WORLD CONGRESS OF PHARMACY AND PHARMACEUTICAL SCIENCES

What future for medicines in the context of globalisation?

A didgeridoo (yidaki) performer entertained participants during the opening celebrations of the 63rd congress of the International Pharmaceutical Federation, which took place in Sydney, Australia, from 5 to 9 September. Our report of the proceedings begins on this and the following seven pages

Even though globalisation makes a significant contribution to raising the standard of living in a large number of countries, it also has a number of adverse effects. Public health is not immune to these, and medicines are the perfect illustration, said International Pharmaceutical Federation president Jean Parrot, of France, at the opening session of the congress.

Mr Parrot explained that globalisation is the result of technical, political and economic factors. Technical factors allow fast, affordable transportation and instantaneous sharing of information. Political factors arise from the end of the 20th century East–West confrontation, and economic factors result from the general world predominance of a free market economy. It is in these contexts that societies must think about medicines and the values they embody.

Globalisation has its advantages: it should contribute to an increase in the standard of living in many countries and facilitate access to goods and services, most notably information and education. But it also has its downsides, said Mr Parrot. For example, the world is now like a village and diseases and epidemics have never been less constrained by national borders. SARS is a good example of this.

The market for the illegal trafficking of medicines also benefits from affordable, rapid transportation. "This year, we have noticed the misappropriation of containers of antiviral drugs bound for Africa," he said. "These medicines, provided by the manufacturer under specially adapted financial conditions, were relabelled and then resold at a higher price in some European markets."

There is also the problem of product quality not always being guaranteed.

The examples of globalisation's disadvantages are numerous and the problems are of particular concern because they impinge on the two primary concerns of the pharmacist: quality and safety.

Globalisation also brings to light considerable inequality in access to medicines, said Mr Parrot. "When the resources to dispense medicines are available, it is unacceptable to see that effective medicines are unavailable to the sick people who need them. And yet we know only too well that this is the reality. As a result the AIDS pandemic is ravaging the populations of many countries in South East Asia and Africa."

The result of this, he said, is that societies are self-destructing, with a demographic concentration at the two extremes of life. Saving the lives of the young adults who are dying would allow entire communities to be saved, along with their culture, experience, wisdom and everything else that contributes to the wealth of a country.

Given the power of the pharmaceutical sciences and their ability to perfect efficacious therapies, how can we allow these products not to reach those who need them, Mr Parrot asked.

"In this context, what does the future hold for pharmaceuticals? The law of markets cannot alone control the life cycle of these products. In past years we have witnessed a tiny amount of progress towards freeing medicines from conventional commercialism. I am talking about the mandatory licences allowing some countries faced with an emergency health situation to produce the medicines they need themselves, whether these medicines are protected by patents or not." The need for such agreements is clear, yet their existence is comparatively recent, he said.

Globalisation is bound to develop still further and countries responsible for the common good of their peoples will have to find avenues at a global level for appropriate consultation to initiate the regulations they require. The need for a global health care policy therefore becomes apparent, Mr Parrot declared.

He said that to develop a society economically and reduce its poverty, it is first and foremost necessary to protect the health of its people. The political authorities of some countries have understood this: they have asked the World Health Organization to help them develop and implement their health policies. Others remain to be convinced.

In this context, said Mr Parrot, the WHO is turning to various health professional networks for grass-roots opinion. Pharmacists are one of these networks since they cover the entire field of medicines from production to dispensing.

"It is our job to know how to respond to the WHO's expectations," Mr Parrot told the congress. "Our profession must assert itself as a partner of choice for political authorities at all levels of responsibility, and FIP offers a setting in which to contribute to the distribution of the tools developed with the WHO."

Jean Parrot: globalisation brings to light considerable inequality in access to medicines

But to do that, FIP needs to reinforce its reputation with the opinion-forming intermediaries and decision-making centres throughout the world, he said, so as to strengthen its influence. That is why FIP is preparing to publish a bimonthly electronic newsletter in its four official languages (English, French, German and Spanish). It will be addressed to member organisations and to national heads of health care policy, opinion leaders, the media, patient support groups, economics ministers and pharmaceutical industry representatives.

Mr Parrot said that this newsletter would enhance the visibility of FIP, which will help it to get its opinions and initiatives approved by its partners and the key decision-makers in health care.

Returning to his theme of the world as a global village, Mr Parrot said that people suffering from disease in developing countries are generally able to find out when a new treatment has become available and, naturally, they want to benefit from it. Some sick people will be tempted to emigrate, legally or illegally, in order to benefit from the treatment and financial responsibility of the social welfare system of another country. "What should we tell these sick people of the global village and, more pointedly, what should we do to meet their needs?"

What we should not do, said Mr Parrot, is rely on statutory barriers to prevent the circulation of medicines rightfully expected by the sick; specialists in illegal commerce inevitably learn to bypass these barriers.

