BIO G04-3

BIOGRAPHY I.SILVA

I.S. Silva
PGEU Belgium

Ivana graduated in Pharmaceutical Sciences by the Faculty of Pharmacy of the University of Lisbon (1999) and is a registered pharmacist at the Portuguese Pharmaceutical Society (PPS). She has a Master in Business and Administration (MBA) with specialization in Information Management by the Portuguese Catholic University – Faculty of Economics and Management Sciences (2005).

Since March 2006 she is responsible for Pharmaceuticals and Professional Affairs of the Pharmaceutical Group of the European Union (PGEU). Her main tasks encompass representation of PGEU and contacts with members as well as with external parties. Responsibilities on issues relevant to pharmacy practice, including the activities of the European Medicines Agency (EMEA), the PGEU activities on patient safety, pharmaceutical policy and e-health. Additional responsibility includes the management of PGEU WG on Education and Training, dealing among others with recognition of professional qualifications, and IT applications aimed at promote professional mobility and exchange of information between pharmacists' competent authorities.

During 1999-2006 she was Professional Secretary of the National Board of the PPS. Her main tasks included assistance to the President, Board of Directors and Secretary General; international affairs; executive coordination of professional projects and taskforces; executive coordination of events and publications. Until 2002 she was the executive assistant of the Department of Quality in Clinical Biology of PPS; executive assistant of the National Council of Quality of PPS; and coordinator of the Portuguese Pharmaceutical Society Magazine and Website. From 2002 until 2006 she was the Executive coordinator of the National Committee for Qualification and Admission of the PPS, involved with Programme Degrees Accreditation, Registering Examination and Continuing Professional Development. In relation to this project she worked on the implementation of the re-licensure system for pharmacists.

She is currently member of the Executive Committee of the EuroPharm Forum (2004-2006 mandate).

ABS G04-1

ACCREDITATION STANDARDS

M.J.A. Rouse
ACPE United States of America

As professionals, pharmacists should accept the responsibility to develop and maintain their professional competence, but in most countries pharmacists are regulated by statute to protect the public. Regulatory systems for education and practice vary, but usually governmental and professional bodies play important roles in quality assurance (QA).

Traditionally, health professions have been given some autonomy over the education and practice of their practitioners. This is changing as governments seek greater levels of accountability and transparency to provide public assurance of the continuing competence of healthcare providers. As pharmacist roles and responsibilities become more diverse, who decides what competencies are needed, and assures they are maintained? Who is responsible to quality assure the education and training provided, and for the validity of any additional credentials?

The presentation will provide an overview of some of the different systems that exist or are emerging to 'regulate' pharmacist education, training and practice, and the QA systems that support such regulation. In the USA, professional (pre-service) education of pharmacists is accredited by a federally-approved agency. While fully independent and autonomous, the agency works closely and collaboratively with all branches of the profession. The same agency accredits providers of continuing education (CE); participation in approved or accredited CE being a requirement for maintenance of licensure in the US. Standards-based accreditation, some of the various models designed to assure ongoing competence of pharmacists, and the role of voluntary credentialing bodies will be discussed.

ABS G04-2

IMPLEMENTATION, BARRIERS, AND REACTIONS TO RELICENSING: LESSONS LEARNED FROM THE PORTUGUESE EXPERIENCE

I.S. Silva
PGEU Belgium

The Portuguese Pharmaceutical Society (PPS), which is the governing and regulatory body of the Pharmacy profession in Portugal, revised its Statute in 2001 in order to include, among other aspects, the mandatory professional re-licensure. The PPS Statute was approved by Decree-Law 288/2001 of 10 of November, and therefore there is a legal framework since then to implement such re-licensing system.

After a period of extensive discussions on how to implement the revalidation of the professional license of more than 10.000 pharmacists all over the country, the approved revalidation model is running since January 2004. Today, over 4.000 pharmacists have started their revalidation process. To come to such a stage of implementation, both the PPS and pharmacists have encountered many challenges and are still in an early stage of a long learning curve. Several financial, infrastructural and human resources' conditions had to be taken on board, innumerous practicing particularities had to be analyzed, expectations had to be managed, acceptance of the model had to be developed, delivery of a robust system had to be ensured.

The presentation will focus on the different stages of implementation the PPS had to go through, how it is presently managing the process and what are the expectations in a medium and long-term perspective. It will underline strengths and weaknesses of the system and how a continuous assessment of the process has introduced new adjustments to the initial proposed model. It will highlight the barriers but also the opportunities faced by individual pharmacists within this process. It will provide concrete examples from the viewpoint of a hospital pharmacist.

BIO G05-1

BIOGRAPHY C.C.F. VIDOTTI

C.C.F. Vidotti
Federal Council of Pharmacy Brazil

Pharmacist, Master in Pharmacology and doing Ph.D. in Health Sciences.

Technical Manager of the Brazilian Drug Information Center (CEBRIM), within the Federal Council of Pharmacy(CFF). I have expertise in drug information, Medicines Information Center management, edition of drug bulletins, team work, drug nomenclature, selection of drugs, pharmacovigilance, pharmacoepidemiology and public health. I have helped training of many pharmacists to set up Medicines Information Centers in Brazil and in Latin America. Currently, I am member of the three Brazilian government committees of drug nomenclature, drug selection and pharmacovigilance in community pharmacies.

BIO G05-2

BIOGRAPHY E. PAULINO

E. Paulino
Associação Nacional das Farmácias Portugal

Ema Paulino
Av. D. Nuno Álvares Pereira, nº 39C, 2800 Almada, Portugal
Ph: +351 962751052 e-mail: emapaulino@ureach.com

- EDUCATION

2002-6 Enrolled in Masters in Community Pharmacy, Faculty of Pharmacy, University of Lisbon (Thesis: Understanding Practice Change in Community Pharmacy - Are Doctors Willing to Play?)

2001 Graduated Pharmaceutical Sciences by the Faculty of Pharmacy, University of Lisbon

- EMPLOYMENT

2002-... Pharmacist-in-charge and owner, Nuno Álvares Pharmacy

2001-2 Pharmacist, Nuno Álvares Pharmacy

RESEARCH EXPERIENCE

2003-... Researcher in international collaboration on facilitators of practice change in community pharmacy

2000-1 Primary researcher in international collaboration on identification of drug related problems in discharged patients, Stevenshof Institute for Pharmacy Practice Research (SIR) and European Society of Clinical Pharmacy (ESCP), The Netherlands

- AWARDS

2001 Health Base Foundation Poster Award at the 30th ESCP Conference in Antwerp, Belgium, for the poster and oral communication "Drug related problems among patients discharged from hospital"

- CURRENT PROFESSIONAL AND STUDENT REPRESENTATIONS

2006 - current Member of the European Pharmacists Forum (EPF)

2005 – current Member of the Executive Committee of the International Pharmaceutical Federation Community Pharmacy Section (FIP CPS)

2004 – current Member of Pharmaceutical Care Network Europe (PCNE)

2003 – current Member of the Portuguese Delegation at the Pharmaceutical Group of the European Union (PGEU)

2003 – current Member of the Portuguese Delegation at the EuroPharm Forum

2003 – current Board Member, Portuguese National Pharmacies Association (ANF)

BIO G05-3

BIOGRAPHY M.S. GHARAT

M.S. Gharat
KMK Pharmacy Polytechnic India

Manjiri Sandeep Gharat,M.Pharm. (Pharmacology),Mumbai ,India .Cutrrently working as Vice Principal at Prin. K.M.Kundanani Pharmacy Polytechnic,Ulhasnagar .The main interest area is Community Pharmacy Practice & Pharmacy Education & loves to carry out innovative experiments in these areas.She is Hon. Secretary of Community Pharmacy Division of Indian Pharmaceutical Association (IPA)She is the resource speaker for IPA,Pharmacy Council & All India Chemist Association for Continuing Education Programs of Reatil Pharmacists. She has several national & international paper presentations to her credit & has attended last three FIP Congresses. She is Chairperson of National Project Team of IPA for an International Project, IPA/CPA/IPSF TB Fact Card Project, (2005/06) which is the most innovative & pathbreaking project in area of Community Pharmacy.She is a Core team member for the IPA- WHO-DCGI Project of Good Pharmacy Practices.She has been Coordinator for Patient Information Leaflet project through retail pharmacists, sponsored by Delhi Pharmaceutical Trust. She has received 'Appreciation Award' from her institute for valuable contribution to the institute.Recently,she received a special Recognition award as 'Young Achiever' from IPA for her contribution to TB Fact Card Project & her activities in area of Community Pharmacy.

BIO G05-4

BIOGRAPHY Y.J.J. JALUNDHWALA

Y.J.J. Jalundhwala
Bombay College of Pharmacy India

I am a student of the Third Year (Semester Six) of the Bachelor of Pharmaceutical Sciences course, studying at the Bombay College of Pharmacy affiliated to the Mumbai University. I have been actively involved in the student activities at intra-college and inter-collegiate levels. I am the Joint General Secretary of the Indian Pharmaceutical Association – Maharashtra State Branch's (IPA-MSB) Student Cell and have been the Cultural secretary of my college. I am also the student coordinator of the TB Fact Card Project. I have been an invited speaker at the IPA-Community Pharmacy Division's National Conference,2006 and co-authored 2 posters one at this conference and the other at the Indian Pharmaceutical Congress, 2005. I am on the editorial board of 'Panache flair of mind' and 'Credence – Belief in excellence' which are annual publications of IPA-MSB student cell and the Bombay College of Pharmacy respectively. I have been the head for the activities of the IPA-MSB Student cell for the National Pharmacy Week in 2005. I am a recipient of the Rotary Youth Leadership Awards (RYLA) King. I have actively participated in many inter-collegiate festivals and won a lot prizes. I am a founder member of the IPA- Student's Forum (IPA – SF), a national level pharmacy student organization.

BIO G05-5

BIOGRAPHY S.I. BENRIMOJ

S.I. Benrimoj
University of Sydney Australia

Professor S.I. (Charlie) Benrimoj B.Pharm (Hons), Ph.D, M.P.S. is the Pro Vice-Chancellor (Strategic Planning), University of Sydney and the Foundation Professor of Pharmacy Practice. He was the Dean of the Faculty of Pharmacy from 2000 to 2005. His research interests involve the clinical, economic, change management, standards of practice and implementation aspects of cognitive pharmaceutical services from community pharmacy in current and emerging health care systems. He initiated a Pharmaceutical International Network spanning 10 countries bringing together pharmacy practice researchers and policy makers and is a founding member of the Global Institute of Pharmacy Practice. Since 1991 he has received, either as chief or sole investigator 78 grants worth over $6million. He has published 97 papers in refereed journals, produced 22 major research reports on cognitive services in Australia, and presented and co-authored over 200 conference presentations. He has been a keynote speaker in over 50 national and international conferences. In 1976-7 he was the president of the British Pharmaceutical Students Association. He is currently the president of the Pharmaceutical Society of Australia (New South Wales branch). In 2000 he was the PSA Australian pharmacist of the year.

BIO G05-6

BIOGRAPHY E.K.D. DIEDRICHSEN

E.K.D. Diedrichsen
Massachusetts General Hospital United States of America

Ellen Diedrichsen served as the Chairperson of Pharmacy Education for the International Pharmaceutical Students' Federation in 2005-06. She earned a PharmD at the University of Nebraska - Medical Center, USA, and completed a pharmacy practice residency at Massachusetts General Hospital in Boston, Massachusetts, USA. Ms Diedrichsen is currently a pharmacist at Massachusetts General Hospital.

ABS G05-1

COMMUNITY HEALTH SERVICES – PHARMACISTS' ROLE

C.C.F. Vidotti
Federal Council of Pharmacy Brazil

Community health services provided by pharmacist are broad and include promotion of health campaigns about rational use of drugs, smoking cessation, vaccination, prevention of STDs and AIDS. In Brazil is ongoing the government program called Family Health Care (PSF), understood as a reorientation strategy of the assistance model that is operated through the implementation of multiprofessional teams in primary health care units. These teams are responsible for the follow-up of a defined number of families that are located in a delimited geographical area. The teams work with health care promotion actions, prevention, recovery, illness rehabilitation and more frequent sicknesses, and in the maintenance of this community's health. The responsibility for the families' follow-up sets the need for Family Health Care teams to overcome the limits as classically defined for the Primary Health Care in Brazil. In this program, the pharmacists' role includes counseling in primary care and in rational use of drugs.

ABS G05-2

COGNITIVE SERVICES IN COMMUNITY PHARMACY: A TEAM APPROACH

E. Paulino
Associação Nacional das Farmácias Portugal

Following the philosophy of Pharmaceutical Care, pharmacists worldwide have been taking up new roles in order to provide patients with services that ultimately contribute to an improvement of their clinical outcomes. Odedina et al., in 1995, acknowledged that the idea of pharmaceutical care served as a changing force in the field of pharmacy, generating multiple reactions from all stakeholders. However, pharmaceutical care was yet to become part of everyday practice of most community pharmacists, as it required fundamental changes in practice, which were not occurring. In fact, several barriers to practice change have been identified. Some are closely linked to our interaction (or lack of it) with doctors, which seems to be a prominent factor in the dissemination and implementation of new services in community pharmacy. Some national and local services involving community pharmacists and doctors have been adopted worldwide, and some examples of sustainable collaborations exist. However, seldom are these services publicized, and therefore literature on this topic is scarce and often linked to national legislation, and hence not always found in international journals. Given the highly documented added-value of a team approach to patient care and prescribing in general, increased exchange of information on successful experiences seems desirable, as it can contribute to the advancement of services in community pharmacies.

ABS G05-3

TB FACT CARD PROJECT IN INDIAN COMMUNITY PHARMACIES

M.S. Gharat
KMK Pharmacy Polytechnic India

Someone in the world is newly infected with TB bacilli every second; overall, one-third of the world's population is currently infected. 500,000 people die each year in India ,the country with the greatest TB Burden. Among all infections diseases it remains to be number one killer in adults. Tuberculosis actually is one of the completely curable diseases provided the right treatment is taken for the complete duration. Incomplete or wrong treatment leads to fatal complication, Multidrug Resistant (MDR) TB. There has been alarming increase in MDR TB Cases in our country. Th is a also common co infection in HIV patients.

In spite of the free diagnosis & drug treatment at DOTS centres,50 to 60% of TB patients take their treatment from private physicians & hence these patients come in contact with the retail pharmacists for their medication purchase. The treatment of these patients is not under the observation & in many cases the patients leave the treatment halfway due to financial reasons or ignorance. Pharmacists, as most easily accessible members of the primary health care team, can play a more proactive role in preventing and managing TB for these patients whose treatment is out of purview of DOTS supervision. This valuable resource has been never tapped for the TB Control. The Pharmacy students can certainly assist the pharmacists in this venture. Based on these views, a TB Fact Card project was designed & was implemented in Mumbai as a pilot project. The project is a collaborative project of Indian Pharmaceutical Association, Commonwealth Pharmaceutical Association (CPA) & International Pharmaceutical Students Federation (IPSF) The project activities involve:

- Dispensing of anti- TB medicines as per the prescription of physician
- Creating awareness about prevention & treatment of TB by way of verbal counselling & by providing written information.TB Fact Card, which is made in 4 local languages.
- Monitoring of treatment when by personal visits to the patients home(with patient consent) or by telephonic calls
- Counselling patients about importance of proper nutrition in TB (with the guidance of the nutritionist)
- Maintaining patient records in easy to use formats. In these formats the contact details of patient can be entered along with the prescribed medicines & at each interaction body weight, any side effects can be noted down.
- Guiding the poor patients to nearby DOTS centre for free treatment

This way the Pharmacist have tried to improve patient adherence to the treatment & have created awareness about TB in the community.

Also this could enhance the image of the pharmacist in the eye of the society. Till now worldwide, there are very few isolated reports of pharmacist's contribution in TB management. But in this pilot project, the 50 selected pharmacists in Mumbai had taken up this proactive role & monitored the treatment of TB patient's with the help of 50 students. The students have taken lead in meeting & informing the TB physicians about the project who are in the area of the Project pharmacies & then some of the Physicians have been recommending their patients to the project pharmacies for better treatment monitoring. This is setting an example of Collaborative Care.

There have been many cases where pharmacists have recommended patients to DOTS treatment .

There has been encouraging progress & this model is the most innovative to supervise the treatment of private sector patients.

Another major breakthrough coming up from the project is the participation of some Pharmacists as DOTS providers. This will be an excellent example of Public-Private Mix (PPM) effort for the improvement of the community health.

For further details of this project, please contact symghar@yahoo.com.

ABS G05-4

TB FACT CARD PROJECT - A STUDENTS' PERSPECTIVE

Y.J.J. Jalundhwala
Bombay College of Pharmacy India

The TB Fact Card Project was envisioned at the FIP in New Orleans in Sept 2004 by the heads of the Indian Pharmaceutical Association, the Commonwealth Pharmaceutical Association and the International Pharmacy Students' Federation but little did anyone realize the realm of the impact this would have on the perspectives of pharmacy students from Mumbai towards various aspects of community pharmacy and patient care. The project which started in full fledge from April 2005 with 65 students from 5 colleges in Mumbai, had a couple of months before start, of rigorous understanding of the project and the protocols and having a grasp at the different aspects of TB & patient care which was beyond the textbooks. This was aided mainly by the training program where in TB specialists were invited to talk to the participating pharmacists (both community and students). Thus it gave students a rare opportunity to interact with the community pharmacists on a one-to-one basis. The students also had interacted with the doctors to better understand the disease and its medication. The project was launched on the World TB Day on 24th March, 2005 in the presence of a few big names from the industry along with the members of the association, some members from the state government health dept and also the MDTCS (Mumbai District TB Control Society) and all the participating pharmacists. The students started their work by keeping constantly in touch with the community pharmacists regarding the enrollment of the patients. Once the details were obtained, the students used their training knowledge to start talking and counseling the patients. The patient's comfort of time and venue to talk were taken most care of while approaching them. The students even tried hard during the exam time to retain the faith of the patients in the project and thus ensuring total commitment of the project to the total care of the patient. As the exams got over by around June, there were more patients enrolled and the project started increasing. Eventually there were some patients who declined to allow students or the pharmacist to counsel them at all, while some wanted to have it during the visit to the community pharmacist, mainly due to the social stigma attached with the disease in India. Some still were interested in this novel way and approach towards patient healthcare. He students visited a lot of patients at their homes, offices or at times even at neutral venues. The Fact Card helped many people who were not even affected by the disease. The awareness had started spreading in a good way. With newer and newer experiences teaching the students the actual role of a pharmacist in healthcare with every visit, the project eventually came to an end. But throughout this span of almost a year since the training and the practice and actual working, the students learnt a lot of things which made the project priceless to them just as it did to the rest. The students learnt a lot more about each other as they hailed from different colleges. They worked like one team and helped each other out at all stages. The learnt from each other's experiences and also had a good view of the community pharmacies and their working. This was especially amazing for most as the syllabus is more industry oriented. The students used these experiences during the National Pharmacy Week from 20 – 26 November, 2005 to share with the other students and then also with other patients through the street plays and the awareness camps at various railway stations and public hospitals. Overall the major gain from the project was the fact that for the first time the students got a chance to actually interact with the patients also and realize the role of pharmacist in the healthcare industry beyond manufacturing medicines and drug delivery systems. This was especially of importance as most of the students were from the Bachelors in Pharmaceutical Sciences a course with a highly industry focus and R & D aspirations. Thus the community aspect along with the patient care was an experience of a life time and will always remain valuable. On behalf of all the students we profusely thank everyone who helped make this project a possibility.

ABS G05-5

FUTURE DIRECTIONS- CLINICAL SERVICES FOR COMMUNITY PHARMACY

S.I. Benrimoj
University of Sydney Australia

Community pharmacy world wide is undergoing a revolution with an increase in the number and depth of clinical services it provides to the community (1). The terminology used to describe and define these 'clinical services' range from Pharmaceutical Care, Cognitive Pharmaceutical Services to Medication Management. Although there is much debate on definitional differences, in essence, all these terms practically describe philosophies, professional practices and services that encapsulate the dramatic evolution of the role of community pharmacy and pharmacist from the often accepted and quoted role-change 'from product to patient orientation' . These clinical services can be generally simply classified as ones that the pharmacist can provide without consultation and independent of other health care professional e.g. services associated with non-prescription medication, health education and promotion to services that rely or require an interaction, collaboration and consultation with other health care professionals e.g. medication management reviews and disease state management. Several hierarchical clinical models of service suggest that these clinical services can be identified as:

* Health education and promotion
* Medication information
* Concordance assessments
* Responding to symptoms and providing non-prescription medications
* Clinical interventions or identifying and resolving drug related problems
* Case Conferencing with other health care providers such as medical practitioners and nurses
* Undertaking residential medication reviews
* Undertaking Domiciliary medication reviews
* Disease state management
* Follow up on therapy e.g. drug monitoring
* Participation in therapeutic decisions (GP pharmacist in surgeries)
* Specialist CPS areas – e.g. mental health, genomics, genetics
* Pharmacist dependant and independent prescribing

One simplistic, yet far reaching vision of the future is that the medical practitioner will diagnose and select the option of managing the patient with a medicine and the pharmacist will select the actual medication and monitor the progress of the patient.

All these services are aimed at not only providing optimal health outcomes for individual patients but also addressing improvements to the health care systems in financial and organizational terms. The emergence of these clinical services has many fundamental implications ranging from the education of students and changes in curricula to legal, remuneration, standards of practice through to the implementation of change management strategies. The challenge and opportunity lie not with the identification, researching and evaluation of clinical services but to a paradigm shift by the leaders of pharmacy. The implementation and sustainability of these services rests with achieving positive outcomes to the health care system and individual patients with cost reductions and quality use of medicines and not in the self interest of the profession. Concurrently governments and consumers have to acknowledge that the profession is working in a commercial environment.

1. Farris K.B., Fernandez-Llimos F. and Benrimoj SI. Pharmaceutical Care in Community Pharmacies: Practice and Research from Around the World. The Annals of Pharmacotherapy, 2005, 39, pp1539-1541.

BIO G06

BIOGRAPHY J.P. GRÉGOIRE

J-P. Gregoire
Laval University Faculty of Pharmacy Canada

Jean-Pierre Grégoire is a Professor of Pharmacy and Pharmacoepidemiology at Laval University in Quebec City, Canada. He is also the Director of the Laval University Population Health Research Unit. He holds a degree in Pharmacy from Laval University, a Master of Public Health (Epidemiology) from the University of Texas School of Public Health at Houston, and a Ph.D. in Public Health from the University of Montreal. From 2001 to 2004, Dr Grégoire has directed the Health Economics & Outcomes Research Group at Merck Frosst Canada Ltd. He is a former President of the Quebec Order of Pharmacists and of the Canadian Council for the Accreditation of Pharmacy Programs. In the past, he was a Consultant for the World Health Organization Action Programme for Essential Drugs. His research activities are in the field of pharmacoepidemiology, the economic evaluation of health interventions, and pharmaceutical policies.

BIO G06

BIOGRAPHY B.J. WANING

J. Waning
Boston University United States of America

Brenda Waning is an Assistant Professor of International Health at Boston University School of Public Health, where she teaches courses on International Pharmaceutical Policy and Antiretroviral Policy and Program Management in Resource Poor Settings. Originally trained as a pharmacist, she worked for over 15 years in clinical and academic pharmacy in the US. Her current work includes research and consulting on pharmaceutical policy in Africa, Asia, and Central Asia.

