 2008	The International Society for Pharmacoepidemiology (ISPE) Announces its 2008 Mid-Year Meeting	Boston, USA	International Society for Pharmacoepidemiology Tel: +1 (301) 718 6500 Fax: +1 (301) 656 0989 E-mail: <a href="mailto:ispe@paimgmt.com">ispe@paimgmt.com</a> <a href="http://www.pharmacoepi.org/">http://www.pharmacoepi.org/</a>
22-26 June 2008	DIA's 44th Annual Meeting	Boston, USA	DIA Tel: +1 (215) 442 6100 Fax: +1 (215) 442 6199 E-mail: <a href="mailto:dia@diahome.org">dia@diahome.org</a>
17-20 August 2008	24th International Conference on Pharmacoepidemiology & Therapeutic Risk Management	Copenhagen, Denmark	International Society for Pharmacoepidemiology Tel: +1 (301) 718 6500 Fax: +1 (301) 656 0989 E-mail: <a href="mailto:ispe@paimgmt.com">ispe@paimgmt.com</a> <a href="http://www.pharmacoepi.org/">http://www.pharmacoepi.org/</a>
6-8 October 2008	8th Annual Meeting of ISoP	Buenos Aires, Argentina	International Society of Pharmacovigilance Tel/Fax: +44 (0)20 3256 0027 <a href="http://www.isoponline.org">www.isoponline.org</a> E-mail: <a href="mailto:administration@isoponline.org">administration@isoponline.org</a>

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