"What we must do," he said, "is arrange affordable access to medicines and implement a regulatory framework based, above all, on quality. This goal should be able to be shared by all the parties involved, including states, governments, health providers and patients and their associations."

Pharmacists in their role as health care professionals must be aware of these needs and, in response to a need that will grow rapidly, must participate in this pursuit.

Concluding, Mr Parrot said that all our efforts, all our initiatives, must strive for the same goal: the promotion of the pharmacist as a public health professional taking an active and responsible role at the heart of the community. Through collaboration with its key partners — the WHO, the International Council of Nurses and the World Medical Association — FIP wants to provide pharmacists with the tools they need to play this role fully in their day-to-day work.

"In this way, we will help pharmacists to commit all their skills to the benefit of public health and to be recognised for their vital contribution to the well-being of their fellow citizens," Mr Parrot declared.

Awards presented during the congress

During the congress, three awards were presented: the Høst-Madsen Award, the Pharmaceutical Practitioner Award and the Bio-Tech Award.

The Høst-Madsen Award was presented to Professor Ernst Mutschler, professor emeritus at the Pharmacological Institute of the University of Frankfurt Main, Germany. FIP's highest award for outstanding contribution to pharmaceutical science is presented every two years by its board of pharmaceutical sciences. Presenting the award at the congress opening session on 5 September, FIP president Jean Parrot said that Professor Mutschler's long and distinguished career in the pharmaceutical sciences was highlighted by his work in synthesising selective agonists and antagonists, whereby he was able to differentiate different muscarinic receptor subtypes.

The International Pharmaceutical Students' Federation received the **Pharmaceutical Practitioner Award** from the FIP Foundation for Education and Research for its Neema project in Tanzania. This is a project that aims to improve the health of the populations in the Kiromo, Buma and Mataya villages of Tanzania. The project's dispensary is shortly to be handed over to the Tanzanian government. The award is given to an individual or group for outstanding contribution to pharmaceutical practice.

Dr Behr, left, receiving his award from Dr Peter Kielgast, chairman of the FIP Foundation for Education and Research

The Bio-Tech Award, also given by the Foundation for Education and Research, is presented to a pharmaceutical scientist who has made a significant contribution to the field of biotechnology. This year's recipient is Dr Jean Paul Behr, director of research at the National Science Agency of France. He also heads the genetic chemistry department at the University of Strasbourg. Mr Parrot said that Dr Behr is internationally acknowledged as one of the founders of genetic chemistry.

A new health system for the 21st century — crossing the quality chasm

If we are serious about improving the quality of health care, we need to change the way we do our work, Professor Philip Schneider, Ohio State University College of Pharmacy, told the congress at a pharmacy practice symposium on 6 September.

He referred to a report, "Crossing the quality chasm", which had been published by the United States Institute of Medicine. In it, six aims and 10 rules for the way health care is delivered in the 21st century are set out. The report, he said, is considered to be the "roadmap" or blueprint for improving the quality of health care in America.

One of its fundamental principles is that the framework on which health care rests is broken. "As for a car with a rusty frame or a boat with a hull that leaks, changes in the framework are needed for the system to work better," he said.

A second principle is that health care professionals need to work more collaboratively to build a new "chassis" based on some common goals and objectives. The report suggests that this new chassis be oriented towards the patient, not the factors that have created the current broken system, such as the interests of individual professions or economic or political issues. It is out of this that the six aims and 10 rules have arisen.

Describing the six aims, Professor Schneider said that these relate to how health care is delivered. They are safety, effectiveness, patient focus, timeliness, efficiency and equity.

Safe delivery ensures that health care avoids preventable injury to patients. Effective care should be based on the scientific evidence that supports the way that health care is provided and used appropriately. Patient-centred delivery should ensure that the preferences, needs and values of patients are considered in making health care decisions. Health care delivery that is timely should ensure that waiting times and delays in receiving care are minimised. Wastage of precious health care resources should be minimised through efficiency. Finally, equitable delivery of health care should ensure that it is consistent, regardless of a patient's ability to pay.

Professor Schneider turned to the report's 10 rules for redesigning health care:

- Care should be based on continuous healing relationships with less fragmentation of care and less dependency on personal visits by patients to health care practitioners
- Care should be customised based on the needs and values of patients
- The patient should be the source of control over the health care that he or she receives
- Scientific and personal information should be interactive, in real time and prospectively available to all health care professionals
- Best care results from evidence-based decision making, ie, the conscientious use of current best evidence and knowledge of effective and safe care
- Safety should be a system priority like it is in other sectors, such as the airline industry
- There should be transparency so that system performance is measured and results made available to consumers
- Organised health care should predict patients' needs rather than wait for acute, often preventable events
- There should be a decrease in wastage, ie, better use should be made of the limited resources available for health care
- Co-operation with clinicians and others is more important than professional prerogatives and the role of individual health care practitioners

Philip Schneider: report is a blueprint for improving the quality of health care in America

Peter Noyce: time for a new contract between pharmacy and society

Professor Schneider concluded by saying that it had been shown that incremental improvements in the way things are done can improve process performance by about 10 per cent. "But an improvement of more than 10 per cent in the quality of health care is needed," he said, and in order to achieve this the way health care is provided needs to change. "The Institute of Medicine's report provides a compelling roadmap towards such changes and is relevant to how the medicines use process and the role of pharmacists in it can be improved." The report is available at www.nap.edu.

