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Foreword

On behalf of the International Pharmaceutical Federation, it is with great importance that we bring to you the official FIP Global Pharmacy Workforce and Migration Report.

Human resources for health has been a significant focus of FIP over the last year in the build up to the 2006 World Health Day of the World Health Organization. This report compiles data on many aspects affecting the constantly changing profile of pharmacy human resources around the world. FIP strongly believes that an expertly skilled and competent - but also motivated and professionally fulfilled - pharmacy workforce is of pinnacle importance in the safe and effective delivery of healthcare. FIP is committed to collaborating with Member Organisations to develop an evidence base for action to strengthen the pharmacy workforce.

With this report, we invite Member Organisations and key stakeholders to examine those issues affecting the pharmacy workforce in their own countries, and to join FIP in celebrating the profession and planning for its future direction.

Jean Parrot
President
International Pharmaceutical Federation
All over the world, health care systems are undergoing dramatic changes. As populations age and disease burden increases due to HIV/AIDS and chronic diseases, we see a corresponding growth in demands on health systems and patient needs. The increased pressure on health care systems stretches the health workforce to meet the accelerating demand for health care providers, services and managed care facilities. No examination of these mounting issues is complete without a critical evaluation of global and national human resources. This must be taken into consideration in the development of health, labour and education policies. Data collection is the key initial step to understanding the current health care labour market.

In many countries, pharmacists are the most accessible of all healthcare workers and as such play a key role in the delivery of healthcare services at all levels. In an era of rapidly accelerating change in healthcare delivery, the roles of pharmacists are being constantly redefined. As roles change, competency and training requirements change. Thus it is vital that international data relating to the pharmacy workforce be available to be considered in international and national health care policies and workforce planning.

The International Pharmaceutical Federation developed the Global Pharmacy Workforce and Migration Study with the support of FIP Member Organisations, to build an evidence base on the pharmacy workforce, raise awareness of global trends affecting the workforce and engage partners to develop strategies to address these.

This report for the first time presents global data on the distribution of pharmacists, Continuing Professional Development systems, and migration of pharmacists. This report is one of the major projects of FIP on Human Resources for Health, in the lead up to 2006 World Health Day and the launch of the WHO Ten Year Action Plan for Strengthening the Health Workforce.

The 2006 World Health Day celebrates the healthcare worker on the 7th of April with the theme of Human Resources for Health. The 2006 World Health Report will cover issues relating to health professionals such as pharmacists, physicians, nurses, dentists and allied healthcare workers. This, together with other activities leading up to the day, aim to raise awareness of the need to address issues relating to the distribution, training, competence, capacity, and migration of health professionals.

“Sufficient investment in the recruitment, training, retention and involvement in health policy of health care professionals is the key to the quality and safety of care”
Ton Hoek, General Secretary, FIP

FIP participated in the WHO Human Resources and National Health Systems – Shaping the Agenda for Action Workshop in 2002. This workshop involved a range of stakeholders including ministries of health and professional organisations to identify the following four priorities for action:

• examine and prepare for the effect of HIV/AIDS on the health workforce and workload;
• advocate for fair incentives and motivation to remunerate and retain health workers;
• address and map imbalances regionally and at a country level;
• and collect evidence and explore the effect of strategies to manage the migration of health workers.

Health workers save lives and are the interface between health systems and the community. Imbalances in human resources for health will only exacerbate imbalances in access to quality health care and compromise patient safety. In 2002, the World Health Professions Alliance partners (FIP, International Council of Nurses and the World Medical Association) called for increased attention to patient safety, a health care challenge that is inextricably linked to human resources for health. The WHPA urged WHO, governments and others to examine ways and means of attracting and retaining appropriately qualified health workers.

The FIP Global Pharmacy Workforce and Migration Report serves as an international starting point to provide a snapshot of the current workforce issues in pharmacy and give direction on required actions to build capacity and strengthen the profession. It is the vision of the Federation to set the international
agenda in addressing pharmacy workforce issues and to provide guidance in the development of solutions.

With this report, FIP urges pharmacy professional and regulatory bodies, policy makers, pharmacy education providers, and pharmacists to document the profession, build an evidence base, and develop national strategies and actions to address workforce issues and strengthen the pharmacy workforce as an integral part of the health care system.

References


2. World Health Professions Alliance (WHPA) Press Release. Health Professionals Call for Priority on Patient Safety. Available at: www.whpa.org/pr07_02.htm
The FIP Global Pharmacy Workforce and Migration Study sought to collect global data on the following:

- The distribution of pharmacists according to country, gender and practice area
- Pharmacist shortages and country imbalances in pharmacist workforce distribution
- Continuing Professional Development (CPD) and Continuing Education (CE) programmes for pharmacists
- Regulation, training and certification of pharmacy technicians
- Migration of pharmacists worldwide and registration processes for foreign pharmacists

Surveys and follow up reminders were sent to FIP Member Organisations comprising of pharmacy professional and regulatory bodies. The FIP surveys were developed with the advice of the Human Resources for Health Department of WHO.

Three surveys were developed to focus on:

- Pharmacy workforce
- CPD/CE
- Migration of pharmacists

Literature searches were conducted through PubMed and the internet to find papers and reports on pharmacy workforce studies, CPD/CE systems, and the migration of health professionals.