ABS G06

LISTING OF DRUGS FOR REIMBURSEMENT – VARIABILITY BETWEEN COUNTRIES

J-P. Gregoire
Laval University Faculty of Pharmacy Canada

During the last decade interest in economic evidence on drugs has increased. This increased interest raises questions about the methodology employed in economic evaluations and on how pharmacoeconomic evidence is being used by public decision makers. While the guidelines and methodology used in economic evaluation are quite harmonized, the policies they produce are not. Those issues will be discussed. An example of how the same evidence seems to produce very different decisions about drug listings from one jurisdiction to the next will be presented.

ABS G06

THE ROLE OF COST-EFFECTIVENESS ANALYSES IN SELECTION OF MEDICINES FOR NATIONAL INSURANCE SCHEMES AND NATIONAL ESSENTIAL MEDICINES LIST: PROCESS AND COUNTRY EXAMPLES

J. Waning
Boston University United States of America

Limited resources for medicines require cost considerations be made at all levels of the health care system including national, facility, program, practitioner, and consumer levels. Cost-effectiveness analyses have been widely used by policy makers in many developed countries to guide decisions about medicine coverage. In developing and transitional countries, however, where resources are more constrained, cost-effectiveness analyses have not been adequately utilized for decision making around national essential medicine lists (EMLs) and national medicines insurance schemes. This presentation discusses the extent to which cost-effectiveness analyses have been incorporated in developed world settings and then compares this with the use of such analyses in developing and transitional country settings. The benefits, considerations, constraints, and challenges of suing cost-effectiveness analyses to make decisions on EMLs and national medicines insurance schemes in these low resource settings will be presented. Instruction on how developing and transitional countries can begin to utilize cost-effectiveness analyses to guide policy decisions will also be presented.

Biographies - Web-Originated Consumer Medicines Information – Where Are We Now? (G 09)

BIO G09-1

BIOGRAPHY D.K. RAYNOR

D.K. Raynor
University of Leeds United Kingdom

After 20 years as a hospital pharmacist, Theo joined the University of Leeds as Professor of Pharmacy Practice in 2000. His research focuses on consumer medicines information and expressing risk of side effects to medicine users. Recent publications have appeared in the BMJ and Lancet. He is executive chairman of a University spin-out LUTO Research Ltd www.luto.co.uk which provides consumer information testing services to the pharma industry. His team was commissioned to undertake a systematic review of written medicines information by the UK Department of Health, which will be published in 2006. Theo leads an international comparison of consumer medicines information in Europe, the US and Australia and chairs an FIP Working Group on Medication Literacy. He supports Leeds United soccer team and holds a season ticket with his teenage daughters.

BIO G09-2

BIOGRAPHY S.G. MOTT

G. Mott
Datapharm Communications United Kingdom

Steve is the Executive Director responsible for Datapharm Communications, a not-for-profit company that came out of the Association of the British Pharmaceutical Industry (ABPI) to support the dissemination of medicines information.

Steve Has a degree in Human Anatomy & Biology and has an IT background in Bioengineering, AI, Expert Systems and Online Information Systems.

Since 1998 Steve has been managing the development & introduction of the electronic Medicines Compendium (eMC) which is now one of the most used medicines information websites in the world. The eMC represents a major investment by the UK pharmaceutical industry to ensure that the seminal medicines information produced by manufacturers is delivered, accurately and reliably, into the public domain.

Currently Datapharm are involved in the Medicines Information Project in partnership with NHS Direct Online to produce a new body of work, Medicine Guides, that are designed to help patients have access to reliable information about medicines. Datapharm are also developing components of the Dictionary of Medicines + Devices with the Prescription Pricing Authority and NHS Information Authority.

Datapharm aims to improve the quality and access to medicines information for the medical professional and public alike using traditional and innovative technologies..

BIO G09-3

BIOGRAPHY J.J DE GIER

J.J. De Gier
University of Groningen Netherlands

J.J. de Gier (Han) PharmD, PhD, born 1951, received his Pharmacy B.S, M.Sc. and Ph.D. degrees (the latter in 1980) from the University of Utrecht. He started his private company to serve as scientific consultant in 1984. He has been appointed professor of Pharmaceutical Care at Groningen University in the Netherlands since 2003.

Prof. De Gier is President of the Section of Pharmacy Information (since 2000) and a member of the Board of Pharmaceutical Practice Programme Committee within the International Pharmaceutical Federation (FIP). He serves as President on the Executive Board of the International Council on Alcohol, Drugs and Traffic Safety (ICADTS). He is consultant specialized in issues concerning drugs and driving to the Dutch Ministry of Transport, Public Works and Water Management, the Directorate General for Transport of the Commission of the European Communities and the Pompidou Group of the Council of Europe.

BIO G09-4

BIOGRAPHY S.J. PARKER

J. Parker
Pfizer Australia Australia

Susan joined Pfizer Australia in October 2005 as Head of Medical Affairs, bringing with her broad experience from over 20 years in the pharmaceutical industry.

Susan graduated from the University of Sydney with a Bachelor of Pharmacy and began her career as a community pharmacist, working in Australia and the UK. She moved into the pharmaceutical industry in the UK after several years at the National Pharmaceutical Association, before returning to Australia during the 1980's.

She has gained experience in regulatory affairs, clinical research, medical information and drug safety during her time in the pharmaceutical industry.

At Pfizer Australia, Susan is Head of Medical Affairs, and is responsible for overseeing Medical Information, Drug Safety, product complaints, promotional review and the Information Center. Medical Affairs at Pfizer Australia currently has a team of 30 people.

She also has a Bachelor of Arts degree from the Open University (UK), which focused on modern history, with an emphasis on propaganda.

Susan has been involved in the development of Consumer Medicine Information in Australia since its initial introduction in 1992. For two terms (four years) she served as a Councillor on the New South Wales branch of the Pharmaceutical Society of Australia. Susan has contributed to the National Prescribing Service Communications Working Group since its inception in 1998 and has recently joined the NPS Medicines Line and Therapeutic Advice Information Service (TAIS) Steering Committee. She is an Adjunct Lecturer and joint Module Convenor for the Diploma in Drug Development, Pharmaceutical Information module run by the University of New South Wales. Susan is also a life member of the Association of Regulatory and Clinical Scientists (ARCS).

Abstracts - Web-Originated Consumer Medicines Information – Where Are We Now? (G 09)

ABS G09-1

SETTING THE SCENE – WHY WEB-BASED INFORMATION?

D.K. Raynor
University of Leeds United Kingdom

Medicines information, like most types of health information, is increasingly being accessed by patients from the World Wide Web. We should welcome this, as it further facilitates the idea that people should get more involved in decisions about their medicines. It has long been accepted that spoken information about medicines from pharmacists and other healthcare professionals can never be sufficient, because of time and memory constraints. However, currently used written materials have many disadvantages. They cannot be individualised, they quickly become out of date and are not accessible to people with special needs. The time is right therefore for developing web-based materials which can overcome some of these disadvantages. The new materials can be accessed by patients and healthcare professionals in various situations, and at various times when needed. The fact that the information can be customised according to patient need is another key benefit. Subsequent speakers will describe innovations in web-based medicines information in the UK, Netherlands and the US, along with information on the industry perspective.

ABS G09-2

INDIVIDUALISED CONSUMER MEDICINES INFORMATION IN THE NETHERLANDS

J.J. De Gier
University of Groningen Netherlands

This paper describes the development of individualised consumer medicines information (ICMI) in the Netherlands. In collaboration with one of the major suppliers of community pharmacy information systems (Pharmacom®) Health Base Foundation, an independent organization maintaining a drug data base to be used in Pharmacom-systems, has provided community pharmacists with new ways of informing patients about their medication. Next to the patient's name, address, age and gender, label instructions as given by the doctor, and practical information about warnings, new options allow patients to check their overall medicines use as known in their pharmacy and read more about the medicines combinations they are using. This information is printed specifically for an individual patient and not suitable for other users.

In a survey conducted in 2003 among 170 community pharmacists to identify reasons for using the different options for individualisation, it was concluded that a vast majority (80%) of pharmacists believed that patients would receive more relevant information, and would appreciate more personalised information. However, only 42% of pharmacists believed that it would help patients to make better choices about their medicines.

In a recent survey among patients, familiar with patient package inserts, reasons for preferring the new options as previously indicated by pharmacists were investigated. The impact of ICMI on communication with the pharmacist and the patient's preferences to obtain the information as web-originated ICMI, will be discussed.

ABS G09-3

WEB-BASED MEDICINES INFORMATION IN THE USA.

K. McEvoy
Amer Soc Health-System Pharm United States of America

An overview of the current state of direct patient access to USA medicines information will be provided. The nature of the information provided by private publishers and the federal government will be described. The principal model for providing this information in the USA has been from private publishers whose information is evaluated according to government standards for usefulness. Information generated by the USA government (e.g., FDA) currently is not subject to such usefulness standards. Recent initiatives of FDA (e.g., Medication Guides, Patient Information Sheets, Drug Watch & Daily Med initiatives) and the National Library of Medicine (e.g., MedLine Plus website, Daily Med initiative) will be discussed as well as the need for standards for evaluating the quality of web-based medicines information and for providing patients with advice on which sites can be trusted.

ABS G09-4

WEB BASED MEDICINES INFORMATION – THE INDUSTRY PERSPECTIVE.

J. Parker
Pfizer Australia Australia

Consumer Medicine Information (CMI) has been available in Australia since 1994. Industry is of the view that patients have the right to understandable information about the medicines they take. This presentation will review the current status of CMI in Australia and New Zealand, and consider the barriers that are still limiting the wider distribution of these documents. It will also review the availability of CMIs on the web and discuss the advantages and difficulties of providing patients with access to a complete library of CMI.

BIO G10-1

BIOGRAPHY Y.J. JUILLET

Y.J. Juillet
Leem France

Dr Juillet is a specialist in internal medicine, cardiology and pharmacology, and is at present Senior Advisor to the President of LEEM (the Association of Pharmaceutical Companies in France).

Prior to this appointment he was Director of Public Affairs of Aventis , Director of Pharmaceutical and Public Affairs of Hoechst Marion Roussel, Inspector General of Roussel Uclaf, Vice President for Licensing, Medical and Regulatory Affairs of the Jouveinal Group, Deputy Managing Director of SNIP (French Manufacturers Association) and Associate professor and Department Head at the Broussais Hospital, Paris.

During seven years Dr Juillet was a Member of the official Registration Committee (AMM), Transparency and Post Marketing Committees of the French Health Ministry, where he represented Industry. He was a member of the Board and the Executive Board of the Pharmaceutical Industry Association in France.

He is the Chairman of the IFPMA Regulatory Policy and Technical Standards Committee , the past Chair of the EFPIA Scientific Technical and Regulatory Policy Committee and member of the Board of Directors of DIA. He has been a Member of the ICH Steering Committee and Co-Chair of the ICH GCG.

BIO G10-2

BIOGRAPHY B.J. WANING

J. Waning
Boston University United States of America

Brenda Waning is an Assistant Professor of International Health at Boston University School of Public Health, where she teaches courses on International Pharmaceutical Policy and Antiretroviral Policy and Program Management in Resource Poor Settings. Originally trained as a pharmacist, she worked for over 15 years in clinical and academic pharmacy in the US. Her current work includes research and consulting on pharmaceutical policy in Africa, Asia, and Central Asia.

BIO G10-3

BIOGRAPHY J. KRAVZOV-JINICH

J.K.J. Kravzov-Jinich
UAM-XOCHIMILCO Mexico

Jaime Kravzov-Jinich is a professor at Universidad Autonoma Metropolitana campus Xochimilco where he investigates and teaches courses on pharmaceutical and health policies and rational use of drugs, for graduate and undergraduate students. He is a former president of the Mexican Pharmaceutical Association and at the present time, he is the president of the National Academy of Pharmaceutical Sciences.

ABS G10-1

INTERNATIONAL REGULATORY ISSUES FOR INNOVATIVE MEDICINES (G10)

Y.J. Juillet
Leem France

The aim of harmonisation of regulatory requirements for registration is to allow patients quicker access to new drugs , to avoid animal and human trials duplication but also guaranteeing at the same time public health and patient safety.

Harmonisation of regulation in the European Union (EU) is now completed, and has led to the submission of one dossier in one language , leading to European marketing authorizations, thanks in particular to specific guidelines published at the European level.

With the benefit of the European experience since 1989, more than 40 guidelines related to Quality , Safety and Efficacy have been harmonised amongst the EU, Japan and the USA through the International Conference on Harmonisation (ICH). ICH is a unique process gathering regulators and industry high level representatives and experts from the three regions. Its activity is built on expertise and trust.

The Common Technical Document (CTD), an agreed common format for application in the three regions, is a logical follow-up to the ICH first phase having started to deal with the content of the dossier. The CTD final implementation since July 2003 has had a considerable influence on the review process and on the exchange of information in the three regions.

In addition, ICH has now established through its Global Cooperation Group direct interaction with non-ICH regions developing some harmonisation activities (APEC, ASEAN, GCG, PANDRH, SADC) , allowing better understanding and use of ICH Guidelines, but also facilitating the contribution of the Regional Harmonisation Initiatives to the ICH process.

ABS G10-2

FIXED DOSE COMBINATION PRODUCTS FOR CHRONIC DISEASES, AIDS, TB AND MALARIA: BENEFITS AND REGULATORY CHALLENGES

J. Waning
Boston University United States of America

There has been much discussion on the role of fixed-dose combination (FDC) medicines for the treatment of several conditions, specifically: cardiovascular disease, hypertension, diabetes, HIV/AIDS, tuberculosis, and malaria. National and international organizations including WHO, UNAIDS, US DHHS, and others have made formal statements in support of FDC for these conditions. Many believe the use of FDCs can simplify treatment regimens, improve patient adherence, reduce treatment failures and resistance, and increase effectiveness of public health programs. Still, some practitioners and policy makers are reluctant to promote the use of FDC products. This presentation explores both the benefits and concerns around using FDC for several health conditions. The regulatory challenges associated with use of FDC will be discussed in detail. A global overview of past, current, and future use of FDC medicines in developing, transitional, and developed countries will also be presented.

ABS G10-3

HEALTH CARE REFORMS IN MEXICO AND ITS IMPACT ON THE REGULATORY ISSUES

J.K.J. Kravzov-Jinich
UAM-XOCHIMILCO Mexico

A health care system is complex and its components interact with one another. Policies affecting one segment will have an impact on the others. Therefore, health care reforms designed with the best of intentions have frequently had serious unintended consequences. Each country has developed its unique health system that reflexes its beliefs and values. Since its beginning (1943) the Mexican Health System has been related to the work force and has included drug endowing in the health services. Therefore, drugs access, its safety and quality, are closely linked to the health care system. During the last decades several health care reforms has been done and major impacts on regulatory issues has taken place. The last health care reforms included new generic drug regulation, a new drug approval system, pharmacovigilance and pharmacoeconomics requirements. A proposal of a pharmaceutical policy document, has been presented by the Mexican government in order to be discussed by all parties of the pharmaceutical sector.

BIO G11-0

BIOGRAPHY M. SCHAEFER

M. Schaefer
Charité Berlin Germany

Prof. Dr Marion Schaefer is an expert in pharmaco-epidemiology and social pharmacy issues in Germany. Since 1998 she has held the position of Professor of Pharmacoepidemiology and Social Pharmacy at Humboldt University in Berlin, Germany. In 2001 she initiated a postgraduate course Consumer Health Care at Humboldt University and is now working with the Medical Faculty, Charité Universitätsmedizin Berlin.

BIO G11-0

BIOGRAPHY A.I. WERTHEIMER

I. Wertheimer
Temple University United States of America

Albert Wertheimer is a professor at Temple University School of Pharmacy and Director of its Pharmaceutical Health Services Research Center, in Philadelphia, PA, USA. He has directed about 70 PhD dissertation students and about an equal number of Masters students. He is the author or co-author of 360 scientific or professional journal articles, 25 book chapters and the author or editor of 24 books.

He is a researcher in the areas of pharmacoeconomics, outcomes research and pharmaceutical public health policy. He is in his second term as president of the FIP Administrative Pharmacists Section.

BIO G11-1

BIOGRAPHY T.H. BJÖRK

H. Björk
Apoteket AB Sweden

Born 1955 November 24th

Education M.Sc.Pharm, 1981 at the Faculty of Pharmacy, Uppsala, Sweden
Dipl. Marketmanager, 1987 at IHM Business School, Stockholm, Sweden
Different management and communication educations

Employment
1981 – 1988, Läkemedelsindustriföreningen, The Association of Swedish Pharmaceutical Industry with drug information and was the first editor of Patient-Fass, a directory of medicines for the general public
1989 – 1995, Apotekarsocieteten, The Swedish Pharmaceutical Society, as Deputy Managing Director and Department Manager as well as Chief Editor and the responible editor of the publication Svensk Farmacevtisk Tidskrift, Swedish Pharmaceutical Magazine.
1995 - , Apoteket AB, Executive Director, Corporate Communications, a position in the Apoteket's top management. Has, among other things, the overall responsibility for external and internal communication, and responsible for matters concerning Apoteket's Nordic, Europeen and International envolvement.

Others

President of the Nordic Pharmacy Association.

Head of delegation and member of the Ececutive Committe of PGEU
Member of the board of Apoteket International AB.

BIO G11-2

BIOGRAPHY J.P. GREGOIRE

J-P. Gregoire
Laval University Faculty of Pharmacy Canada

Jean-Pierre Grégoire is a Professor of Pharmacy and Pharmacoepidemiology at Laval University in Quebec City, Canada. He is also the Director of the Laval University Population Health Research Unit. He holds a degree in Pharmacy from Laval University, a Master of Public Health (Epidemiology) from the University of Texas School of Public Health at Houston, and a Ph.D. in Public Health from the University of Montreal. He is a former President of the Quebec Order of Pharmacists and of the Canadian Council for the Accreditation of Pharmacy Programs. In the past, he was a Consultant for the World Health Organization Action Programme for Essential Drugs. His research activities are in the field of pharmacoepidemiology, the economic evaluation of health interventions, and pharmaceutical policies.

BIO G11-3

BIOGRAPHY R.W. BARKER

R.W. Barker
ABPI United Kingdom

Richard is Director General of the Association of the British Pharmaceutical Industry, which represents companies researching, developing and marketing medicines in the UK. In this capacity he is also a board member of EFPIA (the European industry association) and Council member of IFPMA (the International equivalent). His priorities include boosting the UK and Europe as a global leader in pharmaceutical innovation, strengthening the partnership between the industry and the health service, increasing patient access to new medicines in the UK and globally, and ensuring that the industry's external image reflects its major contribution to health and economic prosperity.

He is also active in the biotechnology sector, as board member of Adlyfe, developing early detection technology for diseases involving protein misfolding, and advisory board member for Noxilizer, commercializing a novel approach to biological sterilization. He is also a board member of International Health Partners, which supplies drug donations to the developing world, and of Datapharm, which provides electronic information on prescription medicines to UK doctors and patients. He is a member of the National Leadership Network of the UK NHS, and a stakeholder of the TB Alliance, bringing new medicines to patients in this global area of need.

Prior to joining the ABPI, Richard was Chairman and CEO of Molecular Staging, a US genomics and proteomics company and President of New Medicine Partners, a firm focused on consulting and entrepreneurship in pharmaceuticals, biotechnology, molecular diagnostics, and biodefence. His past operating roles include CEO of iKnowMed, a clinical decision support and pharmaceutical services business in oncology, Chief Executive of Chiron Diagnostics, a global diagnostics company, and General Manager of IBM's Worldwide Healthcare Solutions business. He also led McKinsey's European pharmaceuticals and healthcare practice.

His academic research was in biological magnetic resonance, at Oxford, Leeds and Munich.

ABS G11-1

THE ISSUE OF PRICING IN THE DRUG DISTRIBUTION PROCESS

H. Björk
Apoteket AB Sweden

Pricing medicines is an important question for all actors in the pharmaceutical market, i.e. the manufacturers, the wholesalers, the pharmacies, different funding bodies and of course the consumer.

There are many aspects to consider: financing research, funding of medicines from different bodies, co-payment from patients, availability of medicines etc.

In the lecture some of the most important questions from the society, the pharmacies and the consumer's point of view will be discussed.

ABS G11-2

BUILDING A REPOSITORY OF PHARMACEUTICAL POLICIES

J-P. Gregoire
Laval University Faculty of Pharmacy Canada

Access to medicines is of growing concern worldwide. The increasing cost of public drug programmes is putting those programmes under pressure. As a result, in many countries, pharmaceutical policies are being reviewed on an on-going basis. In public hearings or in the lay press are often heard or read suggestions about what is being done in other countries. It is however very difficult to assess the validity of this information as it may not be readily available. In addition, when the information is available, it may not be up to date.

An International Repository of Pharmaceutical Policies (IRPP) is currently being built. This initiative aims to summarize the main aspects of the existing information on pharmaceutical policies in selected countries. The IRPP is a global repository of pharmaceutical policies that will be updated on a regular basis.

The IRPP is an inventory that includes a description of the official pharmaceutical policies currently in force. The following elements are outlined: a) procedures for approval of medications, b) procedures for fixing/ regulating pricing, c) procedures (criteria) for access to and reimbursement of medications (including cost-containment procedures) via public programmes, and d) procedures targeting the optimal use of medications.

More details on this initiative will be presented including examples of the summaries currently available.

ABS G11-3

PHARMACEUTICAL PRICING IN A GLOBAL ENVIRONMENT

R.W. Barker
ABPI United Kingdom

While the world grows ever smaller, the list of pricing issues does not. With every country exerting its own mix of price controls, is there a set of sound pricing principles that balance the needs of short-term budget controls and longer term incentives to innovate? Can we afford the increasingly costly and sophisticated treatments in the pipeline for diseases such as cancer? Where does patient co-payment come in? What is the impact of the growing phenomenon of Health Technology Assessment? Is differential pricing the answer to the problems of the developing world?

These and other questions will be addressed, if not fully answered.

BIO G13

BIOGRAPHY G.H. SMITH

H. Smith
University of Maryland United States of America

Dr. Gary Smith is a native of California and received his Pharm.D. Degree from the University of California at San Francisco in 1966. Prior to that he completed his pre-pharmacy requirements at the University of California, Davis and San Francisco State University. Dr. Smith completed a residency in Hospital Pharmacy Practice at the U.S. Public Health Hospital in Seattle, Washington in June 1967. This was followed by serving as Deputy Director of Pharmacy at the U.S. Public Health Indian Hospital at Belcourt, North Dakota. He served as a staff pharmacist at the Mercy General Hospital in Sacramento, California from 1969-1970 (18 months) while also serving as a Clinical Instructor at the University of California School of Pharmacy in San Francisco. In 1970 he joined the faculty at the University of Washington, School of Pharmacy as the first PharmD faculty member. While at Washington he developed and directed the Drug Information Service. In 1982 Dr. Smith joined the faculty at the University of Arizona as an Associate Professor and Director of the Drug Information Center. He was at Arizona for 15 years. At Arizona he also served as manager of clinical pharmacy services at the University Medical Center. Dr. Smith was also a clinical pharmacist for infectious disease and precepted pharmacy students and residents during their infectious disease rotations at University Medical Center. Dr. Smith also served as an Assistant Department Head for Clinical Education at the College of Pharmacy. Dr. Smith Left Arizona, where he had attained the rank of Professor with tenure, in 1997 to assume the position of Professor and Chair of the Department of Pharmacy Practice and Science at the University of Maryland, Baltimore, Maryland. Since 2003 Dr. Smith has retuned to teaching and practice. He is currently providing pharmacotherapy consultation and medication management at the University of Maryland's HIV Clinic. Dr. Smith has had extensive involvement with the formulary process including medication use evaluation. He has a special interest in infectious disease and teaches the majority of the infectious disease topics in the professional doctoral curriculum at Maryland. Dr. Smith has over 100 publications in the professional literature and has made numerous presentations at local, state, national and international professional meetings. Dr. Smith has had extensive experience with academic pharmacy over a 36-year period. He has been a presenter a number of FIP Congresses over the past 16 years. He has also had a vast experience as a practitioner educator and academic administrator. Dr. Smith is currently the President of the American Pharmacists Association Academy of Pharmaceutical Research and Science (2006-2008)

BIO G13

BIOGRAPHY G.J. DUNCAN

G.J. Duncan
Monash University Australia

Greg Duncan is a Lecturer in Pharmacy Practice at Monash University with a background in hospital and community pharmacy in both Australia and the UK. Greg teaches a wide range of pharmacy and medical undergraduate subjects including Pharmaco-epidemiology, Evidence-Based Practice (EBP) and Public Health. He runs graduate and continuing professional development programs in evidence-based pharmacy practice and in health promotion in Australia. Greg is very involved with the development of EBP skills for health professionals through the PSA professional development program as well as being the co-instructor in a multi-disciplinary graduate unit in EBP flexibly delivered by Monash. Greg teaches on the Australian healthcare system at La Trobe University in their Masters program for health managers from China.