Providing a European perspective on the report, Professor Peter Noyce, University of Manchester, United Kingdom, stressed that the report was not about pharmacy and medicines in particular but about the delivery of health care in general. Its main concerns are two-fold. First, care is often suboptimal and even inappropriate. This is often not the fault of individuals. The expertise is available but sometimes health care systems cannot be relied upon to deliver quality care. The second concern is risk of harm. It has been estimated, said Professor Noyce, that the cost of harm caused by drug-related morbidities is equivalent to the total cost of cancer care in North America.

Much of the report is common sense, Professor Noyce believes. It said that care should be reliable, responsive, co-ordinated and accountable. He said that moving from one part of a health care system to another, eg, from secondary to primary care, could be likened almost to moving to another country. With regard to governance, health professionals have not been accountable to anyone but their peers and that needs to be more transparent and publicly visible, he said.

Professor Noyce outlined the four key components for addressing these concerns. First is knowledge management. He said that new developments mean that professional knowledge decays as one gets older, but pharmacists must keep on top of such developments, for example, genomics. A second component is IT infrastructure, which is critical for the management of quality problems.

Third is issues surrounding the professional workforce. Pharmacists are a key component in the management of health care quality, but how much understanding is there about the pharmacy workforce? A census by the Royal Pharmaceutical Society of Great Britain had shown that a large number of pharmacists work as locums and that the workforce is highly mobile. This may not always be good for continuity of patient care, he said.

A fourth component is consideration of incentives and remuneration. Health professionals are no different from other workers, he said, and incentives and fair remuneration are pivotal in ensuring good outcomes.

The goals in addressing the quality chasm are that health care delivery should be evidence-based, patient-centred and systems-oriented. Evidence-based practice is not a new concept, but how widespread is it? Much practice is still based on opinion and that must change. Health care delivery must be patient-oriented, ie, it must meet

patients' needs on their terms, otherwise care delivery will be sub-optimal. Systems orientation is important to ensure that a "fair blame" culture can be developed. Professor Noyce said that medication errors are generally systems problems rather than problems with individual practitioners, the majority of whom are not negligent.

It is time, Professor Noyce continued, for pharmacy to establish a new contract between itself and society in which pharmacists must negotiate greater control over medicines management and usage. The pinnacle of that is to become a prescriber. "If pharmacy does not take this role others will, and pharmacy will continue to be marginalised and detached," he said.

Securing a new contract would require pharmacists to be more integrated into the health care system. Greater governance is also required so that the public can be sure that proper regulation is in place as well as proper systems of professional development that ensure competence to practise. Professor Noyce warned, however, that where there is a shortage of pharmacists, governance could be a particular challenge if new barriers to practice are introduced. These might remove a significant part of an already stretched workforce, but this is no defence for keeping incompetent health professionals at large. Quality must be guaranteed, he declared.

Systems of electronic communication with patients are also necessary, Professor Noyce said, and these could become the mainstream process for improving concordance.

There is a need, too, to look at structure and rewards. Skill mix in pharmacies is important, especially where there is a shortage of pharmacists, as there is in Australia and parts of Europe. There is a need to ensure that the pharmacists available use their skills optimally hence the skills of support staff, too, need to be carefully structured. He acknowledged that this might be contentious and difficult to achieve because community pharmacists practise in a partially competitive environment.

Following the introductory presentations by Professor Schneider and Professor Noyce, four pharmacists told the congress how the ideas contained in "Crossing the quality chasm" might affect their own areas of practice.

The community pharmacy perspective was outlined by Bente Frøkjær, of Denmark. As secretary of FIP's community pharmacy section, she pointed out that much of what is in the report is already contained in her section's mission statement.

She said that community pharmacists need to form quality circles with their local general practitioners and educate and train their staff in good communication methods. They should also consider the set up of their pharmacies and try to make available an area where pharmacists can have an undisturbed dialogue with their patients and customers.

The community pharmacy section supports community pharmacists by providing professional development to help them become therapists and not simply dispensers. She said that pharmacists must move towards being therapists or prescribers in order to ensure the survival of pharmacy in the community. "Community pharmacists must change. If we fail to do so, society may realise it can do without us," she warned.