Population data was taken from the Population Reference Bureau 2005 population statistics (www.prb.org). Country economic classifications were sourced from the World Bank. Data from the online surveys were downloaded into Excel. Other data responses were entered into Excel spreadsheet and analysed. All data was checked to ensure accuracy of data input and where necessary, clarified with the data source. Although very few articles have been published related to pharmacy, a number of country reports and background papers from professional associations and health agencies were used.

Pharmacy Workforce Survey

A survey comprised of 32 questions was designed in consultation with WHO to collect the following information from FIP Member Organisations (see appendix 1):

1. Contact details of personnel responsible for human resources for health
2. Total number of pharmacists
3. Gender distribution of pharmacists
4. Practice distribution of pharmacists
5. Continuous Professional Development programmes and requirements

The survey was available in English, French, Portuguese and Spanish and could be completed either online or in hard copy. A total of 83 member organisations were contacted on the 22nd of July 2005 and 34 organisations responded with data by the 20th January 2006. All member organisations were actively followed up with reminders sent by facsimile, email and telephone.

Continuing Professional Development (CPD) / Continuing Education Survey (CE)

This survey followed the Pharmacy Workforce Survey and was sent to all FIP Member Organisations that responded. The survey was sent to the respondent contact or contact persons responsible for CPD/CE programmes. The following information was collected (see appendix 2):

- Regulatory bodies organising or providing CPD and CE programmes
- Details on CPD and CE system
- Standards and accreditation of CPD and CE providers and programmes
- Incentives for completing CPD and CE programmes and penalties for failing to undertake CPD and CE

The survey was available in English, French, Portuguese and Spanish and could be completed either online or in hard copy. A total of 34 member organisations were contacted on the 24th of November 2005 and 17 organisations responded with data by the 10th of February 2006. Respondents to the pharmacy workforce survey also answered on whether CPD was compulsory in their country. All member organisations were actively followed up with reminders sent by facsimile, email and telephone.
**Migration Study**

Data was collected from ten countries including Australia, Canada, Ghana, Ireland, Kenya, New Zealand, South Africa, Uganda, United Kingdom, and United States of America. These countries were approached along with four other countries (Nigeria, Rwanda, India, and Zimbabwe) who were anecdotally described as having a significant inflow and outflow of pharmacists through migration.

Over 70 pharmacy regulatory boards, professional bodies, Ministries of Health, Pharmacy Faculties, and pharmacists around the world contributed to the collection of data. A survey was sent to professional and regulatory bodies, followed by the Ministry of Health and faculties of pharmacy where additional sources for data were required (see appendix 3). Countries were actively followed up through phone, email, fax and letters. The data was also used to examine imbalances in pharmacist distribution within a country.

Data was collected between the 27th of September 2005 and 10th February 2006. A literature search was also used to gather data where responses were missing and compile relevant findings. The number of active practicing pharmacists was used as the total number of pharmacists where differentiation was provided in the number of registered pharmacists.

The survey collected data on:
- The total number of registered pharmacists in 2005.
- The total number of foreign registered pharmacists in 2005.
- The number of pharmacists graduating per year from the year 2000 - 2005.
- The number of pharmacists that registered from abroad each year from 1995 – 2005.
- The number of pharmacists from abroad that applied for registration from the year 1995 – 2005.
- The countries from which pharmacists were originally registered as a pharmacist prior to application for registration and the corresponding numbers for each country.
- The number of pharmacists migrating to another country each year from 1995 – 2005.
- The application procedure for pharmacists from abroad to register as a pharmacist.

**Pharmacy Technicians Study**

A component of the Pharmacy Workforce Study focused on the pharmacy technician workforce.

The following information was collected from FIP Member Organisations:
- Total number of pharmacy technicians
- Education and training programmes of pharmacy technicians
- Certification requirements of pharmacy technicians

The survey was also available in English, French, Portuguese and Spanish and could be completed either online or in hard copy. A total of 83 member organisations were contacted on the 22nd of July 2005 and 34 organisations responded with data as of the 20th January 2006. All member organisations were actively followed up with reminders sent by facsimile, email and telephone (see appendix 1).

**Study Limitations**

The main limitation of this report is the lack of full details from all countries of the number, distribution, demographics, and migration of pharmacists. Whilst full response from countries in this study was not achieved, a significant wealth of information of the human resources issues in pharmacy in many countries was collected. Many countries were not able to account for pharmacists and describe their practice area or status. In this instance, data may be misleading and further information systems development is required at a country level. Numbers may also be misleading as the distribution of pharmacists within a country may be imbalanced between rural and urban areas. Regional data groupings may not be fully representative but give an indication of trends. Further data is required from non-respondent countries on the workforce and greater study is required to understand the extent of pharmacist migration in non-English speaking countries.

With the constraints of time and limitations of existing country level databases, we were not able to collect data on the age distribution of pharmacists.

Data on the total number of pharmacists was reliant on the information provided by national pharmaceutical associations and/or national pharmacy boards. No verification on the practicing status of the pharmacists was done.

The study did not look at the supply and demand of the global pharmacy workforce in all respondent countries. Pharmacy schools should be engaged in future studies on the pharmacy workforce in order to develop a greater understanding of the human resources situation.