Greg has postgraduate qualifications in public health with particular interest in population health issues, health policy and international health. He is currently a candidate in the Monash Doctor of Public Health program looking at the community-based incidence and prevalence of chronic wounds in Victoria. As part of his Doctorate in Public Health, Greg has pursued studies at Harvard School of Public Health and works on behalf of the Western Pacific Pharmaceutical Federation and the WHO, developing and conducting conducted training workshops for community pharmacists.

Greg is a member of the editorial board of Primary Intention, a peer reviewer for the Australian Pharmacist and a reviewer for Martindale and the Australian Pharmaceutical Formulary. He sat on the Expert Reference Group for the Nurse Practitioner projects of Victoria and is involved at Ministerial committee level with wound policy in Victoria as well as being a member of the Australian Pressure Ulcer Advisory Panel. He also works as a Clinical Adviser to two wound clinics in Melbourne.

BIO G13

BIOGRAPHY C. ANDERSON

C .W. Anderson
University of Nottingham United Kingdom

Claire Anderson is Professor of Social Pharmacy and Director of the Centre for Pharmacy Health and Society at the School of Pharmacy, University of Nottingham, UK. She is President of the Academic Section of International Pharmaceutical Federation (FIP) and on the board of the College of Pharmacy Practice. Her major research interest is about the role of community pharmacists in improving the health of the public. Claire Anderson has published over 60 refereed papers and numerous conference abstracts. Perhaps the most important piece of research she has produced is the strategic research for Pharmacy HealthLink and the Royal Pharmaceutical Society of Great Britain, investigating the broader public health role of pharmacy. She has also been Nottingham's principal investigator in a high profile, collaborative research project that has the potential to radically restructure the role of community pharmacists. The Community Pharmacy Medicines Management Project, a Department of Health funded multi-centre, randomised controlled trial, has evaluated the role of pharmacists in advising patients and prescribers concerning appropriate treatment for coronary heart disease. Her team along with reserachers at The univeristy of Sheffiled are evaluating supplementary prescribing by nurses and pharmacists for the Department of Health, this is a major study which will inform both policy and practice in this area.

BIO G13

BIOGRAPHY M. AIRAKSINEN

M. Airaksinen
University of Helsinki Finland

Professor Airaksinen started her academic career in the University of Kuopio, Finland during 1985-1999, earning there doctorate (Ph.D.) and master's degree in social pharmacy. Before starting her current job as the first professor in social pharmacy in the University of Helsinki, Faculty of Pharmacy in 2004, she worked as a project manager in a 4-year national joint programme TIPPA to promote concordance-based communication practices in community pharmacies (2000-2003). The programme was operated by authorities, professional bodies, universities and continuing education centres. She has been active in the WHO/EuroPharm Forum's 'Questions About Medicines' project. In 1996-1997, she served as Scholar-in-Residence at the United States Pharmacopeia (USP), Rockville, MD, USA, being involved in patient information development programmes. Since 2000, she has been serving the FIP Pharmacy Information Section as a member of the Executive Committee. Since 2003, she has been chairing the Council of Europe Expert Group on Safe Medication Practices under the Committee of Expert on Pharmaceutical Questions.

ABS G13-1

INTRODUCTION TO PUBLIC HEALTH ISSUES AROUND THE WORLD AS THEY RELATE TO PHARMACY

G.J. Duncan
Monash University Australia

This presentation will briefly explore the relevant background and definitions in public health including a reminder of the nature and importance of the socio-environmental determinants of health. From this basis, major public health issues will be discussed including relevant international or national policies related to them. A particular focus will be on the roles of pharmacy in these issues drawing on concepts of essential drugs, issues in supply chain management, counterfeit medicines and medication error. Finally the role of pharmacists in disease prevention and health promotion will be considered, again with a focus on both policy and practical application. Public health is intrinsically multi-disciplinary, and this theme will underpin all aspects of this presentation.

ABS G13-2

THE STATUS OF PUBLIC HEALTH IN THE CURRENT PHARMACY SCHOOL CURRICULUM AND WHAT SHOULD BE INCLUDED

C .W. Anderson
University of Nottingham United Kingdom

The new pharmacy contract in the UK requires pharmacists to make a significant contribution to public heath. The English government paper Choosing Health Through Pharmacy1 states a number of key roles. However, there is much confusion about what public heath is and what should actually be taught to students. Pharmacists' current training at undergraduate level does not typically prepare them for a significant role in public health. Public health curricular content varies between schools of pharmacy. Choosing Health Through Pharmacy states that the undergraduate pharmacy curriculum should include an overview of the three domains of public health strategies for preventing disease and promoting health, the wider determinants of health and the health psychology elements of behaviour change. Novel ways in which we have incorporated the teaching public health at Nottingham will be discussed.

1.Department of Health (2005) Choosing Health Through Pharmacy: a programme for pharmaceutical public health 2005-2015, London.

ABS G13-3

INFORMATION RESOURCES AVAILABLE TO SUPPORT PUBLIC HEALTH INITIATIVES

M. Airaksinen
University of Helsinki Finland

The aim of this presentation is to identify the information resources that will assist the faculty members and students in teaching and learning about Public Health. Examples of useful electronic and print resources available to support the educational and practice needs in public health promotion, improvement, wellness promotion and disease prevention will be listed. Also the importance of differentiation between the various information resources by quality and validity will be discussed. As quality web-based documentation is easily available, it should have a priority. Students should be taught how they can find the reliable documentation on the Internet and how they can apply the information in decision making and developing own profession and practice.

The list of recommended readings should include key health policy documents internationally, nationally and locally; scientific evidence on major public health concerns and related risk factors in developing and developed countries, as well as the main initiatives to solve them. Furthermore, basic documents describing international and national initiatives to involve pharmacists in public health goals (e.g., WHO EuroPharm Forum's projects and their national implementation) and the role of medicines in treating and preventing illnesses are needed. Finally, the students should be introduced to the documentation that will help them to follow political decision making process concerning public health matters – and even influence it.

ABS G13-4

CASE STUDY: ROLE OF PHARMACISTS FROM A PUBLIC HEALTH PERSPECITIVE IN THE MANAGEMENT OF HIV/AIDS AND OTHER STDS

H. Smith
University of Maryland United States of America

Over 40 million people are currently living with HIV/AIDS throughout the world with over 3 million people dying from the disease each year. Patients with HIV/AIDS are often co-infected with other sexually transmitted disease espeically Gonhorrea and Syphilis. The morbidity and mortality of these diseases make them a major public health issue. Pharmaicsts throughout the world need to understand the importance of health promotion and prevention in reducing the incidence of these diseases. Pharmacists also need to know how to manage people with these diseases inlcuding couseling and drug therapy monitoring for efficacy and toxicity.

Pharmacists should be a part of any health care team involved with health promotion, prevention and management of HIV/AIDS and other STDs. Pharmacists may be the first point of contact with some of these patients and thus are in a good postion to serve as the triage point person. A case study will be discussed illustrating the active role of pharmacists in the promotion of safe sexual practices, couseling patients with these diseases and prevention education. An example of how pharmacists play an active role in the management of patients wiht these diseases will also be discussed.

Biographies - Counselling, Concordance and Communication – Innovative Education for Pharmacists (G 15)

BIO G15-0

BIOGRAPHY K. HAKKARAINEN

K.M.E. Hakkarainen
IPSF Netherlands

Ms Katja Hakkarainen was the President of the International Pharmaceutical Students' Federation in 2005-06. She started in the IPSF Executive as the IPSF Chairperson of Student Exchange in 2003-04. During her terms in the IPSF Executive, Ms Hakkarainen served IPSF as the Permanent Officer in The Hague, The Netherlands, in 2003-04 and in 2005-06. In 2004-05 she was the Co-ordinator of the IPSF-FIP booklet 'Counselling, Concordance and Communication – Innovative Education for Pharmacists' that was launched at the FIP Congress in Cairo, Egypt, in 2005. Between 2004 and 2006 Ms Hakkarainen has been in the organising committee of two IPSF Patient Counselling Events in Finland and the Patient Counselling Events of the 51st and 52nd IPSF Congresses in Bonn, Germany and Cairns, Australia. In 2006 she has co-ordinated the translation processes of the booklet into Portuguese, Chinese and Japanese. As the IPSF President she has been actively involved in several educational activities of IPSF, including the Moving On II research on students' learning experiences, Moving On III research on students' migratory intentions and several public health projects on diabetes, HIV/AIDS, tobacco and tuberculosis. Ms Hakkarainen has attended IPSF events and meetings in 20 countries, represented IPSF at the World Health Organization (WHO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) and taken part in three FIP Congresses. Ms Hakkarainen will start her 5th year in pharmacy at the University of Helsinki, Finland, in September 2006, specialising in social pharmacy. She has worked in a community pharmacy since 2000 and practiced pharmacy as a bachelor of pharmacy since 2004.

BIO G15-0

BIOGRAPHY Y.K. KORAIEM

Y.K. Koraiem
International Pharamceutical Students' F Egypt

Yasmine Koraiem is a member of the executive board of the International Pharmaceutical Students' Federation (IPSF). She is studying in her fourth year at University of Alexandria, Egypt. She has served the Alexandria Scientific Pharmaceutical Students' Association (ASPSA) as the officer of Education and Information in 2004-2005. She was elected as the IPSF Chairperson of Professional Development in Bonn, Germany in 2005. As the Chairperson of Professional Development ,Ms Koraim has not only coordinated IPSF member organisations' Patient Counselling Events worldwide,but also organised IPSF Patient Counselling event in IPSF world congress in July in Cairns,Australia. During the first years of her career in pharmacy, she has taken part in numerous international pharmaceutical congresses both in IPSF and FIP.

BIO G15-1

BIOGRAPHY T.WULIJI

T. Wuliji
International Pharmaceutical Federation Netherlands

Tana Wuliji is a Project Coordinator at the International Pharmaceutical Federation (FIP). Tana co-edited the joint FIP/IPSF booklet: Counselling, Concordance and Communication - Innovative Education for Pharmacists. Since the development of the booklet, she has been working together with the Pharmacy Information Section of FIP and IPSF to develop a workshop on the subject at the International Social Pharmacy Workshop held in July 2006. Tana graduated from the Pharmacy School of the University of Otago, New Zealand in 2002 with a Bachelor of Pharmacy and is currently undertaking PhD studies at the Pharmacy School in the University of London. In 2004 Tana was elected the President of the International Pharmaceutical Students' Federation.

BIO G15-2

BIOGRAPHY C.C.F. VIDOTTI

C.C.F. Vidotti
Federal Council of Pharmacy Brazil

Pharmacist, Master in Pharmacology and doing Ph.D. in Health Sciences.

Technical Manager of the Brazilian Drug Information Center (CEBRIM), within the Federal Council of Pharmacy(CFF). I have expertise in drug information, Medicines Information Center management, edition of drug bulletins, team work, drug nomenclature, selection of drugs, pharmacovigilance, pharmacoepidemiology and public health. I have helped training of many pharmacists to set up Medicines Information Centers in Brazil and in Latin America. Currently, I am member of the three Brazilian government committees of drug nomenclature, drug selection and pharmacovigilance in community pharmacies.

BIO G15-4

BIOGRAPHY M. AIRAKSINEN

M. Airaksinen
University of Helsinki Finland

Professor Airaksinen started her academic career in the University of Kuopio, Finland during 1985-1999, earning there doctorate (Ph.D.) and master's degree in social pharmacy. Before starting her current job as the first professor in social pharmacy in the University of Helsinki, Faculty of Pharmacy in 2004, she worked as a project manager in a 4-year national joint programme TIPPA to promote concordance-based communication practices in community pharmacies (2000-2003). The programme was operated by authorities, professional bodies, universities and continuing education centres. She has been active in the WHO/EuroPharm Forum's 'Questions About Medicines' project. In 1996-1997, she served as Scholar-in-Residence at the United States Pharmacopeia (USP), Rockville, MD, USA, being involved in patient information development programmes. Since 2000, she has been serving the FIP Pharmacy Information Section as a member of the Executive Committee. Since 2003, she has been chairing the Council of Europe Expert Group on Safe Medication Practices under the Committee of Expert on Pharmaceutical Questions.

BIO G15-5

BIOGRAPHY S. BELL

J.S. Bell
The University of Sydney Australia

Simon Bell completed his pharmacy degree at the University of Sydney in 2000, and registered as a pharmacist in Australia in 2001. His PhD study involved the development and evaluation of new models of multidisciplinary collaboration in mental health care.

Simon is an Executive Councillor of the Pharmaceutical Society of Australia (NSW Branch), Chairperson of the Pharmaceutical Society of Australia (NSW Branch) Futures Taskforce and a past Chairperson of the NSW Young Pharmacists. Simon has acted as an advisor on pharmacy practice for the World Health Organization, Australian Consumers Association and several pharmaceutical companies.

In 2003, Simon was elected President of the International Pharmaceutical Students' Federation (IPSF). During his term as President Simon worked from the IPSF and International Pharmaceutical Federation (FIP) secretariat in The Hague, The Netherlands.

Simon has spoken about pharmacy practice and pharmacy education at conferences and universities in more than 30 countries worldwide, and been a chief investigator or co-investigator on five successful grant applications. Simon was Young Australian Pharmacist of the Year in 2004.

Abstracts - Counselling, Concordance and Communication – Innovative Education for Pharmacists (G 15)

ABS G15-1

IPSF PATIENT COUNSELLING EVENT - INITIATIVES AROUND THE WORLD

K.M.E. Hakkarainen
IPSF Netherlands

The International Pharmaceutical Students' Federation (IPSF) is committed to promoting excellence in pharmacy education. To help provide graduates with the skills necessary to implement professional pharmaceutical services, IPSF has organised patient counselling events since 1989. IPSF also encourages its constituent member associations to implement similar events at a local and a national level.

Patient counselling events provide students with an interactive learning experience. Students act out a hypothetical scenario involving the provision of medication counselling to a patient.

Patient counselling events can be used to teach students about concordance, patient-centeredness and involving patients as equals in negotiation about their own medication therapy. Emphasis is placed on students recognising the patient as a specialist in his or her own disease. Students get an opportunity to develop their counselling skills and implement theory into practice.

A resource booklet entitled 'Counselling, Concordance and Communication - Innovative Education for Pharmacists' was developed by IPSF and the FIP Pharmacy Information Section and launched in 2005. The booklet was targeted to students, pharmacists, universities and professional associations to assist in the development of education about medication counselling and communication skills. The booklet is being translated into Chinese, Japanese and Portuguese.

In 2005-06 patient counselling events were organised by IPSF member associations in Australia, Canada, Croatia, Czech Republic, Egypt, Finland, Germany, Great Britain, India, Hungry, The Netherlands, Romania, Singapore and Taiwan, China. Many of these events were organised in collaboration with universities and professional organisations.

ABS G15-2

BREAKING CULTURAL BARRIERS – PATIENT COUNSELLING IN PORTUGUESE

C.C.F. Vidotti
Federal Council of Pharmacy Brazil

Pharmacists are adopting new roles in the provision of pharmaceutical care but these changing face some barriers to be implemented. One barrier is that Brazilians seen pharmacies as trade and the law reflects this situation, given the permission to lay people to open a pharmacy. Pharmacists are required as an employee responsible for technical issues, but pharmacist, in general, do not have technical condition to set up a pharmaceutical care program. Others types of cultural barriers that affects patient counseling will be shown like patients perception about pharmaceutical care services; owners of pharmacies reluctance to set up these services; clerks suspect. Some experiences that are ongoing show that patient counseling has been improving perception about quality of health care, which is rewarding for patients and for pharmacists.

ABS G15-3

PATIENT COUNSELLING AS A SOCIAL SCRIPT

I.I. Puumalainen
Finnish Pharmacists' Association Finland

Even though patient counselling has long been considered a main duty for community pharmacists, studies have indicated a room for improvement in counselling performance. One way to understand the nature of patient-pharmacist relationship is to study the scripts of patient counselling.

Scripts are behaviour patterns that we follow in our daily activities. Therefore, it is usuful to reflect one's counselling performance in order to develop these scripts. This can be done by self-evaluation or conducting peer evaluation. Also, videotaped counselling sessions provide an excellent tool to assess scripts and communication models.

Studies have shown that pharmacists do not properly assess the individual needs of the patient. This may indicate that pharmacists have fixed scripts that they follow despite the patient's needs. Sometimes the scripts reflect that the role of the pharmacist reminds the role of a 'sales representative': pharmacist tells the patient different options that are available but do not provide expert information about them. Pharmacists may also repeat the same information e.g., about antibiotics to all the patients receiving them.

Scripts provide a useful tool to asess counselling performace. They can also be used in basic and continuing education.

ABS G15-4

INNOVATIVE EDUCATION: DRAMA TECHNIQUES

M. Airaksinen
University of Helsinki Finland

When you think of drama, you may remember the last play you went to see in town, which made you laugh or cry. Or maybe you think about your own performance at school as an angel in the X-mas play. But have you ever thought about drama as a skill useful to enhance your professional performance? Good communication skills are essential for improving pharmaceutical care. Drama provides an opportunity to make it happen. This session offers ideas on how drama may improve communication skills and how this can be taught. It turns out from the literature that there is some expertise in using drama techniques in different settings, e.g., in public health care programs. Drama is also used in monitoring quality of health care by trained actors as pseudo patients/customers. There is also some experience in training communication skills to health professionals by using different drama techniques. It is quite often done by practising with role-plays. It may also be called simulation or behaviour rehearsal, communication rehearsal or socio drama according to approach chosen. This session will focus on role-plays applicable to basic academic education and continuing education. Several improvisation games have been developed over the years. A good list in English is available on www.learnimprov.com. The games can be used to train different aspects of communication. Interaction with the audience e.g., by asking for ingredients for the scene, makes the setting tailored to that particular audience and makes discussion more lively. A prerequisite for successful use of these techniques is that the moderator of the session has good improvisation skills.

Reference:

Schaafsma E, Airaksinen M. How to develop communication skills using drama techniques. In: Counselling, Concordance and Communication - Innovative Education for Pharmacists. Eds. Wuliji T, Airaksinen M. p. 17-20. FIP-IPSF 2005 (www.fip.org or www.ipsf.org).

ABS G15-5

OVERCOMING STIGMA IN MENTAL HEALTH CARE – INTERNATIONAL CASE STUDIES

J.S. Bell
The University of Sydney Australia

Pharmaceutical services provided by pharmacists are well suited to optimising the use of medications for mental illness. However, pharmacists' provision of information about medications may be limited by poor communication with and sub-optimal attitudes towards people with mental illnesses. Understanding consumers' experiences of their illness is an important aspect of facilitating a concordant approach to medication counselling. Health care providers may also inadvertently contribute to the stigma experienced by people with mental illnesses. The fear of stigmatisation may be linked to consumers' reluctance to seek help when symptoms first appear. This presentation will compare and contrast the attitudes of pharmacy students in different countries toward people with mental illnesses. Evidence for various educational strategies to improve pharmacists' attitudes and willingness to provide medication counselling will be discussed.

ABS G15-6

COUNSELLING, CONCORDANCE AND COMMUNICATION: INTRODUCTION

T. Wuliji
International Pharmaceutical Federation Netherlands

The concept of a concordance was published over ten years ago although it has yet to be implemented in practice. Concordance describes an approach to patient care where the patient is an active partner in the management and decision making relating to their health. Healthcare providers, including pharmacists are faced with numerous challenges in adopting new communication techniques and practices to enable a concordant approach. This presentation aims to give an overview and background to the concept of concordance and describe the implications for changes in practice and communication.

BIO G17-0

BIOGRAPHY A.L. GRAY

A.L. Gray
Nelson R Mandela School of Medicine South Africa

Andy Gray B Pharm, MSc (Pharm), FPS is a Senior Lecturer in the Department of Therapeutics and Medicines Management, Nelson R Mandela School of Medicine, University of KwaZulu-Natal, Durban, South Africa. He is also the study pharmacist for the Centre for the AIDS Programme of Research in South Africa (CAPRISA). Mr Gray is a Fellow of the Pharmaceutical Society of South Africa, a past president of the South African Association of Hospital and Institutional Pharmacists and is currently Vice-President (Africa) of the Hospital Pharmacy Section of the International Pharmacy Federation (FIP). His research interests include the development of quality management tools for pharmaceutical services at district level, the implementation of District Health Systems, policy analysis (particularly the processes of development and implementation of Drug Policies), rational medicines use (particularly in the elderly and in relation to antimicrobial use) and the application of Highly Active Antiretroviral Therapy (HAART) in resource-constrained settings.

BIO G17-0

BIOGRAPHY W.Y. DAHDAL

W.Y.D. Dahdal
Midwestern University United States of America

Wafa Y. Dahdal, Pharm.D., B.C.P.S.

Dahdal is an Associate Professor of Pharmacy Practice at Midwestern University Chicago College of Pharmacy and a Pharmacotherapy Specialist in Cardiology at Michael Reese Hospital and Medical Center in Illinois, U.S.A. She received her Doctor of Pharmacy degree from the University of Illinois College of Pharmacy in 1993. She then completed a Pharmacy Practice Residency at Saint Louis University Hospital in collaboration with the St. Louis College of Pharmacy where she was appointed Assistant Professor of Pharmacy Practice in 1994. Dahdal served as president of the Gateway College of Clinical Pharmacy, a Chapter of the American College of Clinical Pharmacy in the U.S. in 1999 and is currently serving as secretary of the National Arab America Medical Association Illinois Chapter as well as a board member of the Academic Section of FIP.

BIO G17-1

BIOGRAPHY J.L. MARRIOTT

J.L. Marriott
Monash University Australia

Dr Jennifer Marriott

Jennifer graduated with a Bachelor of Pharmacy degree from the Victorian College of Pharmacy, Australia in 1971.

She worked for 5 years as manager of a community pharmacy then as locum pharmacist in both hospital and community settings for several years before commencing as a senior clinical pharmacist at a tertiary care hospital where she remained for 15 years. During this time Jennifer was responsible for Clinical Ward pharmacy, Drug Use Evaluation and Clinical education.

Jennifer was awarded her Doctor of Philosophy at Monash University, Faculty of Medicine in 2000.

In 1999 she was appointed to the position of Lecturer (now Senior Lecturer) in Clinical Pharmacy, Department of Pharmacy Practice, Victorian College of Pharmacy, Monash University, where she developed the Course in Clinical Pharmacy. Her teaching responsibilities include unit co-ordination and teaching Clinical Pharmacy to third and fourth year undergraduate students.

Her research interests include: New Professional roles for pharmacists, Preceptor Education, Community Liaison Pharmacy, Electronic Decision support, Palliative Care, and the effect of cultural and linguistic difficulties on medication use.

Jennifer is currently President–Elect of the Academic section of the International Pharmaceutical Federation (FIP).