Professor Schneider, who had spoken earlier, gave the hospital pharmacy view as secretary of the federation's hospital pharmacy section. He said that some hospital pharmacists in the US had tried to envisage the aspects of care that patients expect. What they came up with was that:

- Patients should understand the benefits and risks of therapy before receiving a medicine
- Patients should not experience an adverse reaction to a drug that is predictable and preventable
- Patients should receive the correct dose and drug prescribed
- Patients should not develop a nosocomial infection from medicines that should be sterile
- Patients should not receive drugs to which they have a known allergy
- Outpatients should receive their prescriptions in a timely manner
- Patients should have doses of drugs individualised when necessary
- Patients should receive the most effective drug therapy at the lowest cost

Dr Han de Gier, of the Netherlands, looked at how the provision of medicines information might be affected. As president of FIP's pharmacy information section, he said the report could provide a basis for the development of a personal health information system. Such a system would be responsive at all times and provide access to care over the internet, by telephone and other means in addition to personal visits by patients to health care professionals.

Information must be made available to patients and their families that allows them to make informed decisions, including information describing the pharmacy's performance on safety, evidence-based practice and patient satisfaction, he suggested. But wisdom is needed. "Wisdom, not simply more information, and better financing schemes and smarter information technology, will be required to bring about new pharmacy values in the 21st century," he said.

Finally, Ms Mei-Ling Hsiao, of the Centre for Drug Evaluation, Taiwan, told the congress how pharmacy practice in the Western Pacific region is responding to the quality chasm outlined in the report. She said that safe use of medicines remains a concern in the region and pharmacies, sometimes, as "general stores", cannot be considered places where professionalism can be found. Some countries had launched policies that separate dispensing from prescribing and, in these countries, the quality of pharmacy practice and care is rising. However, in the region, doctors and pharmacists continued to fight each other over these separation policies and this is not good for the teamwork that is necessary to improve patient-centred services, said Ms Hsiao. Pharmacists in her region are still at an early stage of development, she said, but are trying to build a professional image.

Future congresses

Next year's congress of the International Pharmaceutical Federation will take place in New Orleans from 4 to 9 September 2004. Held in association with the American Pharmacists Association, the American Society of Health-System Pharmacists and the American Association of Pharmaceutical Scientists, the congress will take as its theme "Patient and pharmacists — a key partnership in health care".

The 2005 congress will take place in association with the Syndicate of Pharmacists of the Arab Republic of Egypt in Cairo from 3 to 8 September.

ANDREW HAYNES

The French Quarter, New Orleans

Further information about these and other meetings is available from FIP Congresses and Conferences, Andries Bickerweg 5, PO Box 84200, 2508 AE The Hague, The Netherlands (tel +31 70 302 1982, e-mail congress@fip.org) or from the FIP website (www.fip.org).

How does pharmacy add value? Reducing risks, improving outcomes

In a pharmacy practice symposium on 6 September, which focused on the contribution of pharmacists in improving outcomes and reducing risks, Professor Theo Raynor, professor of pharmacy practice, University of Leeds, United Kingdom, said that better medicine-related outcomes could be achieved by the pharmacist being a patient's "medicines manager". Pharmacists can help in two main ways — first by ensuring appropriate therapy and second by improving adherence.

There is ample evidence of need for action in relation to adherence, most recently from a review published by the World Health Organization. This has shown a problem of striking magnitude with only 50 per cent of patients world-wide taking their medicines as prescribed. However, patients need supporting — not blaming — and are more likely to take medicines appropriately if they understand and accept their diagnosis, agree with the proposed treatment and have had concerns about their medicines specifically and seriously addressed.

Theo Raynor: medicines management must form a major part of any solution to problems within health care systems

REDESIGN OF US HEALTH CARE SYSTEM

Professor Raynor went on to discuss the United States Institute of Medicine 2001 report "Crossing the quality chasm: a new health system for the 21st century", which urged a broad, sweeping redesign of the American health care system. The report identified several major redesign challenges, all of which provide pharmacists with unprecedented opportunities for improving medicines-related outcomes.

Re-engineering care processes is the first challenge, and a key role for pharmacists in this context is medication review. Trials have been conducted in the UK, Australia, the US and elsewhere. Describing the work of his own research group in Leeds, Professor Raynor said that medicine review clinics conducted by pharmacists in general practice surgeries have led to fewer medicines prescribed, lower costs, minimal impact on GP and nurse workload and increased patient satisfaction.

The second redesign challenge in the report is about advancing the effectiveness of teams, and a major priority for pharmacists is to enhance partnership in medicine taking. According to the UK Medicines Partnership Taskforce (the concordance initiative led by the Department of Health with the Royal Pharmaceutical Society), prescribing decisions have to be based on an equal partnership between prescriber and patient.

For such a partnership to work, patients need enough knowledge to participate as partners. Information has to be tailored, clear, accurate and accessible. However, current medicines leaflets are too narrow in that they focus on one drug, too negative in that they identify adverse reactions and too late because the patient does not receive them until after the medicine has been prescribed. Information technology has the potential for improving communication with patients and other health care professionals.

A further requirement in relation to partnership is that patients have to be involved in prescribing decisions, and both sides need to buy into this concept. However, there is a spectrum of attitudes to this among both patients and health professionals, with nurses and doctors being more positive than pharmacists. The way forward is to encourage and empower patients to participate and, at the same time, to train health professionals. The UK is due to have an "Ask about medicines week" in October 2003, Professor Raynor told the congress. Following similar events in Australia and the US, this campaign aims to encourage patients to take an active role in medicines taking by discussing safe and effective use with health professionals.

Another prerequisite for partnership is that patients are supported in taking their medicines. This involves regular medication review with the patient, addressing any practical difficulties and effectively sharing information between health professionals.

The third redesign challenge in "Crossing the quality chasm" relates to the effective use of information technologies. For pharmacists, developments in IT provide the potential to improve medicines information. Unlike current medicines leaflets, computer-generated leaflets can be individualised to the patient and offer potential for providing clear information especially for those with sight, literacy and other problems.

Knowledge and skills management, the fourth challenge, has to be addressed at both the undergraduate level and through effective life-long learning. A key skill to be developed is to support patients in becoming partners in medicines-taking decisions. Practitioners need specific training in adherence management, and this is an obvious candidate for multi-professional learning.

Co-ordination of care is the fifth redesign challenge, and in relation to appropriate medicines use, Professor Raynor asked who else but the pharmacist should be the co-ordinator? The WHO report had highlighted the need for a multidisciplinary approach towards adherence, but this has to be co-ordinated. The registration of patients with an individual pharmacist should be considered and pharmacists and other health professionals working in the hospital and community sectors have to find ways of working together more closely.

Medicines management must form a major part of any solution to problems within health care systems, Professor Raynor concluded. This is because medication is a key treatment mode in health care. Using an evidence-based and patient-centred approach, pharmacists are the logical profession to take responsibility for medicines management.

PHARMACISTS' RESPONSIBILITIES

In the second presentation, Inger Duus Nielsen, of the Danish Pharmaceutical Association, said that pharmacists have a responsibility to protect patients from drug-related morbidity and mortality because they are the professionals who dispense medicines. Despite the development of new roles, filling prescriptions is still a core function of pharmacists, she said. Pharmacists should focus on medicines in a patient-centred way, using their professional competence in all areas and on every possible occasion.

In relation to risk reduction, pharmacists have three main roles: first, in checking prescriptions. "Be critical about what you dispense — for the benefit of patients," she said. New technology such as barcode control systems, and computer-generated checks of the medicine and its indication and dose before dispensing, help to identify errors. However, pharmacists are still limited in many countries by lack of access to patients' medical records.

A second way in which pharmacists can reduce the risks of medicines is in monitor-

ing drug interactions. However, inconsistencies in published information create difficulties for pharmacists, not to mention misunderstanding for patients. In Denmark a new interaction database for use by all health professionals is due to be completed within the next 12 months and this should help considerably.

Patient counselling represents the third way in which pharmacists can reduce medication risks. However, the pharmacist has to understand the patient's needs, and customer satisfaction surveys in European countries have found that pharmacists tend to focus too much on giving information and not enough on whether the patient needs information in the first place.

Perhaps the pharmacist's best opportunity to reduce risk lies in reporting adverse drug reactions. This is a reality in the US, Australia, the UK and other EU countries. New legislation in Denmark has introduced reporting of ADRs by patients, but it is too early to say how this is progressing.

ECONOMIC EVALUATION

According to Professor J.-Matthias Graf von der Schulenburg, of the University of Hannover, Germany, a possible way for pharmacists to add value to the medication process is to become involved in the cost-effective use of medicines — in short, to become cost/disease managers. To achieve this, however, they need knowledge about economic evaluation, knowledge about the ways doctors reach prescribing decisions and knowledge about the ways patients use medicines.

Economic evaluations of medicines are used to varying degrees in Europe to inform reimbursement decisions, price negotiations, local formulary decisions, practice guidelines and communications to prescribers. Information on cost-effectiveness of medicines is available from various sources, such as the UK National Institute for Clinical Excellence and NHS economic evaluation database, and similar systems in countries such as France and Japan.

Major Europe-wide projects include HARMET (Harmonisation of consensus methodology for economic evaluation of health care technologies in the European Union), EUROMET (European network on methodology and application of economic evaluation techniques) and EURO NHEED (European network of health economic evaluation database). EURO NHEED contains more than 11,000 records, 56 per cent of which originate from the US and 29 per cent from the EU, and will soon be available to download from the internet (access by searching EURO NHEED).

Robert Broeksama, IMS Health Europe, concurred with the view that pharmacists can make a crucial contribution to cost management. However they have other important roles in shaping and implementing health care. First they could relieve the workload of doctors by their advisory role on common ailments, repeat dispensing, supplementary prescribing and implementing disease management programmes.