BIO G17-2

BIOGRAPHY M.F. IVEY

F. Ivey
Health Alliance United States of America

Marianne F. Ivey, PharmD., M.P.H., FASHP

Biographical Sketch

Marianne F. Ivey is Corporate Director, Pharmacy Services for the Health Alliance of Greater Cincinnati, an integrated health care system, and Vice Chairman and Associate Professor in the Division of Pharmacy Practice, University of Cincinnati.

Her B.S. is from the University of Wisconsin; her PharmD. and M.P.H. are from the University of Washington.

Her practice, research and faculty responsibilities are in patient care delivery, automation, clinical outcomes, pharmacy resident training and pharmacy resource management in an integrated health system. She directs the pharmacy portion of information integration and is in the design/testing phase of a computerized physician order entry program and design phase of bar code facilitated medication administration. Marianne works with Primary Care physicians and Alliance Partners to provide a managed care prescription benefit and a Mail Order prescription service for Alliance associates. She chaired The University Hospital total quality improvement steering committee and is on the Health Alliance Six Sigma Steering Committee.

Ivey is ASHP Treasurer and served ASHP as President, Chairman of the HOD, member of the Commission on Goals and the Commission on Credentialing. She received the 1993 ASHP Whitney Lecture Award and the 2005 Ohio Society of Health System Pharmacists Walter Frazier Leadership Award.

BIO G17-3

BIOGRAPHY J. SURUGUE

J.S. Surugue
CHS de la Sarthe France

Jacqueline Surugue, Praticien Hospitalier, Chief of Pharmacy Department

Centre Hospitalier Spécialisé de la Sarthe

Route de Spay, BP 4

72700 Allonnes, France

Jacqueline Surugue is the President of the European Association of Hospital Pharmacists.

She graduated in 1974 from the University of Tours, on the Loire Valley, then specialized in Pharmacology, Toxicology and Management in Paris University. She was first nominated as Hospital Pharmacist in 1976, and became Chief of Department in 1979. Along her career she has always been passionate with international contacts. She got involved in EAHP in 1982 as a member of the French delegation at the General Assembly and was Honorary Secretary of the association when she was elected President in June 2002 . She has been re elected for a second mandate in June last year.

She is at present Chief of the Pharmacy Department in Centre Hospitalier Spécialisé de la Sarthe, in Allonnes, near Le Mans, France. She is also lecturer in Pharmacy at the University of Angers and an elected member of the national Council of the French National Order for Pharmacists.

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BIO G17-4

BIOGRAPHY R.A. BUCKLE NORDOR

R.A. Buckle Nordor
KorleBu Teaching Hospital(MOH) Ghana

Date of Birth : 11 January 1948
Present Position : Director of Pharmacy(MOH)
Education : FPCP(Clinical Pharmacy)
MSc Pharmaceutical Services and Medicines Control
MPA (Master of Public Administration)
BPharm/MPSGh
Presentations:
1. Drug Needs and Utilization in the West African Sub region - 5th Scientific Seminar of WAPF(Freetown,Sierra Leone -1988,February)
2. Poster Presentation --Gender - Related Health Issues , International Perpective(FIP-Sweden)
3. Review of National Drug Policy for Ghana (Ten year period)-MSc Dissertation,Bradford University,UK-1999
4. Trends and Challenges and Drug Use Therapy in Ghana (3rd International Conference on Pharmaceutical and Pharmacological Sciences,September 2002)
5.Capacity Building in the Pharmaceutical Sector,Problems ,Prospects,Its Effects on Health Service Delivery (A Case Study of MOH-Ghana)-MPA Thesis at Ghana Institute of Management and Public Administration,2004

Positions Held to Date:

Board Member - Korlebu Teaching Hospital

Council Member - Ghana Catholic Health Service

Member of Editorial Consultants of National Pharmaceutical Journal

Editorial Consultant on ' Health Forum Reporter'

Member of Pharmacy Professional Examination Board

ABS G17-1

PREPARING UNDERGRADUATES FOR HOSPITAL PRACTICE

J.L. Marriott
Monash University Australia

Activities that a hospital pharmacist is expected to undertake when providing a clinical service include: Interpretation of patient specific information; Identification of clinical problems; Establishment of therapeutic goals; Evaluation of therapeutic options; Individualisation of therapy; Monitoring of outcomes. The Society of Hospital Pharmacists of Australia has developed Clinical Pharmacy Practice standards based on these activities. These activities are used as a basis for this presentation to illustrate how the undergraduate Bachelor of Pharmacy degree can prepare students for hospital practice by addressing these Standards of Practice. This syllabus is complementary to the roles identified by WHO for a 'seven star pharmacist'; care-giver, decision maker, communicator, leader, manager, life-long learner, teacher.

The two years of Clinical Pharmacy (Therapeutics) units undertaken by Bachelor of Pharmacy students cover general principles of clinical management and a wide range of disease state management topics commonly encountered in practice. For each disease, students are taught the epidemiology, pathophysiology, the goal of therapy, treatment and monitoring options and potential complications and consequences of the disease. Case studies are used to illustrate application of the information provided to an individual patient and form part of the assessment.

ABS G17-2

HOSPITAL PHARMACY SPECIALISATION IN EUROPE

J.S. Surugue
CHS de la Sarthe France

Although there is variation in hospital pharmacy practice over Europe, there are important common aspects in the knowledge and skills required for the safe use of drugs in a high-risk and high-cost environment of a hospital. Many of the indispensable competencies are not part of the basic undergraduate training in pharmacy or only at a superficial level: more advanced knowledge on pharmaceuticals, pharmacotherapy and practical skills is required.

To acquire these competencies, countries with a strong tradition in hospital pharmacy in the EU have a 3 – 4 years additional post-graduate training that leads to a specialisation with a protected title of Hospital Pharmacist. But up to now, not all the EU countries have implemented such a specialisation. More over, there is no harmonization on the EU level between the existing specialisations in hospital pharmacy.

A new EU regulation was issued on September 7th 2005, published in the Official Journal of September 30th 2005: the Directive of the EU Parliament and of the Council for mutual recognition of professional qualifications. While consolidating fifteen existing directives that were specific to some professions (pharmacy is one of them), this text aims to simplify the existing rules regarding the recognition of professional qualifications and therefore contribute to the flexibility of labour markets.

The possibilities of how this Directive allows to go forward will be explained and the steps presented for the challenge of the recognition of the specialisation in hospital pharmacy, the only way to create safe conditions for the use of pharmaceuticals in the modern hospital environment of tomorrow.

ABS G17-3

TRAINING HOSPITAL PHARMACISTS FOR THE FUTURE MEETING NEEDS WITH IN-HOUSE TRAINING – A DEVELOPING COUNTRY'S PERSPECTIVE

R.A. Buckle Nordor
KorleBu Teaching Hospital(MOH) Ghana

In Ghana, the University of Science and Technology is the only institution that runs a four year science based programme leading to the award of a bachelor of Pharmacy degree (BPharm).
The four year bachelor of pharmacy degree does not adequately prepare the graduates to practise as pharmacists shortly after graduation. This is because of the limited scope within the undergraduate studies for actual experience of practice.
It is also a known fact that for many years the national professional association which was considered as a fraternal body did not have the legal mandate to make inputs into the orientation of pharmacy training at the University.
However in countries like the United Kingdom, United States of America and other developed countries, the national pharmaceutical associations and the major users of the pharmacist's skills have the legal mandate to make inputs into the orientation of pharmacists' training at the university.
The first BPharm curriculum review was undertaken to restructure the course in response to the needs of the society. To this end some clinical disciplines had to be incorporated into the curriculum as well as other disciplines that would enhance the practice of pharmacy in the future.
The Pharmacy council together with the university recognizing the inadequacy of the science degree designed a twelve month course of study to be provided in-house at the various health institutions and other areas of pharmacy practice to address some of the gaps in their training.
This programme is currently the compulsory internship training which is a pre-requisite for licensure to practise as a pharmacist in Ghana.
At the end of the internship training programme an assessment through written and oral examination is undertaken and professional qualifying examination certificates are awarded to candidates who satisfy the requirements.
The aim of compulsory internship training is to expose the graduates to real life situations of the practice, assist them through predetermined course of instructions to enable them improve their learning skills, to facilitate acquisition of new knowledge, to improve their performance and ultimately build capacity for the required competencies they need.
During the internship training courses of instructions are designed to prepare the interns to attain some level of proficiency that enables them to find a fit within the complex matrix of healthcare delivery in which they find themselves.
When new pharmacists are recruited by the health institutions, some in-house training courses are designed based on a needs assessment within each component of the clinical areas where the pharmacists work. This enables the hospital management to plan for training programmes which are often linked to the mission and vision of the institution to achieve its objectives.
Currently areas of training within the hospital practice setting which are often emphasized in larger hospitals include Patient Centred Clinical Services ; Medicine Information Management; Medicine Safety and Adverse Events Monitoring ; Information Communication and Technology for Pharmacy Practice; Intra and Inter Professional Communication ; Documentation of Medication Errors ; Counseling skills for non-communicable diseases and emerging diseases. The in-house training sometimes follow the traditional methods such as coaching and modeling, job rotation, assistant to positions and committee assignments.
Some off-job development programmes include classroom courses, specialized programmes, case studies and simulation.
The driving force behind all these is that medicines use cut across all aspects of healthcare delivery and to this end appropriate skill must be developed to match jobs that directly impact on outcomes of therapy.
In a developing setup good medicines management has implications for judicious use of limited financial and other support resource allocation by governments.

BIO G18-0

BIOGRAPHY L.J. ANDERSON

L. Anderson
United States of America

Lowell was graduated from the University of Minnesota, College of Pharmacy in 1962. He went on to practice in both chains and hospitals. He owned and practiced in community pharmacy for forty years before leaving practice in 2006.

Lowell has participated vigorously in both his community and his profession. He has served as a director on hospital, insurance company, and health maintenance organization boards. In addition, he has served or chaired community health groups, and legislative committees of inquiry.

In the profession he has served as President of the Minnesota Pharmacists Association, MN Board of Pharmacy, MN Alumni Association and the American Pharmaceutical Association (AphA). And, two terms as Treasurer of APhA. He has also served on the American Council of Pharmaceutical Education, committees for the National Association of Boards of Pharmacy and on the Executive Committee of the Community Practice Section of the International Pharmacy Federation (FIP). Currently, he serves as convenor of the Working Group on Public Policy for FIP and Editor of the International Journal of Pharmacy (IJP).

He received a Doctor of Sciences (honoris causa) from the Philadelphia College of Pharmacy and Science in 1995 and the Remington Honor Medal from the profession of Pharmacy in 2004.

BIO G18-1

BIOGRAPHY C. BOND

C. Bond
University of Aberdeen United Kingdom

Professor Christine Bond (BPharm, FRPharmS, PhD, MEd, HonMFPHM, ACPP) is Professor of Primary Care (Pharmacy), University of Aberdeen. She is also part time Consultant in Pharmaceutical Public Health (NHS Grampian), and current Chair of the Scottish Specialists in Pharmaceutical Public Health. She has a large portfolio of pharmacy practice research in the contribution of pharmacy to effective use of medicines (prescribed and 'OTC'), drug misuse, the community pharmacist-general practitioner interface and the wider health care agenda. She is Editor of the International Journal of Pharmacy Practice, an elected member of the Scottish Executive of the Royal Pharmaceutical Society of Great Britain, a member of the Scottish National Pharmaceutical Forum and serves on several national Research Panels eg the Health Service Research Committee of the Scottish Office, the RPSGB Pharmacy Practice Research Award Panel

BIO G18-2

BIOGRAPHY F.CHEN

F. Chen
The University of Sydney Australia

Dr Timothy F Chen

B Pharm, DipHPharm, PhD, MPS

Dr Tim Chen is a Senior Lecturer in Pharmacy Practice at The University of Sydney, Faculty of Pharmacy. He is an experienced researcher and educator. His doctoral research involved the first major Australian study evaluating the role of the pharmacist in conducting Home Medicines Review (HMR) and interprofessional collaboration with medical practitioners. This research and his subsequent studies in HMR have helped inform a national model for practice which has been taken up by the Australian Commonwealth Government. In recognition for his contribution to the advancement of Pharmacy Practice, he was awarded the Young Australian Pharmacist of the Year Excellence Medal, (2001). Dr Chen currently serves on a number of peak national pharmacy advisory boards. He is the principal author for two process-based case studies books for pharmacists and pharmacy students, in Medication Review (2002) and Pharmacist Only and Pharmacy Medicines (2003). He leads an active research team which includes PhDs, Masters and Honours candidates.

BIO G18-3

BIOGRAPHY D.K. RAYNOR

D.K. Raynor
University of Leeds United Kingdom

After 20 years as a hospital pharmacist, Theo joined the University of Leeds as Professor of Pharmacy Practice in 2000. His research focuses on consumer medicines information and expressing risk of side effects to medicine users. Recent publications have appeared in the BMJ and Lancet. He is executive chairman of a University spin-out LUTO Research Ltd www.luto.co.uk which provides consumer information testing services to the pharma industry. His team was commissioned to undertake a systematic review of written medicines information by the UK Department of Health, which will be published in 2006. Theo leads an international comparison of consumer medicines information in Europe, the US and Australia and chairs an FIP Working Group on Medication Literacy. He supports Leeds United soccer team and holds a season ticket with his teenage daughters.

BIO G18-4

BIOGRAPHY E.M. LUTZ

M. Lutz
Pharmcy Services, Inc. United States of America

BIOGRAPHICAL SKETCH: Eugene M. Lutz, R.Ph., FAPhA, FACA

Eugene M. Lutz is co-owner and President of Lutz Pharmacy in Altoona, Iowa. He is past president of the Iowa Pharmacy Association and the American Pharmacists Association-Academy of Pharmacy Practice and Management.(APhA-APPM). He is a Fellow of APhA and of the American College of Apothecaries(ACA). Lutz served two terms on the APhA Board of Trustees and as4/28/2006 President of APhA (2004-2006). He has served on numerous local, state and national committees and as a member of the APhA House of Delegates since 1980. He is a graduate of the APhA Community Pharmacy Management Program. His pharmacy was one of 12 pilots in the development of the Iowa Center for Pharmaceutical Care training which is used nationally as a model for pharmaceutical care 're-engineering'. Lutz participated in Project IMPACT and several other projects designed to demonstrate the pharmacist's role in medication management. His practice includes long term care, compounding, lipid, asthma and diabetes management and immunizations

ABS G18-1

INNOVATIONS THAT CHANGED PHARMACY PRACTICE

C. Bond
University of Aberdeen United Kingdom

Community pharmacy roles in the UK have undergone significant change in the past ten years. Whilst initially innovations were delivered by a minority of practitioners the new NHS Community Pharmacy Contract has embedded the changed role across the whole profession.

Traditionally community pharmacy provided advice on ailments and supplied appropriate remedies, as well as dispensing medicines for medical practitioners. When health care in the UK became free in 1948 the role of the community pharmacist concentrated increasingly on dispensing. Today the new contract has reversed that trend and we have moved the role of the community pharmacist back from a technical dispenser to a clinical professional.

The presentation will look at three policy changes that have contributed to this quantum leap. These are:

1. The move to deregulate medicines from prescription only use to pharmacy sale, thus increasing the effectiveness of the over-the-counter role.

2. The increase in the range of qualified health care professionals allowed to prescribe prescription medicines including pharmacists.

3. The increasing emphasis on health improvement and the public health role of the pharmacist.

The presentation will include results from some of the early pilot projects and provide evidence of the benefit of the new innovative roles for UK community pharmacy.

ABS G18-2

INNOVATIONS FOR BETTER RESULTS IN HEALTHCARE

F. Chen
The University of Sydney Australia

There is substantial research evidence, and numerous practice examples, of the role of the pharmacist in delivering better healthcare for patients. This is primarily a consequence of practice based research into the development, implementation and evaluation of new professional pharmaceutical services, in many countries. These professional services include medication management review services for patients living at home; disease state management services for chronic conditions such as mental illness and screening and monitoring services. The aim of this paper is to discuss various innovative approaches for pharmacist involvement in achieving better results in healthcare. These approaches may be divided into those operationalised at the practice level and those implemented at the organizational/systems level. At a community pharmacy practice level, better healthcare can be achieved if the expertise of pharmacists as 'medicines experts' is better used. Although this sounds simplistic, this means that pharmacists should be willing to focus on the delivery of professional services rather than their traditional supply role. To achieve this practice change, new professional services must be integrated into the core activities of community pharmacy. Another important consideration is the adoption of a multidisciplinary approach, with other health professionals clearly able to see the benefits of working with pharmacists. Having a 'non-pharmacist champion' for the service is also beneficial, as is building interdisciplinary professional rapport and trust. From the patient's perspective, involvement of consumers and advocacy groups is fundamental, for example, the use of mental health consumer educators as bona fide providers of training. Furthermore, in the medium and long term, consumer demand for healthcare services will likely be a significant driver of uptake of the service. From an organizational/systems level, innovations include the use of technology in linking different clinical and administrative databases; the implementation of dissemination strategies including better links with policy makers and government; the provision of appropriate infrastructure to support the role of pharmacists in multidisciplinary service delivery; and joint inter-professional statements which endorse a collaborative approach to healthcare. In summary, a variety of innovative approaches may be implemented to facilitate the growing professional role that community pharmacists play in achieving better healthcare for their patients.

ABS G18-3

INNOVATIONS IN PATIENT COMMUNICATION AND EDUCATION

D.K. Raynor
University of Leeds United Kingdom

There has been a dramatic change in how pharmacists have communicated with, and provided education to, patients over the past 30 years. In the 1970s in the UK it was common for medicine labels to say 'The Tablets' or 'The Liquid' – most people were not even told the name of their medicine. How things have changed. For example, private areas for a consultation with the pharmacist are becoming common. Such developments have been the result of innovation in the way pharmacy is practised; influenced by wider changes in healthcare and society. This presentation will highlight the key changes, using the UK as an exemplar:

- Development of cognitive services
- The patient empowerment and concordance movements
- Legislation and guidance on provision of written medicines information
- Developments in pharmacy teaching on patient communication.
- Patient reporting of adverse drug reactions

In addition, it will look at possible future developments, including web-based information about medicines.

ABS G18-4

COMPREHENSIVE PHARMACEUTICAL CARE® (CPC) – THE WAY FORWARD

J.A. Dunlop
New Zealand

Background: The New Zealand government has restructured primary health care. In 2001 the government developed the Primary Health Care Strategy which provided direction for health care providers to work in teams, collaboratively caring for patients and optimising the use of health care provider skills. Pharmacy was only mentioned once in this strategy, with neither the government, nor the profession, having a clear vision of the role of community pharmacy in the new health care structure. Our initial exploration into the realm of CPC® and its implementation was unsuccessful.
Disscussion: From New Zealand research into CPC® practice and expected health outcomes, coupled with the experiences from overseas as described in the evidence-based literature, we identified barriers to the implementation of CPC® into routine community pharmacy practice in New Zealand. We also identified the 'enablers' of CPC® implementation by analysing the limited number of small but successful projects developed in New Zealand. Utilising this knowledge and our own experience we have worked with a large Primary Health Organisation to develop a collaborative CPC® service. This Primary Health Organisation is responsible for providing access to, and managing, the provision of their population's health, particularly by targeting the high-needs population, including Maori and Pacific People.
Conclusion: We have learned that the pharmaceutical care philosophy of the Hepler / Strand collaborative model, which focused on medicines-related health outcomes and caring for the patient, can only be undertaken by pharmacists who have appropriate clinical skills, and who are prepared to accept responsibility and be accountable for their actions. The model we have created is supported and funded by the government funding agency (the District Health Board), through the Primary Health Organisation. The Primary Health Organisation has facilitated the collaboration between general practitioners, the suitably qualified pharmacists and other members of the health care team. This ensures access to patients and patient data, and the participation of the prescriber in the process. We have been contracted to both, set standards, provide peer review and clinical governance for the practicing pharmacists, and to provide CPC®. Knowing that CPC® can improve medicines-related health outcomes, our challenge is to confirm that this service delivery model is effective.

ABS G18-5

NEW SERVICE DELIVERY SYSTEMS

M. Lutz
Pharmcy Services, Inc. United States of America

The profession of pharmacy in the USA is experiencing significant changes in both the type and the depth of patient care services. This session will review the new systems that are emerging and examine patient care issues, medication safety issues, legal and regulatory issues, manpower issues and economic issues that have contributed to this process. In addition we will examine how these new systems are redefining the pharmacists role and the role of pharmacy technicians as well as changes that are occuring in other parts of the health care system that are contributing factors.

Biographies - Integration of Electronic Patient Health Record Systems Into The Pharmacy (G 20)

BIO G20-0

BIOGRAPHY E. PAULINO

E. Paulino
Associação Nacional das Farmácias Portugal

Ema Paulino
Av. D. Nuno Álvares Pereira, nº 39C, 2800 Almada, Portugal
Ph: +351 962751052 e-mail: emapaulino@ureach.com
- EDUCATION
2002-6 Enrolled in Masters in Community Pharmacy, Faculty of Pharmacy, University of Lisbon (Thesis: Understanding Practice Change in Community Pharmacy - Are Doctors Willing to Play?)
2001 Graduated Pharmaceutical Sciences by the Faculty of Pharmacy, University of Lisbon
- EMPLOYMENT
2002-... Pharmacist-in-charge and owner, Nuno Álvares Pharmacy
2001-2 Pharmacist, Nuno Álvares Pharmacy
RESEARCH EXPERIENCE
2003-... Researcher in international collaboration on facilitators of practice change in community pharmacy
2000-1 Primary researcher in international collaboration on identification of drug related problems in discharged patients, Stevenshof Institute for Pharmacy Practice Research (SIR) and European Society of Clinical Pharmacy (ESCP), The Netherlands
- AWARDS
2001 Health Base Foundation Poster Award at the 30th ESCP Conference in Antwerp, Belgium, for the poster and oral communication "Drug related problems among patients discharged from hospital"
- CURRENT PROFESSIONAL AND STUDENT REPRESENTATIONS
2006 - current Member of the European Pharmacists Forum (EPF)
2005 – current Member of the Executive Committee of the International Pharmaceutical Federation Community Pharmacy Section (FIP CPS)
2004 – current Member of Pharmaceutical Care Network Europe (PCNE)
2003 – current Member of the Portuguese Delegation at the Pharmaceutical Group of the European Union (PGEU)
2003 – current Member of the Portuguese Delegation at the EuroPharm Forum
2003 – current Board Member, Portuguese National Pharmacies Association (ANF)

BIO G20-0

BIOGRAPHY A. D'EMANUELE

A. D'Emanuele
University of Central Lancashire United Kingdom

Antony D'Emanuele is Professor of Pharmaceutics and Head of the new School of Pharmacy and Pharmaceutical Sciences at the University of Central Lancashire. Tony obtained a First Class honours degree in Pharmacy from the School of Pharmacy, University of London in 1985 and his PhD in drug delivery from the University of Bath in 1989. He then took up a postdoctoral fellowship at the Massachusetts Institute of Technology followed by his first academic position at the University of Manchester.
Tony's research interests focus on the delivery of bioactive molecules using polymeric systems. His group at Preston focuses on the pharmaceutical applications of dendrimers (http://www.dendrimerweb.com). He also has an interest in the development of delivery systems where release is responsive to a patient's varying requirements. Tony was responsible for the creation of PharmWeb, the first structured pharmaceutical portal on the Internet.
Tony has been a visiting scientist at the Department of Pharmacy, University of Sco Paulo and also the Department of Chemical Engineering, Massachusetts Institute of Technology. He has been invited to give over 60 lectures and has received five awards, including a Eurand Award for Novel Approaches in Oral Drug Delivery in 2004. Tony is the author of approximately 120 publications, including over 50 scientific and professional papers. He is a member of the Royal Pharmaceutical Society of Great Britain and a Fellow of the Royal Society of Chemistry. Tony is past Chairman of the UK-Ireland Controlled Release Society and was up until recently

European representative Member of Executive Committee of the Pharmacy

Information Section, International Pharmaceutical Federation.

BIO G20-0

BIOGRAPHY K. TELLINGER

K . Tellinger
Apoteket AB Sweden

Karina Tellinger is a market developer at the Swedish Pharmacy Company, Apoteket AB. It's the only pharmacy chain in Sweden and consists of 900 pharmacies. Karina has been working to increase the use of electronically transmitted prescriptions in Sweden since 2000. She is also a member of the national advisory group which was founded by the Swedish Government to stimulate and promote Sweden as a strong IT nation and to develop a national strategy to promote the use of IT in the healthcare sector.

BIO G20-1

BIOGRAPHY L MCCLURE

L. McClure
PSNC United Kingdom

Lindsay is Head of Information Services at the Pharmaceutical Services Negotiating Committee, the organisation that represents the interests of community pharmacies in England and Wales on National Health Service (NHS) matters. Her responsibilities include working with the Department of Health in England on the implementation of Government IT projects in community pharmacy including the electronic transmission of prescriptions (ETP) and the NHS Care Records Service.

In April 2005, community pharmacies in England entered into a new funding arrangement with the Government. Lindsay was a member of the group that worked to negotiate the funding to support pharmacies in becoming ETP enabled, valued at £58 million in year one of the agreement.

Since her student days, Lindsay has been involved in pharmacy organisations at a local, national and international level including serving as IPSF President in 2000-01 and Chairperson of the FIP Young Pharmacists' Group in 2004-05.

Biographies - Integration of Electronic Patient Health Record Systems Into The Pharmacy (G 20)

BIO G20-2

BIOGRAPHY H.J. JACOBSGAARD

H.J. Jacobsgaard
The Danish Pharmaceutical Association Denmark

Helle Jacobsgaard is Pharmaceutical Adviser in the Danish Pharmaceutical Association. Since February 2002 she is also Pharmaceutical Consultant in the Secretariat of the Nordic Pharmacy Association.

Helle Jacobsgaard graduated as a pharmacist from the Danish University of Pharmaceutical Sciences in Copenhagen in 1986. She also has an HD in Organisation and Management from the Copenhagen Business School from 1997.

In the Danish Pharmaceutical Association she is responsible for questions concerning medicine legislation and other legislation in relation to the product line of the pharmacy.

She has participated in and conducted a series of activities and projects in areas such as pharmaceutical care, smoking cessation, marketing campaigns, health promotion and prevention.

She is co-ordinating the Danish participation and activities in the Task Forces of Euro-Pharm Forum.

She has published a number of papers/articles on pharmaceutical subjects and presented several posters.

From 1998 to 2003 Helle Jacobsgaard has also been a teacher at the Danish University of Pharmaceutical Sciences in Copenhagen.

BIO G20-3

BIOGRAPHY G. BRIDELL

G.B. Bridell
Apoteket AB Sweden

Masters degree in pharmacy 1972.

Gunnel Bridell has worked in the pharmaceutical industry for a total of 9 years, during the 1970s and 1980s. She worked both as a documentalist and as a product specialist with marketing responsibility for some company products. In the 1980s she worked for LIF, the pharmaceutical industry's trade association in Sweden.

For a period of 6 years she served as a hospital pharmacist. Some main tasks were inspections of hospital ward supplies, improvement of pharmacy routines for various types of services to the hospital, and the compilation and presentation of consumption statistics on medicines in the hospital. She has also held training courses in pharmacology for those intending to be nurses and been in charge of the hospital pharmacy's drug information centre.

Gunnel Bridell worked as an information pharmacist for 10 years for a pharmacy area corresponding to approximately 15-20 pharmacies. She was responsible for further training of pharmacy personnel and was in charge of the pharmacies' information efforts towards health services. She has, together with health services, carried out studies on the use of medicines and worked to increase health and medical care's compliancy to recommended medicines.

In the 1990s Gunnel Bridell worked as pharmacy manager with coordination responsibility for 4 pharmacies in the municipality.

Since 2000, Gunnel Bridell has worked to increase the use of electronic prescriptions in Sweden. The goal is to have 80% of all prescriptions come in to the pharmacy electronically. The project was initiated by Apoteket AB but has been run in cooperation with county council representatives.

Abstracts - Integration of Electronic Patient Health Record Systems Into The Pharmacy (G 20)

ABS G20-1

THE UK MODEL AN AMBITIOUS NATIONAL PROJECT, AIMING FOR JOINED UP CARE

L. McClure
PSNC United Kingdom

The National Programme for IT within the National Health Service (NHS) in England is designed to connect the capabilities of modern IT with the delivery of the Government's strategic plan for the NHS. It includes the electronic transmission of prescriptions, a national electronic health records service, an electronic appointment booking (referral) service and a supporting national broadband network. The programme is rumoured to be costing over £20 Billion and will eventually link all parts of the health service, both primary and secondary care.

Service improvement is at the heart of the initiative and this is no more evident than in the community pharmacy setting. For pharmacists to undertake new roles such as supplementary and independent prescribing in community pharmacies, they will need access to patient information via the NHS Care Records Service, to communicate effectively with other members of the health care team, pharmacists need access to the internet and email and to free up pharmacists' time from dispensing to allow them to deliver new patient services such as diagnostic testing and medication reviews, pharmacies will need to participate in the NHS electronic prescriptions service.

The timescale for delivering the programme is short and the NHS Care Records Service has already experienced a number of delays. Current key concerns include the accuracy of data transfer, consent procedures for data transfer and sharing, agreeing liability for shared records and errors in transfer between systems, acceptance of new systems by health professionals and issues around ownership of data.

More information: www.psnc.org.uk/IT

ABS G20-2

PATIENT MEDICAL PROFILING IN DENMARK – IMPACT ON THE PHARMACIST

H.J. Jacobsgaard
The Danish Pharmaceutical Association Denmark

The Danish medicine profile is an electronic overview on the Internet of the prescription medicine that each Dane buys at pharmacies. The medicine profile is developed and managed by the Danish Medicines Agency.

The medicine profile contains:

- an overview of prescription medicine bought by the citizen at a pharmacy
- detailed information about the medicine, e.g. dosage, strength, number of pack-ages handed out, indication etc.
- the doctor, who prescribed the medicine and the pharmacy that handled the prescription

Only the individual citizen has access to his/her own medicine profile and the doctor, treating the citizen. The pharmacy, however, has access to the medicine profile if the citizen gives his/her consent. Pharmacists primarily use the medicine profile in connec-tion with the service medicine check. There have been several projects where pharma-cists have used the medicine profile since it became accessible. Advantages and disad-vantages of the Danish medicine profile will be presented.

BS G20-3

THREATS AND OPPORTUNITIES OF SHARED INFORMATION TO THE PHARMACIST

G.B. Bridell
Apoteket AB Sweden

The development in many countries is moving towards giving players in health care greater access to patients' accumulated lists of medicines. The benefit of access to a great amount of information on an individual patient's use of medicine is that the information can form a basis for a better-founded prescribing of medicine as well as to facilitate improved advising at the pharmacy. However, are there only benefits with access to an increased amount of information? How will pharmacists' daily work be affected by access to more information? How will the professional role of the pharmacist be affected and how will finances be affected?

In the autumn of 2006, the Swedish pharmacies will offer the service 'My Medicines' which means an opportunity for patients to electronically save all their prescriptions with Apoteket and receive direct access to information about all their valid prescriptions and past dispensations which occurred within the preceding 15 months. Even the pharmacists and prescribers will - with the patient's consent – have access to the same information. From experiences in Sweden, the presentation will illustrate how access to a large amount of information on patients' medicines can affect the pharmacists' working situation.

BIO G21-0

BIOGRAPHY L.M. MCDEVITT

L. McDevitt
Massachusetts College of Pharmacy United States of America

Lisa McDevitt currently works as an Assistant Professor of Pharmacy Practice at the Massachusetts College of Pharmacy and Health Sciences. She also serves as the clinical pharmacist for the transplant surgery service at Tufts-New England Medical Center in Boston. She received her Pharm.D. from the University of Nebraska Medical Center in Omaha. She has completed a Pharmacy Practice Residency at Thomas Jefferson University Hospital in Philadelphia and a Specialty Residency in Organ Transplantation at the University of Utah Health Sciences Center in Salt Lake City.

Dr. McDevitt's teaching, research, and patient care activities focus on the care of liver and kidney transplant donors and recipients. She has presented posters at various meetings including the American Transplant Congress, ASN's Renal Week, the ASHP Midyear Clinical Meeting, and the ACCP Annual Meeting. She has published various articles and serves as a peer reviewer for several pharmacy journals. In addition, Dr. McDevitt has been an invited speaker at national pharmacy congresses in Mexico and Peru, where she discussed clinical pharmacy and the role of a pharmacist on the transplant team.

In addition to her work in transplant, Dr. McDevitt has an active interest in international pharmacy issues. She has worked with the International Pharmaceutical Federation (FIP) in various capacities and currently serves as the Steering Committee Chair of FIP's Young Pharmacists Group.

BIO G21-1

BIOGRAPHY G.H. LEUFKENS

G. Leufkens
Utrecht University Netherlands

Dr Leufkens obtained his PharmD and PhD degree from Utrecht University. In 1998 he was appointed as full professor and Chair of the Department of Pharmacoepidemiology and Pharmacotherapy at the same university. This is one of the leading groups in pharmacoepidemiology (output >;50 publications per year in peer reviewed press, highly visible profile, resource for innovative methodologies). From 2003-2005 he has been the Scientific Director of the Utrecht Institute for Pharmaceutical Sciences (UIPS). Since the beginning of 2006 he is Dean of Pharmaceutical Sciences of the Faculty of Science in Utrecht. Moreover, Dr Leufkens is scientific director of the SIR Pharma Policy Institute in Leiden and active at several (inter)national platforms on pharmacoepidemiology (e.g. Past-President of ISPE) , pharmacovigilance, risk assessment, pharma policy, orphan drugs and scenario planning. He is (co) author of >; 230 papers in peer reviewed journals, book chapters and research reports.

BIO G21-2

BIOGRAPHY A.I. WERTHEIMER

I. Wertheimer
Temple University United States of America

Albert Wertheimer is a professor at Temple University School of Pharmacy, and Director of its Center for Pharmaceutical Health Services Research, in Philadelphia, PA, USA. He has supervised about 70 PhD dissertation students and is the author of about 360 scientific or professional journal articles, about 25 book chapters and author or editor of about 24 books.

His research interests and activities are in pharmacoeconomics, outcomes research and public health policy. He is completing his second term as president of the FIP Administrative Pharmacists' Section.

BIO G21-3

BIOGRAPHY J.M. NICHOLSON

M.J.N. Nicholson
FIP WG on Counterfeit Medicines United Kingdom

Jane is an industrial pharmacist and was a Vice -President of FIP from 1994-2002. She is a Fellow of FIP and is currently an Expert Member of the Board of Pharmacy Practice and Convenor of their Working Group on counterfeit medicines.

She is a past President of IPSF and Chairman of Information and Education for the Federation.

Author of a number of articles on product registration and regulatory requirements for pharmaceuticals, patient access and labelling of medicinal products and on the reclassification from prescription to pharmacy status.

Speaker on regulatory affairs, pharmaceutical education and the practice of pharmacy at meetings in the U.K., most other countries of Europe and in Canada, Australia and the U.S.A. Jane is British representative to EIPG and currently holds the presidency of the European Industrial Pharmacists Group.

BIO G21-4

BIOGRAPHY J.L. CARAPINHA

J.L. Carapinha
University of the Witwatersrand South Africa

João Carapinha graduated from the University of the Witwatersrand with a Bachelor Degree in Pharmacy. He was President of the South African Pharmaceutical Students Federation and President of the International Pharmaceutical Students Federation. He worked for Glaxo SmithKline (SA) (Pty) Ltd as their Pharmacist Intern after which the Southern Gauteng Branch of the Pharmaceutical Society of South Africa employed him as their Professional Development Manager. In March 2000 João was appointed by the Minister of Labour (South Africa) to serve on the Board of the Health and Welfare Sector Education and Training Authority (HWSETA). In January 2003 João joined Department of Pharmacy and Pharmacology, Faculty of Health Sciences, University of the Witwatersrand as a Lecturer and Head of the Pharmacy Practice Division. In January 2006, João joined Wyeth S.A. (Pty) Ltd as their Market Access Manager responsible for all pricing, health economic and reimbursement matters related to Wyeth's core business. João is also currently the Director of the Pharmaceutical Economics and Policy Programme, Wits Health Consortium, University of the Witwatersrand.

He is actively involved in several organizations – International Pharmaceutical Federation, International Society for Pharmacoeconomics and Outcomes Research and is currently the Chairman of the Health Economics Assessment Team (HEAT) of the Pharmaceutical Manufacturers Association. Postgraduate studies include a Diploma in Manager Development (Damelin Management School), Industrial and Organisational Psychology (University of South Africa) and a Masters in Public and Development Management – Economic Policy and Public Finance (Graduate School of Public and Development Management, University of the Witwatersrand). He is currently registered for his Doctorate in Public and Development Management at the Graduate School of Public and Development Management, University of the Witwatersrand.

BIO G21-5

BIOGRAPHY C.H. HYLDIG

C.H. Hyldig
Apoteket Trianglen Denmark

Christina Hoffmann Hyldig graduated at the Danish University of Pharmaceutical Sciences in 1996 and has been hosted as a guest teacher and an examiner thereafter. She works in a community pharmacy in Copenhagen and is primarily concerned about educating patients in taking their medicine correctly. Behind the counter, she is active in the domain of cholesterol, blood sugar and blood pressure screenings as well as providing smoking cessation programs. She is further developing her studies to attain a diploma in 'Master of Drug Management' and is an active FIP member. Hyldig enjoys research programs and has presented 6 projects over the last 8 years. She has published several articles in Helse, a national Family Health magazine and is the editor of a monthly health column in a local newspaper.

BIO G21-6

BIOGRAPHY J.E. MARTIN

J.E. Martin
University of Cincinnati United States of America

Jill E. Martin is Associate Professor of Pharmacy Practice at the University of Cincinnati with a focus on transplant outcomes research and a clinical practice in transplantation. She is also the Director of Transplant Outcomes at the University Hospital where she has extensive involvement in outcomes management, assessing resource utilization, and quality of life measurements. Previously, she practiced for 15 years as a Clinical Pharmacy Specialist at the University of Cincinnati Hospital. She received her degrees at the University of Kentucky. Martin has presented nationally and published extensively in the areas of transplant economics, pain management and quality of life. She has also been active on many national, state, and local committees addressing pharmacy and outcomes issues. She was the 1999 recipient of the Ohio Society of Health-System Pharmacists Walter A. Frazier Award and is currently serving as President of ASHP.

ABS G21-1

NEW DRUG DEVELOPMENT: WHAT IS THE BEST BET?

G. Leufkens
Utrecht University Netherlands

Today's pharmaceutical marketplace is under a lot of pressure. Current developments in new drug development represent an intriguing myriad of scientific, clinical, economic, regulatory and political challenges. Many analysts question whether the current model of pharmaceutical innovation is still sustainable. The costs of today's drug development are not in balance with the output. A large number of therapeutic gaps have been identified in order to drive new drug development in the direction of public health priorities (e.g. antibacterial resistance, neglected diseases, orphan drugs). The question whether the gaps in pharmaceutical innovation can be linked to research depletion or market failure, features prominently on many stakeholders' agendas. Moreover, at the same time many 'omics'-technologies allow for new approaches of individualized medicine, molecular patient targeting and mechanism-based therapeutics. There are no easy answers, but a strong need for an open dialogue, learned weighing of the arguments among and across disciplines, and finally, trust building between the individual parties involved. Pharmacists can't neglect these developments. New medicines don't fall from heaven. They are the result of stretching the best brains, technologies, economic incentives and thoughtful weighing of public health priorities.

ABS G21-2

COMPULSORY LICENSING: BENEFIT OR DETRIMENT

I. Wertheimer
Temple University United States of America

Patents are licenses for exclusive use of an invention or composition. Governments grant patents as an incentive for innovative research. In exchange, a patent holder must divulge the composition and synthesis of the invention. This enables other researchers to tinker with the invention to improve it. This is how science functions. Yet, in all patent laws, there is a provision for the national government to seize the patent if its owner fails to work it or in cases of national emergency; rarely encountered situations.

However, compulsory patent licensing has been more common, to create competition and lower prices or when branded products are unaffordable. Lesser developed countries often try to save foreign exchange by producing generics locally. Canada tried such a program in the 1960s, but abandoned it in 1969 after pharmaceutical companies ceased all R & D activity in the country. Brazil used this strategy more recently to make massive anti HIV/AIDS drug purchases affordable

The presentation will provide a more in-depth report.

ABS G21-3

COUNTERFEIT MEDICATIONS: IMPACT ON THE PROFESSION

M.J.N. Nicholson
FIP WG on Counterfeit Medicines United Kingdom

Counterfeit medicines kill! Counterfeiting is an increasingly sophisticated and lucrative business. The World Health Organisation estimates that up to 15% of all medicinal products sold world wide are counterfeit. Products bought over the internet have a 1 in 2 chance of being counterfeit.

Factors encouraging counterfeiting include lack of government commitment, weak legislation, lack of enforcement and the presence of unregulated manufacturing and distribution outlets. However, modern trade arrangements support the opening of borders, dealing through a number of intermediaries and merchandising on the internet.

This presentation will update attendees on the activities of the FIP Counterfeit Medicines Working Group, whose aim is to combat counterfeiting at a practical level. An FIP website has been established and includes a pharmacists' reporting form, a toolkit to visually identify counterfeits, pharmacists advice to patients on internet sales, teaching materials and links to a large number of government and other websites holding information on counterfeits.

Pharmacists are the last link of the chain in patient safety. Individual pharmacists have a big role to play in the fight against counterfeits.

ABS G21-4

PHARMACISTS AS HEALTHCARE PROVIDERS: PREVENTATIVE MEDICINE

C.H. Hyldig
Apoteket Trianglen Denmark

In Denmark, paid professional services are part of the daily activities in the Pharmacy. This presentation is meant as an inspiration depicting the implementation of paid services. The syllabuses of the professional services are presented.

Patients are educated in managing diseases related to their lifestyle such as: high cholesterol, diabetes and hypertension also individual smoking cessation and medication reviews are offered. The professional services include an update on individual health profiles based on data such as BMI, cholesterol levels and blood pressures etc.

Professional services can help develop the community pharmacist's role in preventative medicine and make the patients see the Pharmacy as a valuable source of information.

ABS G21-5

COLLABORATIVE DRUG THERAPY MANAGEMENT (CTDM)

J.E. Martin
University of Cincinnati United States of America

This presentation will provide an overview of collabortive drug therapy management (CTDM) and examples of its implementation within the United States. CTDM is a practice where prescribers (generally physicians, in some states includes nurse practitioners) authorize pharmacists to engage in specified activities including adjusting and/or initiating drug therapy. This type of advanced pharmacy practice may be provided in hospital or ambulatory settings and has been associated with decreasing costs and improved patient outcomes.

BIO G22-0

BIOGRAPHY D. SEYOUM

D. Seyoum
The United States Pharmacopeia United States of America

General Information: Date of Birth: July 26, 1962
Place of Birth: Addis Ababa, Ethiopia
Citizenship: United States of America

Education: MSc, Clinical Pharmacy and Pharmaceutical Analysis

Experience:
1994-2006; Program Manager/Drug Information Specialist; The United States Pharmacopeia; Rockville, MD
1991-1992; Formulary Development; British National Formulary; London, UK
1982-1991; Inspector and head, Licensing and Professional Registration; Ministry of Health; Addis Ababa, Ethiopia

Professional Membership:
International AIDS Society
International Pharmaceutical Federation (FIP)

Papers:

Presented a number of abstracts on AMR, HIV/AIDS and TB at Major Scientific Conferences.

Reviewed articles (abstracts) for a number of medical journals and international Conferences

BIO G22-1

BIOGRAPHY C.C.F. VIDOTTI

C.C.F. Vidotti
Federal Council of Pharmacy Brazil

Pharmacist, Master in Pharmacology and doing Ph.D. in Health Sciences.

Technical Manager of the Brazilian Drug Information Center (CEBRIM), within the Federal Council of Pharmacy(CFF). I have expertise in drug information, Medicines Information Center management, edition of drug bulletins, team work, drug nomenclature, selection of drugs, pharmacovigilance, pharmacoepidemiology and public health. I have helped training of many pharmacists to set up Medicines Information Centers in Brazil and in Latin America. Currently, I am member of the three Brazilian government committees of drug nomenclature, drug selection and pharmacovigilance in community pharmacies.

BIO G22-2

BIOGRAPHY J. DARTNELL

J. Dartnell
Therapeutic Guidelines Australia

Jonathan Dartnell received his pharmacy degree from the Victorian College of Pharmacy (Australia) in 1982. Initially he worked as a hospital pharmacist in Australia and England and then coordinated a pharmacy training program in Belize. After returning to Australia, he coordinated the Drug Usage Evaluation Program at the Royal Melbourne Hospital while undertaking his doctoral studies with the University of Melbourne. Since joining Therapeutic Guidelines Limited in 1998, he has been editor of Therapeutic Guidelines: Antibiotic and managed the development of the electronic products .He is currently Production Manager.

BIO G22-3

BIOGRAPHY K.A.HOLLOWAY

K.A. Holloway
World Health Organisation Switzerland

Dr. Kathleen Holloway is a medical officer with the department of Medicines Policy and Standards in the World Health Organization in Geneva. Her present responsibility is to promote rational use of medicines and contain antimicrobial resistance at both global and country levels and she is actively involved in training programmes, capacity building, operational research, and policy development, in these areas. Her professional experience includes 10 years as a clinician in the UK National Health Service, 10 years working in Asia in clinical medicine, public health and managing essential medicines programmes, and 6 years working in international health. Her research has included examining the effects of user fees on prescribing quality, surveillance of antimicrobial resistance and use in the community, and trends in medicines use in developing countries.

ABS G22-1

ANTIMICROBIAL DRUG RESISTANCE (AMR): OVERVIEW

D. Seyoum
The United States Pharmacopeia United States of America

Antimicrobial Drug Resistance (AMR) results in increased morbidity, mortality, and cost of health care, prolonged periods during which individuals are infectious, and greater opportunities for spread of infection to other individuals. Initially, the problem of AMR was solved by the discovery of new classes of drugs as well as by the chemical modification of previously existing drugs; unfortunately, the development of new antimicrobial drugs cannot keep pace with the ability of bacteria to develop resistance.

There are several factors contributing to the increase in AMR. Some are related to host factors, such as a sicker inpatient population, a larger immunocompromised population, and new procedures and instrumentation that have resulted in new sites or types of infection. Other factors were identified through literature search, and included, selective pressures in health care and community settings; misuse of antimicrobial agents by unskilled practitioners; misuse of antimicrobial agents by patients; poor or nonexistent infection-control techniques; Inadequate surveillance; counterfeit and sub-standard drugs; antimicrobial use in livestock and agriculture.

The following are few examples of the growing problem of AMR. Resistance in the anaerobic bacterium Bacteroides fragilis to clindamycin has increased from 3% in 1987 to 16% and 26% in 1996 and 2000, respectively. Reports of multi-drug-resistant tuberculosis (MDR-TB) hot spots, countries with more than 500 new MDR-TB cases per year, included countries from all regions of the world. Methicillin-resistant Staphylococcus aureus (MRSA) is currently the most commonly identified antibiotic-resistant pathogen in US hospitals. Infection caused by MRSA was effectively treated using vancomycin. However, reports of reduced susceptibility to vancomycin have emerged from all parts of the world. Since the first reported isolation of vancomycin-resistant enterococci (VRE), VRE have spread with unanticipated rapidity. This problem of AMR is particularly prevalent among the most common etiologic pathogens associated with community-acquired respiratory tract infections.