Second, they could relieve workload through providing delivery services, not only traditional home delivery, but also mail order. In the US, 5.5 per cent of prescriptions are dispensed by mail order, but because these are mostly 90-day prescriptions for chronic conditions, they represent 18.8 per cent of the total value. Moreover, the growth rate is currently 18 per cent, twice the average US market growth. However, it is likely to be the lower co-payments that attract patients to this service, not the home delivery element.

Evidence on medication-related admissions to hospital and the incidence of ADRs and drug interactions suggest that there is a great deal to be done on patient safety. Checking of prescriptions and maintenance of complete patient medication records represent a way of reducing such risks. Pharmacists also have a crucial role in patient education on medicines and, as trusted advisers in the treatment chain, are in a unique position to achieve this and so enhance compliance.

RISK REDUCTION

In the final presentation, a Europe-wide perspective was given by Joe Asghar, of the regional drug and therapeutics centre, Newcastle, UK. There are several risk areas in relation to medicines, he said. One of these is the sheer speed of change in health care systems, and change will increase risk for patients. Pharmacists need to understand these changes, but there is some evidence from the UK, relating to knowledge of the NHS plan, which suggests that they are not always up to date with what is going on.

Medication errors are an international problem, he emphasised. In Denmark they represent 3.4 per cent of drug related admissions and in France 5.4 per cent. In the UK 1.1 per cent of inpatients experience adverse drug events (ADEs) related to parenteral products, and in Italy 1.4 per cent of admissions are due to preventable ADEs. In Spain, 5.3 per cent of admissions to medical wards occur as a result of medication errors. Few European countries, however, have an established definition of "medication error" with four countries (the UK, Ireland, Spain, the Netherlands) using the US National Co-ordinating Council for Medication Error Reporting and Prevention definition. The main sources of errors originate in prescribing (42 per cent), documenting (27 per cent) and dispensing (17 per cent).

Mr Asghar pointed out that it is crucial to raise awareness of the importance of medication errors to reduce the frequency of them, to quantify the errors by collecting reports and to report them at a national level. Action has to be taken in response to errors and all health care professionals and organisations have to be involved. There is also a need to raise awareness of the role of the pharmacist in public health — in surveillance, health promotion and health protection, reducing inequalities, ethical use of limited resources, work with local communities and collaboration for health improvement.

Reducing risk demands the development of a strategy to manage change at the cultural, organisational, external and individual levels. Pharmacists already contribute to risk reduction in several ways — through their knowledge base and communication skills, local population health surveillance and health protection and the "final check". However, they could do more in medication error reporting. Only three countries in Europe (Spain, England and Ireland) have medication error reporting at a national level. On a local level, seven countries (Belgium, Spain, the Netherlands, Sweden, UK, Ireland and Finland) have error reporting in hospitals, and five countries (the Netherlands, Sweden, UK, Ireland and Finland) have reporting by community pharmacists.

Prevention of errors requires a redesign of the system, acknowledgement on the part of professionals that they need to learn, and both internal and national reporting systems put in place. Other measures that would help include up-to-date drug knowledge systems, discussion of errors, enhanced computer warning systems and improved information for patients.

Various schemes in the UK are contributing to error reduction. Evidence from the UK Medicines Management Collaborative has demonstrated that a dedicated clinical pharmacist can achieve savings of £130 per nursing home patient per year. The percentage of patients in care homes with a documented review has quadrupled over a 12-month period in one part of this project. An error reduction group established in Yorkshire in 2000 has achieved improved awareness and reporting of incidents and improved working practices in participating hospitals, and has developed a regional reporting form and database.

Mr Asghar concluded by saying that pharmacists can and do make a difference to patient care. It was a different but complementary contribution, whose success has to be measured and demonstrated. However, pharmacists need to change their attitudes to using information to which they have access, and to improve communication with patients and health professionals. Finally, national and local initiatives need to be complementary and additive. — *Contributed by Pamela Mason.*

How pharmacy's resistance to change affects patient care

Introducing a pharmacy practice symposium on 7 September, Dr Lowell Anderson, of the American Pharmacists Association, said that the shift from pharmacy-centred practice to patient-centred practice has to be professionally responsible. "We must not move from product to patient without satisfying the patient," he added. "We need to understand consumer preferences."

Professor Charlie Benrimoj, University of Sydney, Australia, began his presentation by saying that the emphasis on patient-centred practice is fine, but not enough attention is being paid to the pharmacist's view of this model of practice. "Why is a profession that is so close to patients, accessible, located in the heart of communities and with limited barriers not picking up patient-focused practice more rapidly," he asked.

The answer, he said, lies in the fact that insufficient attention is being given to the economic needs of pharmacists. Most community pharmacists are running a business and have to make a profit, so unless patient-centred services make money, progress towards implementation will be slow. Not only must this approach meet the professional needs of pharmacists, but also the economic needs, he said.