The steady increase in AMR continues despite the introduction of new antibiotics. AMR is associated with increased patient morbidity and mortality as well as with increased costs. Addressing the problem of AMR requires both infection control and regulation of antibiotic use. Reports from professional organizations and a consensus of experts have outlined strategies for the control of resistance in hospitals and in the community. There should be an emphasis on the importance of a multidisciplinary approach in tackling the problem of AMR. A close collaboration among the disciplines of infectious diseases, microbiology, hospital epidemiology, pharmacy, and nursing, can result in an effective program that can be readily incorporated into the quality-improvement goals of any health-care organization.

ABS G22-2

THE PROBLEM OF AMR IN LATIN AMERICA

C.C.F. Vidotti
Federal Council of Pharmacy Brazil

AMR facts in Latin America (LA) and actions against spread of resistance will be shown and include enforcement of regulations about drug registration, production, marketing, prescription, dispensing, use and pharmacovigilance. In all LA countries, antimicrobials must be provided under prescription. Hospitals committees that deal with antimicrobials have been required by legislation and they also help in hospital accreditation. There are improvements in regulations, in health services and health professionals and public education, but insufficient to deal with the problem. Successful experiences regarding improvement of care, rational use of antimicrobials and costs control will be shown.

ABS G22-3

AMR IN AUSTRALIA: MONITORING AND INFLUENCING ANTIMICROBIAL USE AND RESISTANCE

J. Dartnell
Therapeutic Guidelines Australia

Antimicrobial resistance is increasing in many pathogens including Streptococcus pneumoniae, methicillin-resistant Staphylococcus aureus (including community-acquired strains), vancomycin-resistant enterococci, Klebsiella, Escherichia coli and Acinetobacter.

Whilst there are a number of AMR surveillance systems in operation at the national level, these activities are fragmented and not comprehensive. To address this, a national strategy for AMR surveillance has been developed.

The use of antimicrobials is monitored via different systems across Australia. A large proportion of community use of antimicrobials is captured through the national drug subsidy system, the Pharmaceutical Benefits Scheme. In recent years, these data show decreasing use of antibiotics. Hospital antimicrobial use has been monitored variably. The National Antimicrobial Utilisation Surveillance Program has been established recently to provide a coordinated, nationally representative surveillance of antimicrobial use in hospitals. Already it has demonstrated significant inter-hospital variations in the use of broad-spectrum agents.

The development of guidelines for use of antimicrobials is well established. Therapeutic Guidelines publish disease-oriented evidence-based guidelines which include a comprehensive range of topics covering antimicrobial use. The guidelines are concise, regularly updated, widely endorsed, produced in a range of highly usable formats, and widely used.

The guidelines underpin many national interventions to improve antimicrobial use coordinated by the National Prescribing Service (NPS), including self-audits of GP prescribing, and multi-site hospital drug usage evaluations utilising academic detailing. The NPS have also undertaken public education campaigns to reduce unnecessary patient demand for antibiotic use.

To conclude, Australia is increasing national coordination to address AMR.

ABS G22-4

CONTAINING ANTIMICROBIAL RESISTANCE THROUGH THE PROMOTING RATIONAL USE OF ANTIMICROBIAL DRUGS

K.A. Holloway
World Health Organisation Switzerland

Background:
Antimicrobial resistance is a very serious public health problem, such that there are high resistance levels to most original 1st line drugs used to treat common infections. The WHO global strategy for containment of antimicrobial resistance (2001) recommends 67 interventions to contain resistance through reducing inappropriate use of antimicrobials and controlling the spread of infection. Unfortunately, most countries are not implementing all the WHO recommendations and there is a lack of epidemiologically sound evidence on which to base national policy to contain antimicrobial resistance and improve use.
Methods:
This paper focuses on promoting rational use of antimicrobials as a way of reducing selection pressure in the development of new resistance. Pharmacists can play a very important role in containing antimicrobial resistance through monitoring antibiotics use; and developing, implementing and evaluating the impact of interventions designed to change irrational use. WHO has developed two databases to monitor the situation with regard to medicines use (including antibiotics). One database examines medicines use in developing and transitional countries, based on a database of all published surveys during 1990-2004. The other database examines pharmaceutical policy, based on a questionnaire filled in by national Ministries of Health.
Results:
The medicines use database, now includes 644 surveys and shows that more than half of all drugs, including antimicrobials, are used in an inappropriate way. Relatively few of the surveys, 280 (43%), were done in conjunction with interventions to promote rational use of medicines. Most of these interventions were on a local scale and only approximately 20% of them were adequately evaluated for their impact on medicines use. Although it is known that some of the most effective and sustainable interventions involve a combination of managerial and economic strategies, 75% of the interventions implemented were educational interventions and only 25% were managerial or economic. Very few of the interventions involved clinical pharmacy, or were aimed at the community, or were undertaken on a routine basis. The database on pharmaceutical policy shows relatively low implementation of national policies known to encourage rational use of antibiotics as recommended in the WHO Global Strategy for Containment of Antimicrobial Resistance.

Conclusion:

There is an urgent need for improved monitoring and more implementation and evaluation of appropriate policies and interventions to promote rational use of antibiotics. Pharmacists could play a very important role in this, particularly with regard to fostering a culture of quality improvement cyclical approaches within their health institutions.

ABS G22-5

A CURRENT STATUS OF AMR IN JAPAN

M. Maeda, Koichi Kawasaki, Eiichi Akaho
Kobe Gakuin University Japan

In Japan, a large propagation of the antimicrobial resistance as MRSA from the major hospital to the city residential area has not been reported yet. But countermeasures in the early stage are necessary in the urban area because the aging of the generation has been increased. We pharmacists should be responsible for the management of the appropriate control of therapy, safe and effective usage of antibiotics, and control of resistance microorganisms in the hospital. However, usage of antibiotics and occurrence tendency of resistant microorganisms depend on each hospital. At present, Japan initiated antibiotic usage control program to inhibit the appearance of resistance microorganisms as follows: (1) survey the usage of antibiotics and the frequency of appearance of resistance microorganisms, (2) analyze the collected data, and reconfirm the related conditions, (3) select rational usage of antibiotics. The enlightenment to the citizen by pharmacists has not been advanced. We need antibiotic control guideline which fits with Japanese environment and Japanese medical system.

ABS G24

FACTORS THAT COULD IMPROVE UTILIZATION OF PHARMACY HEALTH PERSONNEL ON PRACTICING THEIR SPECIALTIES

S. Alrashed
Riyadh Military Hospital Saudi Arabia

Background:
The medical system contains clinics, operation mobile units and other units for intensive care. There is no published research or studies on the methods of utilization of health personnel (HP) including pharmacy health personnel on the practicing the specialties in peace and war.
Methods:
This study was performed using a cross sectional descriptive design. A questionnaire was designed to be filled by officers and health personnel and distributed to seven regions About 1400 questionnaire was distributed to health personnel and more than 350 questionnaire distributed to officers.

Results:
More than 56% of participant officers recognize the good educational level of HP and 87% have mentioned the importance of different technical health specialties in field units. The study found that 78% of officers recommend HP to work at hospitals and health care units to practice their health specialties. Ninety four percent of HP want to participate on health courses; however, there are several barriers. About 89.5% of HP sample mentioned unavailability of such scheduled training programs on their fields and about 40% of them do not know about the required courses on their health specialties to fulfill their need of developing their qualifications and skills. Ninety four percent of HP want to work at hospitals.

Conclusions and Recommendations:
The study concluded that special training programs are important for HP working in the field. The factors that could minimize unnecessary barriers, scheduling of the training programs, encouraging the motivation for continuing professional training. The study recommend to continue designing health courses that is unified and matching the health care needs in all teaching units including hospitals and other health care units of the medical services department with a continuing supervision and evaluation. It is recommended to encourage other studies with more in depth in this field.

ABS G24

COMPLIANCE WITH LIPID-LOWERING DRUG TREATMENT IN MEMBERS OF THE CANADIAN FORCES: AN OBSERVATIONAL COHORT STUDY

Vaillancourt[1], J. Ma[2], S. Groves[2]
[1]Children's Hospital of Eastern Ontario Canada [2]Canadian Forces Health Services Group Canada

AIMS:
Non-compliance with lipid-lowering therapy has been documented in many populations, including individuals at high-risk for cardiovascular disease. This study aims to measure the current compliance rates among members of the Canadian Forces (CF), and to identify potential predictors of non-compliance that may be used to identify future interventions to improve adherence.
METHODS:
An observational study was performed using data from the pharmacy claims database. All CF members who received a lipid-lowering drug between 1 April and 1 June 2003 will be included in the analysis, provided that a minimum follow-up time of three months following the initial prescription was represented in the database. Subjects were categorized as compliant if the pharmacy records indicated consumption of at least 80% of the doses prescribed. Statistical tests were performed to determine the impact of patient characteristics, drug characteristics, and time upon compliance rates.
RESULTS:
Overall compliance rate was 38.5% among all users of lipid-lowering medications. Compliance did not vary among the different classes of lipid-lowering drugs. Rates of compliance ranged from 14% to 100% at individual bases (NS), reflecting ranges in the population sizes at these locations. Duration of employment in the CF was the only independent predictor of compliance.
CONCLUSIONS:

Despite the lack of cost constraints, compliance with lipid-lowering medication was suboptimal in our population. These results suggest that our current interventions may be inadequate to address the range of factors contributing to non-compliance in CF members. Additional expenditures or reallocation of funds for different initiatives may be required.

ABS G24

SAF QUALITY MEDICAL SERVICES AWARD

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Context: The Quality Medical Services Award (QMSA) was set up to enhance the standard of services provided by SAF Medical and Dental Centres. Audit of these medical facilities was mainly focused in the area of medical logistics in the early years. Upon successful attainment of the ISO 9000 (International Organisation for Standardisation) certification in 1998 by five SAF Medical and Dental Centres, we promulgated the ISO 9000 procedures to the other centres in the SAF. The format of the QMSA audit was thus re-aligned to follow the concept of an ISO Internal Quality Audit (IQA).

Aim: To highlight the improvements of the QMSA system over the past few years.

Method: A handbook on QMSA detailing the criteria and checklists was prepared and distributed to all centres in WY 2000. In WY 2001, we made several improvements. These include making the second IQA for each WY as a surprise audit, giving only an hour's notice to the centre. An opened-book test consisting of multiple-choice questions (MCQ) on SAF Medical Directives was also introduced for senior medics and senior dental supervisors. In addition, we introduced an 'Achievement Award' to recognise centres that have attained an overall percentage of 90% or higher. The MCQ test was extended to Medical Officers in WY 2003. Revision of the QMSA Handbook was done yearly. In WY 2004, we restructured the checklists to include the strategic objectives from the SAF Medical Corps' Balanced Scorecard, and merged quality management with risk management.

ABS G24

THE ROLE OF THE 'DISASTER RELIEF PHARMACIST' - THE DOMESTIC AND INTERNATIONAL ACTIVITIES OF THE PHARMACIST IN JAPANESE RED CROSS SOCIETY

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[AIMS] What it takes to be a beneficial disaster responder as a pharmacist is discussed.
[METHODS] Based on the preparedness of the emergency medical kits and the following experiences, in the Japanese Red Cross Society (JRCS) domestic Emergency Response Unit after the Niigata-Chuetsu earthquake of 2004 and in the International Federation of Red Cross and Red Crescent Field Hospital after the Pakistan earthquake of 2005, the role of the pharmacists in the disaster medical teams is summarized and evaluated by other members through the questionnaires after the domestic activities.
[RESULTS] Many aged victims required their maintenance medications lost after the domestic disaster. In international activities, the majority staff was not expatriates but locals for the purpose of support to the local communities. The role of the pharmacist appreciated by other members was as follows: Maintaining the medical kit with essentials in order to ensure a patient care and adequate control of the pharmaceutical inventory. Providing expertise for adjusting to different circumstances faced and individual patient needs. The patient counseling concerning emergency medications played a significant role in psychological support. And communicating with others made proactive as a medical logistician.
[CONCLUSIONS] During disaster operations, the medicines should be triaged, selected from the priorities, by pharmacists. For the effective and appropriate use of medical supplies, the competence of a pharmacist delegate in JRCS is summarized.
1. Universal: Red Cross and Red Crescent Societies, international standard and disaster medicine
2. Professional: expertise as a medical team member, capacity building
3. Interactive: proactive and flexible stances

Pharmacists assertively exercise their responsibilities in preparing for and responding to disasters and should participate in full range of activities related to pharmaceutical care as a 'Disaster Relief Pharmacist'.

GPP

GOOD PHARMACY PRACTICE SYMPOSIUM

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With the overall aim to improve standards and practice of drug distribution and drug utilisation using the WHO/FIP Guidelines for Good Pharmacy Practice (GPP) as the framework, the International Pharmaceutical Federation (FIP) had taken the initiative to explore the possibilities for providing technical assistance to Member Organizations in countries with developing or transitional economies.

The overall goal of this project is to contribute to the health and quality of life of the populations and individuals through improved standards and practice of drug distribution and drug utilisation.

Thailand and Uruguay had been chosen as cases for implementing and learning for the first phase of this project (July 2005 – March 2006). In both countries the pharmaceutical associations were committed to further develop the quality of community pharmacy practice and they had an open dialogue and collaboration with the health authorities, WHO and universities. They were both actively involved in initiatives within public health and pharmaceutical care organized by the WHO-FIP SEARPharm Forum and the Pharmaceutical Forum of the Americas, respectively.

During this seminar, FIP and the FIP Foundation for Education and Research will share the various approaches and strategies in utilising GPP as a tool for pharmacy practice development.

Project managers from the selected countries will also speak on the activities held and lessons learned from the GPP projects conducted in their respective countries.

As a conclusion, a future perspective of the FIP GPP project will be presented.

Specific materials will be distributed separately, during the congress.

AS-P-001

HARMONIZATION OF PHARMACY STUDIES IN EUROPE

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In order to ensure an high level of qualification in pharmacy and pharmaceutical sciences and mutual recognition of diplomas within the European Union, faculties of Pharmacy carried out changes on their curricula in order to reinforce the theoretical and practical training in subjects recommended by the Council Directive 85/432/EEC, namely i) plant and animal biology; ii) physics; general and inorganic chemistry; iii) organic chemistry; iv) analytical chemistry; v) pharmaceutical chemistry, including analysis of medicinal products; vi) general and applied biochemistry; vii) anatomy, physiology and medical terminology; viii) microbiology; ix) pharmacology and pharmacotherapy.

The training in pharmacy and pharmaceutical sciences should ensure adequate knowledge i) of medicines and the substances used in the manufacture of medicines; ii) of pharmaceutical technology and the physical, chemical, biological and microbiological testing of medicinal products; iii) of the metabolism and the effects of medicinal products and the action of toxic substances and the use of medicinal products; iv) to evaluate scientific data concerning medicines in order to be able to supply appropriate information on the basis of this knowledge; v) of the legal and other requirements associated with the practice of pharmacy.

The European Association of Faculties of Pharmacy (EAFP) has developed a major effort in order to monitor implementation of these directives and to increase the scientific standards of the education in pharmacy and pharmaceutical sciences within European Union and to adapt the required formation in the Bologna process. Student mobility is being encouraged and a multidisciplinary and lifelong formation, recommending that the degree of at least 300 ECTS (five academic years) to obtain a diploma mutually recognized within EU.

AS-P-002

HARMONIZATION OF PHARMACY STUDIES IN LATINAMERICA

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In the Iberoamerican countries of America, the analysis of the efforts to harmonise curricular content in this region of the world are based on the work which has been under development since the decade of the nineties, through the meetings of the Pan-American Conference of Pharmaceutical Education and the Hispano-American Conference of Pharmaceutical Education (COHIFFA).

Both organisations have developed independently, a series of reflections and proposals to establish, amongst other things, the minimum contents and mechanisms to enhance the educational process.
One of the most important agreements achieved at COHIFFA, are upon a series of definitions and orientations that are intended to serve as guidelines in the harmonisation of pharmacy curricular content .

Other actions taken by COHIFFA in this respect have been among others, to produce and disseminate several documents containing information and análisis of different elements of pharmaceutical educational curriculum, such as the areas and activities of professional practice for individual countries, the necessary qualifications for university entrance, the basic curriculum or minimum training contents, and the duration of degree courses.

In spite of the present socio-economic and cultural differences between Spain and Latin American countries, the harmonisation spanish experience into Europe constituted a reference point for the identification of homogeneous pharmaceutical profiles. The elements leading to this identification included the main elements that may lead in the short term to curricular harmonisation and therefore, to equivalente of pharmaceutical qualifications in Latin America.

Finally, it is important to reflexionate about that although significant progress has been made with regard to the main elements in curriculum design that will allow the harmonisation in pharmaceutical education and recognition of qualifications between the countries, further analysis is required.

AS-P-003

HEALTHCARE BIOANALYTICS – AN ALTERNATIVE PROGRAM AT CHARLES UNIVERSITY FACULTY OF PHARMACY

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The five-year Pharmacy Master study course is the basic educational activity at Charles University Faculty of Pharmacy. Besides this program, also a program of Healthcare Bioanalytics has been prepared. The program comprises of two steps – a three-year Bc. studies, and a linking-up two-year Master program. The graduate from Bc. studies is a university-trained health care professional capable of independent working in all types of clinical and sanitary service laboratories, mastering laboratory methods and techniques according to principles of Good Laboratory Practice, data processing, calibration, and laboratory control. The graduate from the Master program is trained for independent work and management activities in clinical laboratories and sanitary service, able to exploit information sources and to apply up-to-date expert knowledge in relation to laboratory activities. The graduate is an advisor to physicians and to laboratory co-workers in laboratory methods, in the clinical relevance of laboratory results and in their interpretation. The present paper gives a survey of the current curriculum.

Acknowledgements: Supported by the project 213/2006 of the Czech Ministry of Education

AS-P-004

EVALUATING A CLASSROOM RESPONSE SYSTEM IN A RESEARCH METHODS AND BIOSTATISTICS COURSE

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Objective. To evaluate the instructional effectiveness and student satisfaction for an interactive classroom response system (CRS) Method. The 95 students enrolled in Research Methods and Biostatistics in 2005 (graduating class of 2007, GC2007) were exposed to the first formal course use of CRS in our PharmD curriculum. Thirty-four questions common to the final exams in the GC2006 (without CPS) and GC2007 (with CPS) research courses were evaluated to determine if CRS improved student performance. Three surveys of student opinion and satisfaction (totaling 28 questions) were administered: at the beginning, middle, and end of the semester. Results. During the GC2007 research course, 78 CRS questions were posed in 13 of 26 class sessions. Of these, 48 questions were directly related to the content of 34 exam questions which were included on both GC2006 and GC2007 final research exams. Ten or 30% of common exam questions showed a significant difference in proportion of correct answers for the GC2007 compared to GC06 exams, $p <;0.03$. However, there was no significant difference in overall mean scores on the GC06 (74.0%) and GC07 exams (73.9%), $p = 0.95$. At the end of the semester, on a 5-level Likert scale (1=strongly agree, 5=strongly disagree), students scored the statement 'CPS helped me understand the material in the class better than if we did not have it' at 2.27. Conclusion. Our first use of CRS proved useful for faculty and beneficial for students. Maximum benefit requires attention to question strategy, frequency of administration, and post-question discussion, where indicated.

AS-P-005

THE USE OF SIMULATED PATIENTS IN PHARMACY PRACTICE RESEARCH: PART A. OVERVIEW AND QUANTITATIVE SUMMARY

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Purpose: This paper reviews the use of simulated patients in pharmacy practice research.

Methods: A literature search of Medline, Embase and IPA from inception to 2005 identified all articles using simulated patients in pharmacy practice. MeSH terms used included pharmacy, pharmacist, pharmaceutical services, research, and patient simulation. Data extracted from retrieved articles included location of the research, purpose or objectives, number of scenarios, number of pharmacies, numbers of case presentations, follow-up actions, etc. Data tabulation involved simple descriptive statistics.

Results: From the 63 articles found, the majority, 35% (n=22) were from the United States. Seventy-eight percent (n=49) were research reports, 13% (n=8) were surveys, 8% (n=5) were research letters, and 2% (n=1) was a commentary report. Only 10% (n=6) of the articles addressed the issue of ethics. The number of articles is increasing in a linear fashion (y = 1.8518x - 3651.5, R2=0.97) from 1969 to 2005. In 41% of the studies the data collectors presented themselves as sick patients; 32% pretended to be a relative of a sick patient, and 28% asked for general information about a drug. 5,905 pharmacies were surveyed for an overall total of 9,072 case presentations. The majority of the proposed objectives (73%) were to measure appropriateness of advice given by the retail pharmacist. The most used follow-up was 'responded to questions asked' in 69% of the cases.

Conclusions: Simulation patient's technique has been widely used in pharmacy practice research. Future research should analyse the quality of such studies.

AS-P-006

THE USE OF SIMULATED PATIENTS IN PHARMACY PRACTICE RESEARCH: PART B. QUALITY ASSESSMENT.

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Purpose: To assess the quality of reporting and methodological issues of simulated patients technique in pharmacy practice.

Methods: A literature search of Medline, Embase and IPA from inception to 2005 identified all articles using simulated patients in pharmacy practice. MeSH terms used included pharmacy, pharmacist, pharmaceutical services, research, and patient simulation. A 22-items modified version of Downs and Black quality assessment checklist was created. The checklist consisted in the presence or absence of specific methodological issues regarding simulated patients technique. Data was grouped (i.e., reporting, internal and external validities), presented in rates of positive outcomes (i.e., presence of methodological issues) and rates were compared using Kruskal-Wallis test.

Results: A total of 59 articles were included in our quality assessment. Overall rates for all issues were 0.513 (SD=0.225). When divided by groups, rates were 0.579 (SD=0.264), 0.684 (SD=0.368), and 0.327 (SD=0.240) for reporting, external and internal validities, respectively (chi-square=38.731, df=3, p<;0.001). Publications' from the 2000's (rate=0.636, SD=0.144) had statistically significant (chi-square=8.926, df=3, p=0.030) overall higher rates, followed by the 90's (rate=0.528, SD=0.235), the 70's (rate=0.511, SD=0.185), and the 80's (rate=0.385, SD=0.255). When rates were categorized by region, no statistical significance was observed.

Conclusions: Simulated patients studies in pharmacy practice showed over 50% of positive outcomes regarding the presence of methodological issues in their contents. Recent studies had higher rates than the ones from previous decades, which suggest quality improvement over the years.

AS-P-007

BEST-PRACTICE CONCEPTS TO TEACHING - LEARNING OF PHARMACEUTICAL CARE OBSERVED AT THE AUCKLAND BACHELOR PHARMACY COURSE, NEW ZEALAND (NZ).

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Introdution: One of the barriers to implementation of pharmaceutical care is the nature of the pharmacy curriculum and the balance between the traditional pharmaceutical sciences and innovative practice and clinical elements. Australia and New Zealand are fortunate in having balanced undergraduate pharmacy curricula founded on an excellent scientific base but attuned to the changing nature of pharmacy practice. Objective: The aim of this work was to describe the best educational practice observed to teaching-learning of Pharmaceutical Care at undergraduate pharmacy course of the University of Auckland, NZ in order to introduce these concepts in Brazil adequately. Methodology: An observational and descriptive study of the Auckland Bachelor Pharmacy course was undertaken by visiting scholar from Brazil. The courses in Pharmacy Practice, Pharmacotherapy and Applied Pharmacotherapy/Pharmaceutical Care were observed in particular detail. Results: A number of best-practice concepts were identified, including: i) linking curriculum design with pharmacy entry-level competencies; ii) a move from 'didactic' to student-centred learning and assessment, with an emphasis on small-group workshops rather than lectures; iii) the use of experiential teaching with a patient focus; iv) the use of role play for developing communication skills; v) the use of Pharmaceutical Care Plans; vi) the use of Objective Structured Clinical Examinations (OSCE) and vii) activities integrated in a fashion similar to the 'real – life' operation of a pharmacy (Model Community Pharmacy with counselling rooms and computer programmes used in Community Pharmacies). Conclusion: The best-practice concepts and strategies observed at Auckland University related to teaching and learning of Pharmaceutical Care may contribute to formation and training of new role of pharmacist professional in Brazil. Support: CAPES – Brazil, Federal University of Ceara - Brazil; The University of Auckland - NZ

AS-P-008

COMMENCEMENT OF THE NEW SIX YEAR PHARMACY PROGRAM IN JAPAN AND IN PARTICULAR, AT HOKKAIDO PHARMACEUTICAL UNIVERSITY

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In Japan, the pharmacy education system is changing in 2006, with separation into two curriculum tracks: a traditional 4-year program with laboratory -orientation, and a new 6-year licensure-oriented program. This change was made to accommodate the strong demand for high quality pharmacists as health care providers for pharmaceutical care. In 2006, many Japanese pharmacy schools are offering the 6-year program, and most of the enrolled students have the aim of becoming pharmacists. (Estimated student enrollment in 2006: 1253 for 4-year program, 10350 for 6-year program). The Pharmaceutical Society of Japan (PSJ) proposed the model core curriculum for pharmacy education, and each pharmacy school has been preparing its program according to PSJ's core curriculum.

Since 1993, Hokkaido Pharmaceutical University (previously known as Hokkaido College of Pharmacy) has been developing the original program with a strong focus on clinical pharmacy education. It includes an intensive school-based clinical pharmacy practice, emphasizing clinical problem solving. In this presentation, the new 6-year program at Hokkaido Pharmaceutical University will be unveiled, and the new pharmacy education system in Japan discussed.

AS-P-009

PRESENT STATUS OF PBL IN PHARMACY EDUCATION IN JAPAN

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The questionnaire concerning the present state of PBL was sent to Presidents/Deans or affairs in charge of total number of 62 faculties/universities of pharmacy in Japan (17 of national and public, 45 of private institutions), in June 2005. The questionnaire recovery rate was 72.6%. 34% of institutions have already now adopted PBL in their education, and PBL-non-adopted institutions were 57%. 75% of national/public institutions were indifferent to bring PBL in pharmacy education, compared to 49% of private institutions. In 15 institutions that have experience of PBL, seven institutions performed the PBL for the graduate students, and all of 15 institutions have practiced PBL to the undergraduate students, especially first grade students. The reply to the questionnaire that the most of institutions have practiced for freshmen let us guess a possibility that they answered including kinds of group studying. However, 84% of institutions that have not adopted PBL had the intention to adopt such method from now on. 28% of institutions have already had actual plans, and 66% of all institutions suggested adoption of PBL into the six-year education. Especially such tendency was remarkable in the private institutions.

Conventionally, the mainstream of conventional pharmacy education in Japan is the 'Knowledge' education, besides Pharmaceutical basic science and research education. Nevertheless, the results of the survey have suggested a tendency that PBL will spread in the healthcare-directed pharmacy education as well as medical education in Japan from now on.

AS-O-001

A NEW PROBLEM-ORIENTED AND STUDENT-CENTERED PHARMACY CURRICULUM AT UTRECHT UNIVERSITY THE NETHERLANDS

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After criticism of the Visitation Committee Pharmaceutical Education in the year 2000 (knowledge oriented curriculum; disproportionate balance of knowledge, skills and attitudes; weak internal coherence; limited orientation on the pharmacy profession) in 2001 a completely new problem-oriented pharmacy curriculum was developed at Utrecht University, the Netherlands.

Steps in the curriculum development were establishment of required competencies (end-terms), establishment of relevant educational objectives (knowledge, skills, attitudes) and evaluation of new educational insights (problem-oriented learning). The curriculum was structured in a way that the programme has a concentric built-up. Year 1: level of acquintance. Year 2 and 3: level of understanding (mostly thematic/integrated blocks and a few methodological blocks). Year: 4-6: level of professional expertise (patient or product-oriented; integrated blocks and rotations). The two basic educational forms used in the curriculum are: problem-based learning (students study individually on the basis of problems and they brainstorm and report in tutor-groups) and project-based learning (students function as a group and have to finish concrete products like dossiers, posters, conferences etc.). To support the creation of adequate and balanced thematic/integrated blocks, content, skills and attitude lines were identified and faculty was made responsible for the different lines. In september 2001 the new curriculum started and in July 2004 all blocks of the 6-year curriculum were given at least once. At the conference the opinion/first experiences of the students and teachers about the new curriculum will be presented.

AS-O-002

PHARMACEUTICAL EDUCATION IN CHINA

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The pharmaceutical education in China has developed rapidly in the past five years. There were 62 pharmacy colleges or schools in 2001 offering B.S. in pharmacy programs and in 2005 the number increased to 239. The enrollments of undergraduate students and graduate students in pharmacy have also grown dramatically, from 8,900 in 2001 to 19,700 in 2005. The main reason of rapid growth of enrollments was the higher employment rate of competent pharmaceutical students. Many pharmacy schools in Medical colleges have merged into Universities. The undergraduate students in pharmacy in China mainly specialized in traditional Chinese medicine, pharmaceutical engineering, pharmaceutics, drug management and administration, biological technology. There are only a few colleges or schools offer training programs for clinical pharmacist like the six-year course of Pharm.D. in America. The training of clinical pharmacists for counseling patients on proper use of medicine in China is just in the beginning and the existing 'clinical pharmacists' in China can not work with the Medical Doctors to establish a drug therapy scheme for patients because of the lack of medical and therapeutic knowledge. Upon graduation, the four-year B.S. students in pharmacy must have completed 3000 hours and more than 30 courses training programs in the area of humanities and social sciences, public basic science, basic medical sciences and pharmacy. The pharmacy curriculums mainly include pharmacology, medicinal chemistry, natural medicinal chemistry, pharmaceutics, pharmacognosy,pharmaceutical analysis, biochemical pharmacy, traditional Chinese medicine etc. Students of pharmacy are mostly employed in hospital dispensaries or social drug stores, academy or universities, enterprises for drug study and production or circulations.

AS-O-003

USING PATIENTS TO HELP TEACH PHARMACY STUDENTS COMMUNICATION SKILLS: AN EVALUATION

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Aim and methods: To work effectively as a pharmacist means listening to people as well as talking to them. This paper describes the use of patients to help pharmacy undergraduates develop their communication skills.

Twenty-six patients with long-term conditions were recruited via patient support groups, and invited to sessions at the university. Students worked in pairs: one student talked to the patient and one observed. The roles were then reversed. After the session, students and patients completed an evaluation form, and 14 patients were interviewed in depth. With consent, interviews were taped and transcribed.

Results: All 112 final-year undergraduates took part; 85% provided feedback. The vast majority felt the experience had helped them in some way. Initially, some students felt inhibited about asking personal questions. After self-reflection, they could see why such questions might be necessary, and gained the confidence to ask them. Students also gained an awareness of the impact that illness and treatment had on patients' lives, and realised the importance of developing rapport.

In the interviews, patients felt more at ease with the students who showed empathy. Patients saw their involvement with pharmacy students as a way of 'investing in the future' by creating pharmacists who were patient-focused. They also provided students with an 'expert view' of their illnesses. Helping to teach students was seen as a way to repay the National Health Service for the treatment that patients had received.

The sessions enhanced patients' self esteem and confidence, enabling them to air their feelings and opinions regarding their illnesses and relieved loneliness. Some also learned something about their illnesses and their medicines.

Conclusions: Both students and patients gained from these sessions. The use of patients as active teachers needs to be explored and developed.

AS-O-004

PROFESSIONAL EDUCATION FOR PHARMACISTS IN SAUDI ARABIA

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Background: In the last couple of years the pharmacy profession has moved from the traditional pharmacist role in only dispensing medicines to a more diverse profession. This transition has increased the need for programs that provide pharmacists with the opportunity to improve their education and/or career. The need becomes more obvious knowing that the number of pharmacists in the Kingdom of Saudi Arabia is estimated to be 5000 pharmacists working in around 3236 community pharmacies, 331 hospitals and about 1000 health care centers.

Objectives:The primary objective is to explore the need of continuing professional education in the form of postgraduate studies and residency programs in the kingdom. The secondary objective is to evaluate he opportunities and the quality of available programs compared to an international standard.

Methodology:The study is divided in to two parts. Part I involves comparing available programs in the kingdom that involves comparing the curriculum, acceptance process, and faculty credentials as well as preceptors specific characteristics. Part II involves a questionnaire for practicing pharmacists, and coordinators of postgraduate studies and residency programs. The aim is to take their opinion and feedback about the current programs.

Conclusion:There is limited number of postgraduate programs available in Saudi Arabia. The total number of acceptance every year is not matching the expected needs. Many factors have been discussed. Pharmacists, health care institutions, postgraduate programs providers should work together to overcome barriers that might make these programs efficient in terms of quantity and quality. The finding of this study might have an impact on the future of continuing professional education for pharmacists in the kingdom and the pharmacy profession in general.

AS-O-005

MEDICINE PROFILES – AN INTERACTIVE IT-BASED TRAINING PROGRAM

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Background
Drug-related problems have major health implications for patients and heavy economic consequences for society. If we are to help bring about solutions, it is important to have access to tools that can strengthen competencies to identify, solve and prevent drug-related problems.
Purpose
Therefore, an IT-based training program was designed and can be accessed on www.nycoversitetet.dk. Containing 100 medicine profiles and built-in testing module, the program gives interested participants the opportunity to improve their skills in identifying, solving and preventing drug-related problems.
Target group
The primary target group for the program is pharmacy students and pharmacists at community and hospital pharmacies. Secondary target groups in the health sector (doctors, for example) can also use the training program to advantage.
Method
The training program tests participants' responses to information provided by medicine profiles. On level one, participants must decide whether a medicine profile gives rise to from 0 to 8 drug-related problems. Each profile is accompanied by a mini journal that provides the necessary information about the patient's illness and any symptoms. At the very end of the training program, it is also possible to take a comprehensive test in identifying, solving and preventing drug-related problems.

Conclusion and perspectives
Fifteen practicing pharmacists and five pharmacy students tested the program before it was launched on the Internet. In autumn 2005, fourth-year pharmacy students used the training program with great success. Therefore, under the University's new Degree Regulations coming into force in 2007, the training program will be a compulsory segment of the examination pharmacy students take as part of their pharmacy clerkship.

AS-O-006

SUPPLEMENTARY PRESCRIBING IN PRACTICE: DESIGNATED SUPERVISING MEDICAL PRACTITIONER'S EVALUATION.

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Cardiff University ran its' first Supplementary Prescribing programme for pharmacists and nurses in 2004. Essential to the success of the course were the Designated Supervising Medical Practitioners (DSMPs). The aim of this study was to establish the attitudes and opinions of DSMPs regarding Supplementary Prescribing as a subject, the course and the future of prescribing by non-medical health professionals.

A questionnaire and covering letter were developed and sent to all 47 DSMPs. After 14 days, a follow-up letter and questionnaire were sent to all non-responders. Data was anlysed using SPSS 12.0.1

A response rate of 74.5% was achieved (n=35/47). Reasons for their involvement in the course included to improve patient care, to utilise the different skills of the healthcare team and to regularise what was already being done by the nurse/ pharmacist. Overall the respondents believed that the allocation of study days, learning in practice and directed study was appropriate. The main topics they covered during the learning in practice included development of a clinical management plan, the consultation process and to accurately assess patients and critically evaluate therapeutic options. The majority of respondents felt that an Objective Structured Clincial Examination (OSCE) was a suitable way to examine some of the competencies. Subsequent to the course, 57% had a working relationship with a Supplementary Prescriber; however only 11 believed that they were benefiting from it. Strong support for Independent Prescribing being practised outside of the medical profession was expressed; however the majority felt that more time learning in practice with the DSMP and in an academic setting was required.

In conclusion DSMPs were engaged in Supplementary Prescribing. However, there is a need for organisations to have effective strategic plans for implementing it in order that the full benefit of such a development is achieved.

AS-O-007

HOW CAN LEARNING IN PHARMACY INTERNSHIP BE IMPROVED?

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The overall aim of the project was to contribute to quality development of pharmacy practice and pharmacy practice research in the area of pharmaceutical care making the user perspective better integrated. With this presentation we would like to present the results from the Pharmacy-University study about the students learning under their internship. The following question will be answered: Does a pharmacy internship where students are involved in a practice research project produce more relevant outcomes than more traditional learning?

The methods used in the study/ were to combine undergraduate pharmacy education, pharmacy practice development and practice research in an action research designed study. In all, 153 pharmacy students serving their pharmacy internship made up the population for the evaluation. Of these, 107 students participated in the Pharmacy-University study and contributed during the internship by collecting data and presenting the results to the internship pharmacy. A triangulation of methods was used to evaluate student's learning for project participants and non-participants alike, the students carried out a multiple-choice test at baseline and at the end of the study; they were asked to consider a case study at the final part of their internship; and they finally evaluated their own knowledge.

We conclude that pharmacy students are incorporated into a situated learning context during an internship. Most pharmacy students learn from the internship experience, but students who participated in the Pharmacy-University Study learned more than those who did not participate. This implies the creation of a more appropriate learning situation for future pharmacy students.

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AS-O-008

ACCREDITATION OF PORTUGUESE PHARMACY DEGREES

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Introduction
The statute of the Portuguese Pharmaceutical Society (OF), approved by Decree-Law 288/2001, has established a mandatory registration examination to become a licensed pharmacist. It also establishes a professional accreditation process of university degrees in Pharmaceutical Sciences, performed by the OF according to criteria specified in its Admission Internal Rules. Students graduating from an accredited degree will be exempt from the registration examination.

Methods
The process was initiated in the academic year 2003/04 and five faculties (out of seven) have applied for accreditation of their study programmes. Accreditation guidelines were distributed in the end of May 2003, self-evaluation studies were submitted in October 2003, on site visits were carried out in March 2004 and accreditation results became public in July 2004. In October 2004 and in September 2005, the two faculties that could not apply for accreditation in 2003 have submitted their process.

Results
The accreditation process finishes with the presentation of a position paper which includes the recommendations for improvement of the study programme, and the final decision about the process. These recommendations always have in mind that the true focus of the profession is the patient, so it is advocated that early contact with patients should be promoted during the course of the study programme.

After the first round of accreditation processes, in 2004, the Pharmacy Faculties have performed some adjustments to their study programmes in order to meet the recommendations of the OF, working for a future accreditation of their degrees, aiming at the continuous quality improvement of the Pharmacy Education. Additionally, the OF has on its side, made an evaluation of the accreditation process and is currently revising some procedural aspects and accreditation standards. Simultaneously a complete report of the process was submitted to an international audit performed by ENQA.

APS-P-001

CONSUMPTION ANALYSIS OF CARDIOVASCULAR GROUP OF MEDICINES AVAILABLE ON POSITIVE LIST OVER 2002-05 PERIOD IN REPUBLIC OF SRPSKA, BOSNIA AND HERZEGOVINA

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INTRODUCTION.Consumption analyses of medicines enables monitoring of health conditions of population, pharmaco-therapeutical habits, prescribing trends and degree of rational use of medicines when compared with world trends.Among most prescribed are medicines for treatment of cardiovascular diseases as they remain a major cause of death and disability worldwide.AIM.The aim of this article was analyse, comment and compare with worldwide trends consumption patterns in ATC group C medicines in Republic of Srpska over 2002-05 period.MATERIAL AND METHODS.Retrospective study was taken to analyse consumption of medicines in group C available on Health Insurance Fund's positive list. Republic of Srpska is one of two entities in Bosnia and Herzegovina with 1.5 million inhabitants. ATC/DDD methodology was used and results are expressed in number of DDD/1000 inhabitants/day.RESULTS.Group C medicines accounted half of total medicines consumption over 2002-05 period with trend of constant increase.Most prescribed were antihypertensive medicines:ACE (C09) inhibitors, both plain and in combination with diuretic, and CaB (C08). Consumption of beta blockers (C07) and thiazide diuretics (C03) remains still rather low despite incresed consumption. Introduction of lipid lowering agents (statins, only in secondary prevention) instantly led to high consumption, what was initially expected.Although with certain differences most prescribed medicines among comparing countries are also ACE inhibitors, CaB and statins.CONCLUSION. Pharmacotherapy of group C medicines should be more rational, adjusted with treatment guidelines and evidence based medicine. This will lead to cost benefit use of all available resources.

APS-P-002

COST-EFFECTIVENESS STUDY OF THE NINE MOST USED ANTIHYPERTENSIVE AGENTS IN MEXICO

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Introduction: In Mexico, up to date very few pharmacoeconomics studies have been done and pharmacoeconomics constitutes a rapidly development discipline. New health regulations in the country require pharmacoeconomics studies in order to include drugs in the National Drug Essential List. Hypertension control is a pharmacological challenge and a public health issue. Mild to moderate hypertension affect about 25% of the adult population. There are more than forty antihypertensive agents in the Mexican private market.

Aim: To determine the cost/effectiveness ratios of the most used antihypertensive agents.

Methods: A retrospective study from January to December 2005. The setting was the private sector of Mexico. The study was done from the Mexican societal perspective. All antihypertensive drugs were accommodated into 5 main therapeutic classes and the most consumed drug of each class were selected for the cost/effectiveness evaluation. Data sources used were Medline for drugs effectiveness or efficacy (probabilities) and the retailed drug price lists for direct costs. The International Marketing Services of Mexico was also used for drug sales.

Results: The most used antihypertensive by therapeutic classes were: one diuretic (chlorthalidone), two beta-adrenergics (atenolol and propranolol), two calcium channel blockers (amlodipine and nifedipine), two ACE inhibitors (captopril and lisinopril) and two ARB (losartan and telmisartan). According to the efficacy, risk and the therapeutic regimen and total costs the most cost/effectiveness were chlortalidone and atenolol.

Conclusion: The most cost/effective antihypertensive agents to treat mild to moderate essential hypertension are the diuretics and beta-blockers.

APS-P-003

THE ACCESS OF THE MEDICINE AND THE GUARANTEE OF THE INTEGRAL ASSISTANCE TO THE HEALTH: A STUDY ON ITS IMPLICATIONS IN THE DEVELOPMENT OF THE PEMAC IN THE STATE OS THE BAHIA, 2003.

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In the year of 2003, the authors of this work had observed in its professional activity the interference of the Judiciary in the system of dispensation of medicines in bonanza character of the Secretariat of the Health of the State of the Bahia, prevailing many times legal criteria to the technician criteria that regulate the subject.

Ahead by this this study, the process of dispensation of medicines in bonanza character with sights to identify, took as object where measured the interference of legal factors they come occurring in this process in the scope of the State of the Bahia. For in such a way an empirical research will be carried through contemplating given on actions at Law that come intervening with this dispensation, analyzing the reasons that had given origin to them and if these come of fact intervening of significant form with the process of dispensation of bonanza medicines in the State.

This study it has left of estimated of that the State Program of dispensation de Medicines of High Cost (PEMAC) it is a process in construction, with many points still not regulated. This fact comes favoring the frequency of requests of these medicines through the Judiciary .

Taking as base in you would carry them that they regulate the subject in the range aspects and applicability as well as its tipologies, will be analyzed the data raised on the process of dispensation in the Bahia. In this line also the legal aspects of the problem will be analyzed; of the dicipline of the actors involved and the suggestions of improvements.

APS-P-004

ESTABLISHMENT AND PROMOTION OF 'THE ESSENTIAL DRUG USAGE INFORMATION FOR PATIENTS DATABASE' IN TAIWAN

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Aims
In 2002, the Taiwan Department of Health requested the Taiwan Clinical Pharmacy Association to establish 'Good Pharmacy Practice' guidelines. Within the field of pharmacy practice, the 'provision of instructions on the proper usage of drugs' has been given the highest priority in the establishment of national practicing standards. In order to ensure its realization and execution, it was importance and necessity to establish a database on the 'Essential Drug Usage Information for Patients'.
Method
We conducted a systemic literature search on the worldwide and nationwide reported incidences of severe adverse drug reactions and major cases reported by the Drug Relief Foundation of Taiwan. Experts in the field were invited to define 'the essential drug usage information for patients' and decide on the extent of investigation. 'The essential drug usage information for patients' refers to vital information that patients must know in order to use the drug safely. It includes important notifications and warnings before, during, and after drug use, whose omission might result in major hazards to the patient.

Result
The drugs that 'may possibly lead to severe adverse reactions' were given the first priority for inclusion in the publication. In order to enable the widespread utilization of 'The Essential Drug Usage Information for Patients' database and meet the actual needs of the public, expert and editing committees were established. The contents of the database and the materials to be published were standardized. Drug information booklets and instructional brochures covering 10 categories of 97 drug ingredients were written using layman's language and from the general public's perspective.

Conclusion
The list of drugs and categories will continue to expand in the future. The drug use instructional brochures will be published simultaneously, and the 'Essential Drug Usage Information Website' will be periodically maintained and updated, thus establishing a complete and comprehensive information system.

APS-P-005

THE EFFECT OF PHARMACY ADMINISTRATIVE INTERVENTION ON MEDICATION ERRORS

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Aims: Medication errors occur most often at the stages of ordering during hospitalization and they were much more likely to be intercepted earlier. Efforts to reduce the numbers of ordering errors may reduce the costs of care through pharmacist-review mechanism. We used an approach of 'system thinking' to analyze the elements and identify the problems involving in the prescribing process. Inventing new polities to solve the problem in order to decrease the risk of medication errors.

Methods: A retrospective study of reported data from August 2003 to November 2005 was conducted in a medical center to analyze the effect of pharmacy administrative interventions, including feedback error to the physician, present alert in CPOE (Computerized physician order entry) system and pharmacists education.

Results: The errors dropped within the range from 29.5% to 94.7% after presenting alerts in the CPOE system individually. The alerting signals will emerge if there is an irrational order in the prescribing process, including duplicate, dosing duration, dosing frequency, dosing preparations, contraindications, route of administration and drug interactions. The CPOE system also alerting impaired renal function and showing the result of creatinine test on the patient medication profile as well. Besides, we found that the medication errors reduce apparently after feedback error to the physician.

Conclusions: Pharmacists must have an unwavering commitment to the priority of preventing medication errors and improving patient health outcomes. Information technology is a tool to assist pharmacists in identifying and solving the problems in order to decrease the risk of medication errors.

APS-P-006

DRUG DELIVERY PROCESS IMPROVEMENTS OF INPATIENT PHARMACY

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Aim: 'Continuous quality improvement' is a method motivating healthcare professionals to improve the daily routine duty in medical industries. The collaboration between clinical pharmacy and healthcare management is a breakthrough goal to effort. The drug delivery process in pharmacy should provide medication accurately in time under limited manpower. Moreover, process improvement is a realistic way may help to enhance the quality of patient-focus pharmaceutical care.

Methods: After analyzing the steps in the drug delivery process of inpatient pharmacy, there are five main causes affecting the delivery timing: 1.computer or system error occurred while data linking from the ward to the pharmacy 2.assign the swabs, prescriptions and medication profiles to the individual pharmacists 3.dispensing 4.review the prescription 5.confirm the medication item. We used the tool of Program Evaluation and Review Technique/ Critical Path Method, PERT/CPM)to identified the critical steps in the entire delivery process, and introduced a serial of activities in the process to shorten the delivery time.