Charlie Benrimoj: economic needs of pharmacists must be met

Abilio de Almeido Neto: workshops must be followed by ongoing training

Obtaining a payer for the service is vital but, having got a payer, implementation has to proceed without delay. This means that the service has to be well planned and prepared before presenting it to a payer. "Getting a payer on board can actually be detrimental to the quality of the service if you are not ready to go," he emphasised.

In Australia, patient surveys indicated that pharmacists' current methods of practice are meeting patients' needs. However, as in every other country, margins from dispensing are falling, making current practice unsustainable in the future. Community pharmacists want to develop more patient-focused services, but question their economic viability, and the crisis in staff recruitment, again a feature in all developed countries, does nothing to help in extending roles. There is also a paucity of practice models, and pharmacists say they need these to get started.

A combination of factors — economic, professional and political — is therefore responsible for this resistance to change. "All in all, it is not surprising that implementation of patient-focused practice was slow, superficial and patchy."

Expanding on the theme of why pharmacy is resistant to change, Professor Benrimoj said that the current practice model still works financially for pharmacists. Although dispensing margins are falling, volume of prescriptions continues to increase. Pharmacists can afford in the short term to continue to be driven by mark-up and volume rather than service and quality. And because most pharmacists are in business for no more than 20 to 30 years, they tend not to look far into the future. But if they want to maintain their revenue, they have no choice but to look to payment for services.

Worldwide, most current financial negotiations focus on prescription volume. But what pharmacists need is a share of other governmental resources — health promotion money, for example. To obtain such money they will have to be able to offer solutions to health problems, but pharmaceutical politicians often lack a strategic voice and fail to link potential pharmacy services to politicians' agendas.

Another factor that does nothing to help change is the undergraduate curriculum. Being conservative, it sustains the current model of practice and produces good pharmaceutical scientists, but fails to prepare practitioners for providing patient-focused services. Postgraduate education is little better in that it is neither embedded in the workplace nor linked to commercial needs and realities.

Concluding, Professor Benrimoj said: "If the shift to patient-focused service is to take place, it needs to be made economically attractive for community pharmacists. It needs more than statements in the literature and clinical training. However, payment is only one step. It opens the gate, but service does not automatically follow payment. What we need is a transitional management process that provides solutions at all levels — economic, political and professional."

Dr Abilio de Almeido Neto, Pharmaceutical Society of Australia, New South Wales, picked up on the theme of embedding education in the workplace to effect change in practice.

Change in practice behaviour is not achieved by workshops and seminars, no matter how good, he said. It is naive to think it could be. Such training increases knowledge of patient-centred techniques, such as communication, but does not mean that such knowledge is put into practice.

Despite pharmacists and pharmacy students being trained in communication, all too often patients in community pharmacies have to adapt to the customs and procedures of the pharmacist rather than receiving care designed to focus on their needs and preferences. However, pharmacists are often put off by some patients' apparent unwillingness to allow greater involvement in their drug therapy. This, too, reduces pharmacists' motivation to change to a patient-focused approach.

In New South Wales, the Pharmaceutical Society of Australia has incorporated practical skills into continuing education programmes on managing patient interactions in the non-prescription area of the pharmacy. The aim is to motivate community pharmacists to deliver patient-centred care. Within such programmes, pharmacists are taught to identify patients who are apparently unwilling or have no time to discuss their drug therapy. Appropriate communication techniques are also taught to enable the pharmacist to motivate the patient to participate in the conversation.

IMPACT OF PSEUDO-PATIENTS

Even with this type of training, the majority of pharmacists return to their pharmacies and do not attempt to employ a patient-centred approach in their practice. What the trainers have learnt is that behaviour can be changed only when a workshop is followed by ongoing training at the pharmacy. This is achieved through the use of "pseudo-patients" — individuals trained to go to a pharmacy and present particular scenarios (eg, a mother requesting cough medicine for her six-year-old son).

Pharmacists are unaware of the pseudo-patient's identity, although they are told at the workshop that such an individual will visit the pharmacy. Indeed, the involvement of the pseudo-patient is negotiated with pharmacists at the workshop.

When pharmacists are told that a pseudo-patient is going to visit the pharmacy, every unfamiliar face that enters the pharmacy becomes a "suspect". This motivates the pharmacist to practise skills learnt in the workshop with every patient who visits the pharmacy.

The pseudo-patient returns to the pharmacy after the visit to talk to the pharmacist about how well they performed. Most of the pseudo-patients are pharmacists with many years of experience and are trained to provide feedback in a non-confrontational manner.

When fully integrated into training, pseudo-patient visits represent a powerful tool for the implementation of skills in the pharmacy setting, Dr Neto said. Workshops alone often have little lasting impact on the day-to-day practice of participants. This could be because they offer insufficient opportunity for practising skills and gaining feedback or because the workshop environment is not sufficiently similar to the natural practice setting. Moreover, change is a process, not an event, and practice in the pharmacy over a period of time, supported by feedback and coaching seems to be necessary to effect behaviour change.

Community pharmacists in Australia have accepted this procedure. Since the procedure has been negotiated with pharmacists, there is no sense of betrayal from the visits of the pseudo-patients. Indeed participants recognise that they would profit from the procedure by further developing their professional skills. During the past six months, over 600 pharmacists participated in this type of training and by the end of 2003, this number is expected to have increased to around 1,500.

According to Dr Marja Airaksinen, University of Kuopio, Finland, implementation of patient-focused services requires a fundamental change in the philosophy of running a community pharmacy. Of course, it requires good communication skills, and pharmacists have to be taught a new approach to patients — to regard them as active medicines users, active partners with whom pharmacists are expected to establish a professional relationship based on trust and mutual decision making.

Work in Finland has shown that, above all, pharmacy owners have to incorporate patient-focused services into the vision and business strategy of the pharmacy. Each pharmacy has been encouraged to develop a long-term action plan, and the recommended period for this action plan has been set at two years to effect permanent change. "Patient-focused services cannot be integrated into routine pharmacy practice without a long-term development plan," she said.

As part of this, it is important to evaluate current practice, especially in relation to understanding the needs of customers, modifying service processes, including resources and facilities to integrate counselling, together with developing the competency of the personnel. Experience in Finland has demonstrated that pharmacists have to be almost re-educated in this new practice, but steady progress towards patient-focused services is being made, she concluded.

In the final presentation, Grant Kardachi, Pharmaceutical Society of Australia, discussed medicines management services which he has implemented into his own community pharmacy. Currently in Australia there are two major cognitive services funded by the federal government. These are medication review services in nursing homes, funded at A$100 per bed per year, and medicines review in the homes of patients, funded at A$140 per patient per year.

In his experience, key issues in establishing such services are first, and most critically, to establish good working relationships with general practitioners. This often requires face-to-face meetings during the early stages of implementation. GP perceptions of pharmacies as shops often have to be changed. Doctors do not see pharmacies as places which employ professionals who could help them with their prescribing decisions and offer solutions to patients' medication problems.

Secondly, and linked to the first issue, the pharmacy has to be restructured with less emphasis on promoting special offers and commercial merchandise and more on promoting professional services. Thirdly, the pharmacist has to dedicate time to these services and to be proactive, not reactive. In addition, staff have to understand the nature of the new services and be trained to provide the necessary back-up.

The sustainability of these services would be dependent on the quality delivered. In Mr Kardachi's opinion, an important factor in establishing medication review is to use a mentor pharmacist with significant clinical experience. This adds quality assurance to the process, produces better health outcomes and improves the confidence of the pharmacist delivering the service. The mentor model has been used with significant success, he concluded. — *Contributed by Pamela Mason.*

GUIDANCE FOR REPORTS ON MEETINGS AND CONFERENCES

Timing and submission *The Pharmaceutical Journal* welcomes submissions about meetings and conferences. Please contact the editorial department before sending in a report, ideally before the meeting takes place, to check that it is not already being covered and to discuss the length of the report.

Photographs are also welcome, provided they are of publishable standard.

Reports should be sent in by e-mail or on disk. If the meeting is newsworthy, the report should be sent in by the Tuesday immediately after it takes place to ensure immediate publication. All reports should be sent within two weeks of the meeting to guarantee publication within a month of the meeting. Reports submitted later than this will not always be published in full in *The Journal*. It may be necessary to publish an abbreviated version in print and post the full report on *PJ Online* (www.pjonline.com).

How to prepare a report Readers need to be encouraged to read reports, so start the report with the most interesting item, not with details of what, where and when the meeting occurred.

Concentrate throughout the report on the most newsworthy contributions to a meeting, such as valuable information that has not already been publicised or strongly worded opinions voiced by influential speakers. Reports that repeat what readers already know or cover old issues will not be interesting.

Write about what people actually said rather than what they talked about. Ask speakers for copies of their talks or notes. Do not submit reports that are just lists of speakers' topics; they are of no value to the reader. Instead of writing "Professor Plum gave a fascinating account of continuing professional development," readers will want to know exactly what Professor Plum said that was so fascinating.

Do not give every speaker an equal number of words. With the exception of keynote speakers if someone says nothing of interest, then do not report it, however well-known the person. If the keynote speaker says nothing of interest, consider how valuable a meeting report will be.

Advice for photographers *The Journal* is unlikely to publish more than two or three photographs from most meetings, so it is best to concentrate on the main speakers. The ideal time to take photographs is at the beginning of each address, while the speaker is still involved in introductions and is likely to be looking out at the audience rather than staring down into his or her notes. Take several shots of each speaker and always aim to be as close as possible to the podium, even if it means obstructing the view of the audience for a short time.