Results: The delivery time decrease to 53 minutes from 116 minutes after process improvement and 1.22 manpower can be saved. On the other side, we found that there were 44% detentions of the prescription in the ward. It may influence the quality of care and cause high return rate of un-use medication.

Conclusions: The accuracy and timing in the drug delivery process can be controlled by critical path improvement. We believe the electronic signature legislation may skip through some steps in the delivery process and save further delivery time to optimize the drug therapy.

APS-P-007

VETERINARY ANABOLIC STEROIDS UTILIZATION BY MALE ATHLETES IN GYMS OF MEXICO CITY

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Abstract

Introduction: The anabolic steroids are use in a common way for adjuvant cancer therapy and some hematic diseases. As a result of the drug anabolic effects an enhancement of body building occurred as well as an improvement in the physic performance: Consequently, many athletes use and abuse anabolic drugs and in many cases they might suffer irreversible damage to the their health. Aim: To evaluate the level of utilization of veterinary anabolic steroids in 'gyms' or health centers in Mexico City. Method: A total of 100 male athletes between 18 and 50 years old were surveyed. 15 items structured questionnaire was used. Results: 16% (n=16) of the athletes used anabolic steroids and 91% of them admitted to consume at least one or more veterinary anabolic steroids.70 % of the athletes knew the use of anabolic steroids. 47% were willing to use veterinary anabolic steroids if they would get some physical benefit. The results showed that the anabolic steroids risk use increases with the age of the athletes and the time training period. The age group ranging from 28 to 44 years is the most susceptible one to the use of some anabolic steroid. The main reasons for using veterinary anabolic steroid instead of human presentations the direct costs (veterinary steroid are cheaper than human ones) and the access without a prescription is easier. Conclusion: In the study sample, a widespread use of veterinary anabolic steroids was found. Mexican young adult athletes had more preference for anabolic steroids than older ones.

APS-P-008

PHARMACEUTICAL CARE:MODEL FOR THE CARE PHARMACISTS CAN PROVIDE IN THE BRAZILIAN FAMILY HEALTHCARE PROGRAM FOR PRIMARY CARE.

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Background: Pharmaceutical care and Brazilian primary care strategy, the Family Healthcare Program (PSF), have the individual as the center of their practice based on continuous multiprofessional team work acting on total health promotion, prevention and cure or control of individual diseases. Pharmacists have to assure continuously that everyone uses the necessary medication for the best outcome, does not use the unnecessary ones, and to assure the individual has access to the necessary cost-effective medication. Collectively, the Pharmaceutical Care and PSF goal is to optimize individual and family quality of life, achieving positive outcomes, within their biological, social and economic conditions. A Pharmaceutical Care Program (PAF) was implemented at academic PSF healthcare units to provide individuals with the most appropriate medications following their outcomes and intervening when necessary, along with the multiprofessional team.

Methods: PAF has used PharmCare strategies to identify and solve patient drug-related problems (DRP), and has included medication safety culture to improve rational utilization, from prescribing to patient use. Compliance was monitored by good relationship of individual with the team, and medication chart review pointed potential or actual DRP presented in medical practice.

Results: Implementation of PharmCare principles and medication safety strategies lead to reduction and prevention of medication errors as physicians and students became aware of medication risks. Education on medication is provided, computerized prescribing was introduced, standard medications list to improve access and daily unit-doses like dispensing system for special patients were prepared. Conclusions: Pharmaceutical care and clinical pharmacy activities developed at the PSF units with multiprofessional team solves individual DRP effectively, satisfies patient and his family, and improve significantly rational use and costs.

CBS-P-001

SPINA BIFIDA: - A CONGENITAL THREAT

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Preceding article features a life compatible defect, Spina Bifida, which has been a worry line creasing the browse of several parents. Spina Bifida is a neural tube defect of fetus spine, which remains open, involving missing of bony protection on nerves and incomplete development of brain and spinal cord. It affects 1 in 1200 – 1400 live births with higher incidences in UK, British Isles, Ireland and Wales, and this equal percentage is observed in Northern India. Although folic acid deficiencies, exposure to organic solvents, administration of anti – convulsant drugs are the presumed causes, yet Spina Bifida remains as an idiopathic defect is shown by result of work of observation of many Spina bifida patients. It has dreadful outcomes viz. hydrocephalus, bracing for legs and spine, bowel and bladder dysfunction, fractures, etc. Fetal surgery performed on mothers womb is perhaps the only alternative, once the fetus gets caught by the defect, as there is no drug therapy is available in world, however folate supplementation with avoidance of self medication and unexposure to organic solvents during the pregnancy can, to a certain extent, aid in reducing the incidence of spina bifida.

Awareness of Spina Bifida, recommended drug therapies, practicing some yogic methods are techniques to handle Spina Bifida. Hence cam paining about Spina Bifida in villages, places where people are unaware about this disease would definitely reduce the percentage of Spina Bifida.

Possible recommendations of yogic treatments, suitable drug treatment rather to operate (surgery) and methods of detections of Spina Bifida would be future aspects of study.

CBS-P-002

PHARMACOKINETICS OF TRAMADOL ADMINISTERED BY I.V. AND I.M. ROUTES TO FEMALE DOGS SUBMITTED TO OVARIOHYSTERECTOMY

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INTRODUCTION/OBJECTIVE
The pharmacists have to be enrolled in multidisciplinary groups of research, mainly those evolved with medicines. In this way, the profession is facing a great challenge in veterinary medicine. Tramadol has been used at Veterinary Hospital of University of São Paulo as analgesic after ovariohysterectomy (castration) of female dogs by intravenous (i.v.) route. Therefore, there is a lack of pharmacokinetics data of tramadol in this animal specie. Thus, the aim of the present work was to evaluate the pharmacokinetics (PKs) of tramadol following i.v. and intramuscular (i.m.) administration of this drug in female dogs submitted to castration, in a multidisciplinary group composed of pharmacists and veterinarians.
METODOLOGY
The pharmacokinetics of tramadol were examined following i.v./i.m. administration to ten female dogs submitted to ovariohysterectomy (dosage=4 mg/kg). Tramadol was analyzed by HPLC with UV detection.

RESULTS
In relation to i.v. administration, the values to the PK parameters were: half-time for the distribution process ($t1/2d = 0.47 \pm 0.03$ h); volume of distribution at steady state ($Vd(ss) = 1.89 \pm 0.20$ L/kg), total body clearance ($Cl = 1.05 \pm 0.21$ mL/h/kg), half-life of elimination ($t1/2\beta = 4.75 \pm 0.28$ h). In relation to i.m. administration the values was the same as to i.v. only to CL. Moreover, statistically differences between parameters obtained after i.v. and i.m. were significant: MRT, $t1/2\beta$ and Vd (area). The F was $36.00 \pm 8.14\%$.

DISCUSSIN/CONCLUSION
Many aspects of veterinary pharmacy are analogous to human-oriented pharmacy, though likely to differ markedly in the scale of dosage and route of administration. In this study we proposed a new route for tramadol administration, which could represent an improvement in the analgesia procedures currently employed in dogs after castration. Yet, the results reflect the different invasion kinetics between human and dogs.

CBS-P-003

BIOPHYSICAL CHARACTERIZATION OF BEE VENOM FROM APIS MELLIFERA BY FT-IR MICROSPECTROSCOPY

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Aims: The purpose of this study was to investigate the infrared characterization and secondary structure of bee venom by FT-IR microspectroscopy.

Methods: The bee venom from Apis mellifera was purchased from SIGMA and used without further purification. Infrared spectrum in the range 4000-450 cm-1 was recorded on Perkin-Elmer Spectrum One FT-IR spectrometer using solid samples pressed as pellets in KBr. Secondary-derivative analysis relative to the original infrared spectra and curve-fitting analysis spectra were analyzed with Grams/32 AI software.

Results: The region between 4000 and 3100 cm-1 is dominated by rather broad spectral features resulting from O-H stretching modes (~3400 cm-1) and from N-H stretching modes (amide A ~3300 cm-1 and amide B ~3030 cm-1). The region between 3100 and 2800 cm-1 exhibits the C-H stretching vibrations of –CH3 and <CH2 functional groups. The region between 1800 and 1500 cm-1 is dominated by the conformation-sensitive amide I and amide II bands. Complex absorption profiles are observed between 1300 and 1500 cm-1, arising predominantly from <CH2 and <CH3 bending modes of lipids, proteins, and ring vibration of nucleic acids. Around 1240 cm-1, superimposed bands typical of different <P=O double-bond antisymmetric stretching vibrations of phosphodiester, free phosphate, and monoester phosphate functional groups are observed. The spectral region between 1200 and 900 cm-1 is generally dominated by the symmetric stretching vibration of PO2- groups in nucleic acids and a complex sequence of peaks due mainly to strongly coupled C-C, C-O stretching and C-O-H, C-O-C deformation modes of various oligo- and polysaccharides. The region between 900 and 600 cm-1 exhibits a variety of weak but extremely characteristic features superimposed on an underlying broad spectral contour.

Conclusions: The secondary structure composition of bee venom from Apis mellifera was estimated as 29.56% beta-sheet, 42.58% beta-turn, 13.39% alpha-helix, and 14.47% random coil.

CBS-P-004

SPECTROSCOPIC INVESTIGATION OF THE INTERACTION BETWEEN HUMAN LUNG CANCER LINE A549 WITH COLCHICINE

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Aims: This study conducted the microscopic mapping of the human lung cancer line (A549) to obtain information on the spatial distribution of cancerous cells. The aim of this study is to investigate the nature of intracellular interaction of colchicine with some macromolecules using IR spectroscopy.

Methods: The infrared spectrum of human lung cancer line (A549) was obtained using a Perkin-Elmer Spectrum One FT-IR spectrometer equipped with a Perkin-Elmer AutoIMAGE IR Microscope and a liquid nitrogen-cooled mercury-cadmium-telluride (MCT) detector and a zinc selenide attenuated total reflectance (ATR) prism. For each spectrum, 128 scans were performed at a spectral resolution of 4 cm-1, with a normal range from 4000 to 700 cm-1. The second-derivative spectra were also used to confirm the peak positions and assignments of the IR spectra.

Results: The alpha-helix peak is at about 1650 cm-1. The beta-sheet peaks are at between 1600–1640 cm-1 and the random coil peak is at about 1640 cm-1. The antiparallel beta-sheet peak is at about 1670 cm-1. The beta-turn peaks are at in the regions of 1655-1700 cm-1. After treating with colchicines, the A549 cells' amide I peak moved from 1650 cm-1 to 1649 cm-1. After treating with colchicine, the alpha-helix peak of A549 cells moved from 1650 cm-1 to 1649 cm-1, the beta-sheet peaks of A549 cells moved from 1635 cm-1 to 1632 cm-1, 1627 cm-1 to 1622 cm-1, the random peak shifted from 1643 cm-1 to 1642 cm-1, and the beta-turn peaks shifted from 1682 cm-1 to 1680 cm-1and 1695 cm-1 to 1691 cm-1, respectively.

Conclusions: These results imply that the secondary structure contents of alpha-helix, beta-sheet, beta-turn, and random in A549 cells were induced by colchicines with increasing concentration.

CBS-P-005

DISTRIBUTION OF HCV GENOTYPES IN SOUTHERN BRAZIL

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Hepatitis C virus (HCV) is widespread and responsible for more than 60% of chronic hepatitis cases. Hepatitis C constitutes an important public health issue since this viral infection is considered to be the major risk factor for hepatocellular carcinoma in the world.

The determination of HCV genotypes is very important for epidemiological surveillance and for the treatment response in clinical settings, because it defines the time of treatment with anti-viral drugs. Furthermore, the molecular techniques are considered as 'gold pattern' in diagnostic of hepatitis C, and nowadays the test of virus genotype in Brazil is demanded by the Health Secretary State for the free supply of the medicines (interferon and ribavirina).

In the present study, the prevalence of hepatitis C virus (HCV) genotypes was studied in the plasma of 628 HCV-RNA-positive samples collected at LACEN-Rio Grande do Sul (RS), obtained in the period between September/2001 and September/2003. Reverse transcription-polymerase chain reaction (RT-PCR) products from 5' noncoding region were digested with Hinf I e Mva I and analyzed by restriction fragment length polymorphism (RFLP). Fragments were analyzed and three genotypes (1, 2 e 3) were demonstrable, presenting the following frequencies: 53,82% (338) for genotype 1, 5,41% (34) for genotype 2 and 40,76 % (256) for genotype 3. The average age of the studied population was 45 years old, being that 56% (351) were male and 44% (277) were female. These results show that genotype 1 is the most prevalent in Rio Grande do Sul. However, our study has demonstrated an unusual high prevalence of genotype 3, in contrast to others states in Brazil and in according of published data made in this state.

Systematic examination of HCV sequence variation has important implications in understanding HCV biology and could open novel avenues for anti-viral therapy. Therefore, studies in HCV genotyping should be conducted to determine the prognosis and follow up of infected patients.

CBS-P-006

TITRE OF ANTITPO AND ANTITG ANTIBODIES IN HEALTHY POPULATION OF BRCKO DISTRICT, BOSNIA AND HERZEGOVINA

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In Bosnia and Herzegovina as a state , few data exist related to incidence and screening of thyroid autoimmune diseases. Having in mind the amount of stress in this zone, incidence of postwar syndrome, nutrition deficient in iodine, it was of general interest to screen random population of individulas for possible autoimmune etiology of thyroid disease. Population studied was that of Brcko District which consisted of 30 individuals of average age 25-57 years. This population was further subdivided and 15 females and 15 males who were tested separately for the activity of anti TPO anti TG antibodies. For the tested population, diseases of other organs or organ systems such as Addison, pernicious anemia or diabetes type 1 were excluded from teh study. For the analysis of antibodies, Elecsys antiTG and Anti Tpo test kits were used. Average concentration of anti Tg was 90,1 while average concentration of anti TPO was 54,7, based on the screening of total population. Within examined population, 26,6 % of healty individulas were found to have pathological anti TPO results , compared to 13,3 for antiTG. There were no significant differences at the level of two antibodies for the total population screened. However, when only pathological results were analysed , significant difference was observed at the level of antiTPO antibodies between male and female population. This work seems to indicate high percentage of antibody titer in the examined population which suggests further studies are needed at this level.

CBS-P-007

ADDITIONAL EVIDENCE OF ANTIINFLAMMATORY EFFECT OF TACROLIMUS IN A MOUSE MODEL OF THE AIR POUCH.

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Objective: The aim of this study was: 1) To evaluate the effect of the Tacrolimus (Tac) administered by intraperitoneal route (i.p.) in the mouse air pouch model induced by carrageenan; 2) To compare the effect of Tacrolimus and Indometacin (Indo) in relation to the same studied inflammatory parameters (leukocyte, exudation, myeloperoxidase (MPO) and adenosine-deaminase (ADA) levels).

Methods: Swiss mice (25-30 g) received subcutaneous (s.c.) injections of 1.5 ml of sterile air for 3 alternate days in order to produce an air cavity. On the 6th day the animals received 0.5 ml of carrageenan (Cg 1%, s.c.). The studied inflammatory parameters were analyzed 24 h after. The animals were pretreated 0.5 h before Cg with Tacrolimus (1.0 mg/kg, i.p.) or Indometacin (5.0 mg/kg, i.p). In this experimental protocol, three groups of animals were analyzed: 1) those treated only with Cg (s.c.), 2) those treated with Tac (1.0 mg/kg, i.p) plus Cg (s.c.), and 3) those treated with Indo (5.0 mg/kg, i.p) plus Cg (s.c.). To evaluate the exudation, the animals received 0.2 ml of Evans blue dye (25 mg/ kg, i.v.) 1 h before the Cg administration. The statistical differences between the groups were determined by analysis of variance (ANOVA) or by Dunnett's or student's T tests. Values of $P < 0.05$ were considered significant.

Results: Tacrolimus, as well as Indometacin, inhibited the leukocyte influx ($P<0.01$), polimorphonuclears ($P<0.01$), mononuclears ($P<0.05$), exudation (mcg/ml) ($P<0.05$), MPO levels (mU/ml) ($P<0.01$) and ADA activities (U/l) ($P<0.05$).

Conclusion: Tacrolimus showed important antiinflammatory properties and the majority of its action is similar to that induced by Indometacin.

CBS-P-008

ANTIINFLAMMATORY EFFECTS OF TACROLIMUS IN MOUSE MODELS OF INFLAMMATION.

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Objective: The aim of this study was to evaluate the antiinflammatory effects of Tacrolimus (Tac) in two animal inflammation models.

Methods: Mouse pleurisy was induced by a single intrapleural injection of 0.1 ml of carrageenan (Cg, 1%) into the right pleural space following methodology described by Saleh et al., 1996. The inflammatory parameters (leukocyte, exudation, myeloperoxidase (MPO) and adenosine-deaminase (ADA)) were analysed 4 h after. The air pouch model was induced by injection of 0.5 ml of Cg (1%) by the subcutaneous route as described by Bottomley et al., 1988 and the same parameters were analysed 24h after. In a first set of experiments, different doses of Tacrolimus (0.5 to 1.5 mg/kg; i.p.) and the time course profiles (0.5 to 72 h) were tested in the mouse model of pleurisy. The dose of 1.0 mg/kg, administered by intraperitoneal route 0.5 h before Cg was the best dose for the inhibition of cell migration and exudation. Then, in the following experiments, in both pleurisy and air pouch models the animals were pretreated 0.5 h before Cg with Tacrolimus (1.0 mg/kg, i.p.).To analyze the exudation the animals were pretreated 1h before Cg with Evans blue dye (25 mg/kg, i.v.). Significant differences between groups were determined by analysis of variance (ANOVA) or by Dunnett's or Student's T tests.

Results: Tacrolimus, in both models, inhibited the leukocyte influx ($P<0.01$), neutrophils ($P<0.01$), exudation (mcg/ml) ($P<0.05$), MPO levels (mU/ml) ($P<0.01$) and ADA activity (U/l) ($P<0.01$).

Conclusion: Tacrolimus treatment has antiinflammatory effects on two mouse models of inflammation by reduced the inflammatory parameters.

CPS-P-001

TAKE YOUR BLOOD PRESSURE TO HEART - A COMMUNICATION CAMPAIGN BY THE COMMUNITY PHARMACY PROFESSION

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In February 2006, the 50,000 French community pharmacists were invited by the National Council of Pharmacists with the support of all the profession's organizations, to take part in a health education campaign on hypertension.

This campaign aimed at strengthening the image of pharmacists as health professionals and promoting their competence.

Previous recommendations adopted by the French Health authorities on hypertension had just emphasized the need for health education, prevention and therapeutic follow-up.

A rigorous methodology was adopted for the campaign design and implementation:

Setting up of a steering committee composed of all stakeholder organizations,

Appointment of a scientific committee, to check that the information to be disseminated would be perfectly accurate and validated,

Selection of a communication agency, to develop information tools for the campaign,

Qualitative tests, to make sure that the messages would be easily understood,

Selection and copyrighting of the slogan 'Take your blood pressure to heart ' and of the following phrase, which could be used for further campaigns by the National Council of Pharmacists: 'the pharmacist, my daily health adviser',

Subsequent evaluation of the campaign in March 2006.

The graphics chosen built on the major assets of the French system of drug dispensation:

tailor made pharmaceutical services,

easy accessibility, thanks to the density of the community pharmacy network in France.

The campaign was advertised in local newspapers. Separate messages were designed, respectively, for the professional press and for the general press.

CPS-P-002

TAKE YOUR BLOOD PRESSURE TO HEART- A NATIONAL HEALTH EDUCATION CAMPAIGN ON HYPERTENSION BY FRENCH PHARMACISTS.

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In February 2006, all organizations representing French community pharmacists (the National Council of pharmacists, pharmacists' unions...) met to launch a health education campaign on hypertension led by pharmacists.

The campaign scientific committee included experts in cardiology, experts in patient education and pharmacists, with the aim of validating all the information to be delivered during the campaign.

Professional information on hypertension was provided to all French pharmacists in January 2006. In accordance with the French guidelines on hypertension care, a technical memo was published by the Health and Social Education Committee for French Pharmacy (Cespharm) and distributed to pharmacists through the National Council of pharmacists' journal.

Communication tools were designed to help pharmacists in their educational role toward patients: leaflets for the general public, leaflets for hypertensive patients, posters and badges intended to show the involvement of pharmacists in this campaign. Communication kits composed of these tools were sent to all French pharmacies in January 2006.

Throughout February 2006, numerous advertisements in the regional press encouraged patients to call at their local pharmacy and be informed about hypertension care: recommended lifestyle changes, home blood pressure measurement, adherence to treatment...

A twofold evaluation of this campaign was planned:

assessment of pharmacists' opinion on the campaign through a questionnaire sent to all pharmacists,

assessment of people's opinion on the campaign through a survey among the general public.

The evaluation data is currently (March 2006) being collected.

CPS-P-003

PRIVATE COMMUNITY PHARMACIES CONTRIBUTION FOR THE INCREASING OF INDISCRIMINATE USE OF ANTIBIOTICS IN BELO HORIZONTE CITY, MG.

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Introduction: The indiscriminate use of medicines is influenced by several factors that individually or in conjunction corroborate for an inadequate conduct of pharmalogical therapeutics. This situation becomes more worrisome when the protagonist of such practice are the antibiotics, in that this group of medicine, when they are not rationally used for proven bacterial infections treatment, might be inefficient in the future in front of the real necessity of using them due to the appearing of microbic resistence. Objectives: This work has the objective of doing an evaluation of information quality and to quantify the indications of antibiotics and other medicine carried out by clerks / pharmacists in private community pharmacies, being aware of a possible contribution for the rising of microbic resistence. Methodology: With a form previously developed and standardized simulation by a script, thirty-four private community pharmacies were visited downtown in Belo Horizonte, presenting the problem situation that involved a four-year child, sixteen kilograms, hypothetically having sinusitis / tonsillitis. Result: An outstanding number of pharmacies indicated medicine for the condition presented, and Acetaminophen was the most indicated for treating the symptoms, instead of antibiotics, as expected. Appropriate orientations to the indicated treatment were omitted, most of the times. Conclusion: Surprisingly, it was noticed that a great fraction of clerks / pharmacists hadn't indicated any kind of antibiotic, but oriented to take the children to the physician in order to have a diagnosis and, if necessary, an antibiotic terapic prescription. To a symptom relief, there were many analgesic and antithermic indications. However, despite this favorable situation, it was observed a defective supplying of information when occurred an indication, even regarding the contra-indication of acetylsalicylic acid for children.

CPS-P-004

CLINICAL PHARMACY IN A BASIC UNIT OF HEALTH

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ABSTRACT

The Clinical Pharmacy appeared as a new profissional practice with focus on patient, pratice the direct assistance with the users of the drugs and create, also, the possibility to closed relation with other professionals, though of information about drugs. The present work presents as objectives, to tell and to evaluate the experience of the Clinical Pharmacy in a Basic Unit of Health. The work began with the description of the activities of Clinical Pharmacy developed, and later the evaluation of the results of the activities was accomplished contemplated in the levels pressóricos of those patient ones, as well as the evaluation of the service by form application. Before the obtained results, the accomplishment was observed from the activities of sanitary education to the community through individual actions (individual orientation) and collective (lectures and distribution of illustrative material). Starting from the registered patients' Pharmacotherapeutics Record, it was possible to observe the results obtained in the control of the hypertension. In the evaluation of the service of Clinical Pharmacy through a form explored verbalmente was possible to identify the good results and the patients' receptivity as for the service.

Keywords: Basic Unit of Health; Clinical Pharmacy; Arterial Hypertension