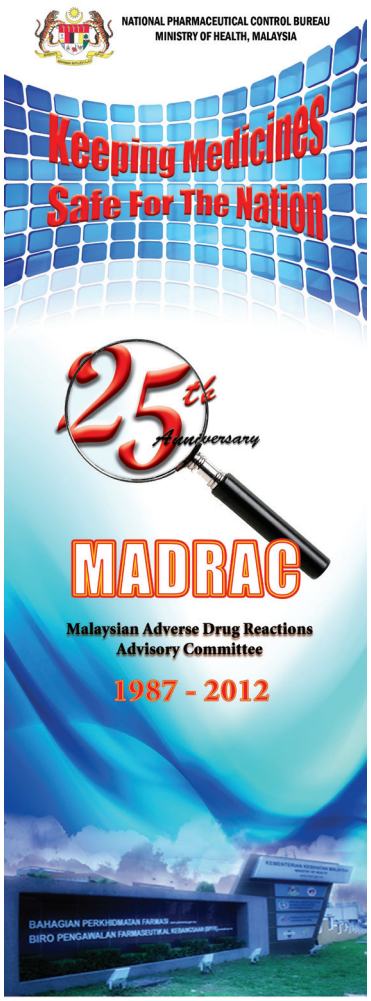
SPECIAL EDITION
DECEMBER 2012
The Malaysian Adverse Drug Reactions Newsletter

MADRAC

1987-2012

Celebrating 25 years of Keeping Medicines Safe for the Nation



MADRAC Members (2009-2012 session)

Front (L-R)	:Cik Sameerah Shaikh Abdul Rahman (Secretary), Datuk Dr. Roshidah Baba, Dr. G.R. Letchuman, En. Tan Ann Ling (Chairman), Dato' Dr. Gun Suk Chyn, Pn. Siti Aida Abdullah
Back (L-R):	Pn. Wan Mohaina Wan Mohammad, Dr. Rohani Jahis, Dr. Lim Chong Hum, Dato' Dr. Tan Chwee Choon, Pn. Rokiah Isahak
Not present	:Datuk Dr. Jeyaindran Tan Sri Dr. Sinnadurai, Dato' Dr. Hussain Imam Hj. Muhammad Ismail

The Malaysian Adverse Drug Reactions Advisory Committee (MADRAC) was established in 1987, under the Drug Control Authority (DCA) to advise DCA on the safety of products registered in Malaysia following assessment of their benefit-risk profile.

Members of MADRAC are appointed by the Director General of Health and serve for a renewable period of three years.

The National Adverse Drug Reaction Monitoring Centre of the National Pharmaceutical Control Bureau (NPCB) became the 30th member of the World of Health Organisation (WHO)'s International Drug Monitoring Programme (IDMP) in July 1990.

Beginning with just the Adverse Drug Reactions (ADR) Monitoring Programme for spontaneous reporting, today, the national centre conducts active pharmacovigilance, looking into signal detection and risk minimisation strategies for pharmaceuticals, biotechnology products, traditional medicines, and vaccines registered for use in Malaysia.

ADR reports are presented at MADRAC meetings for discussion on possible drug safety problems which may warrant further investigation. Report verification of causality assessment is carried out before submission to the WHO Uppsala Monitoring Centre (WHO-UMC) for inclusion in the international WHO database, which currently holds more than 7.7 million ADR reports.

25 years on, MADRAC continues its task to provide information and recommendations to the DCA on local and international drug safety issues. Early risk detection of ADRs facilitates early implementation of preventative measures, thus increasing patient safety.

Adverse Drug Reactions (ADRs) and Pharmacovigilance

Despite the rigorous drug evaluation process for registration, some unknown and unpredictable safety problems may surface only after a drug has been on the market and has been used by a widespread population.
An ADR is officially described as:

'A response to a drug which is noxious and unintended, and which occurs at doses normally used for the prophylaxis, diagnosis or therapy of disease, or for the modification of physiological function.' (WHO Technical Report No 4998, 1972)

Adverse events can range from mild to severe. Serious adverse events are those that can cause disability, are life-threatening, result in hospitalisation or death, or rare birth defects.

This bulletin provides a special focus on pharmacovigilance in Malaysia.

Pharmacovigilance (from the Greek word *pharmakon* i.e drug) is the science and activities of **detection**, **assessment**, **understanding** and **prevention** of adverse effects of medicines, biological products, herbals and traditional medicines, with a view to:

- identify new information about hazards, and
- prevent harm to patients.

(*source: The Uppsala Monitoring Centre, WHO*)

Pharmacovigilance enables early detection of unknown safety problems, determination of adverse drug reaction (ADR) incidence rates, monitoring changes in patterns of known reactions, and identifying possible risk factors. Dissemination of information through pharmacovigilance allows users to make informed decisions about medicines in clinical practice.

ACHIEVEMENTS OVER THE LAST 25 YEARS:

Pharmacovigilance activities are handled by the National Centre for Adverse Drug Reaction Monitoring, NPCB.

Although the centre is best-known for its role in receiving, assessing, recording and analysing spontaneous ADR reports, this is just one of the many activities conducted. The Malaysian Guidelines for the Reporting and Monitoring of Adverse Drug Reactions published in 2002 outlines the responsibilities of product holders and healthcare professionals managed by the centre.
When a safety issue arises, effective risk communication is carried out to all stakeholders. These may include requesting product holders to make labeling changes related to drug safety, issuing Dear Healthcare Professional Communication (DHPC) letters to alert prescribers, releasing press statements to notify the public, and providing feedback to reporters should the need arise.

The evaluation of Periodic Safety Updates Reports (PSURs) for new chemical/biological entities is conducted every 6 months for the first 2 years after registration in Malaysia, and annually for the subsequent 3 years, ensuring all product safety information is updated. Risk Management Plans submitted by the product holders are also monitored by the NPCB Safety Updates Unit. These activities may prompt further safety-related regulatory actions. As a regulatory update last year, Consumer Medication Information Leaflets (RiMUPs) for registered products are approved and uploaded on the NPCB official website.
Open and effective communication is a vital aspect of pharmacovigilance. Safety information is disseminated to doctors, pharmacists and other healthcare professionals via the MADRAC Bulletin, published 3 times a year. In 2011, a new drug safety newsletter called 'Reaksi' was initiated to be issued bimonthly for safety alerts. Summary of ADR reports verified by MADRAC are also provided to state health departments and the respective product holders periodically.

A snapshot in time of Pharmacovigilance in Malaysia

To ensure the steady development and progress of pharmacovigilance in Malaysia, the centre is actively involved in international collaboration with other WHO-UMC member countries including participating in international pharmacovigilance training programmes and meetings. As a WHO Collaboration Centre for Regulatory Control of Pharmaceuticals, attachment training is conducted for foreign health authorities.

Under-reporting of ADRs is a challenge for all national pharmacovigilance centres worldwide. Various efforts have been taken to increase local ADR reporting since the beginning of the programme, such as sending self-addressed 'Reporter Cards' to private practitioners beginning in 1994, establishment of an online reporting system since 1998, conducting numerous workshops, delivering lectures, and participation in local health campaigns or exhibitions. Nevertheless, the National Pharmacovigilance Centre strives to further increase awareness on the importance of reporting ADRs and improve the quality of reports received.

In 2010, the Centre embarked on increasing reporting of Adverse Events Following Immunization (AEFI). The active surveillance of *Human Papillomavirus* (HPV) vaccination, a programme in collaboration with the Disease Control Division, Ministry of Health Malaysia, has led to greater awareness and a large increase in the number of ADR reports for vaccines.

INCREASING TREND IN ADR REPORTING

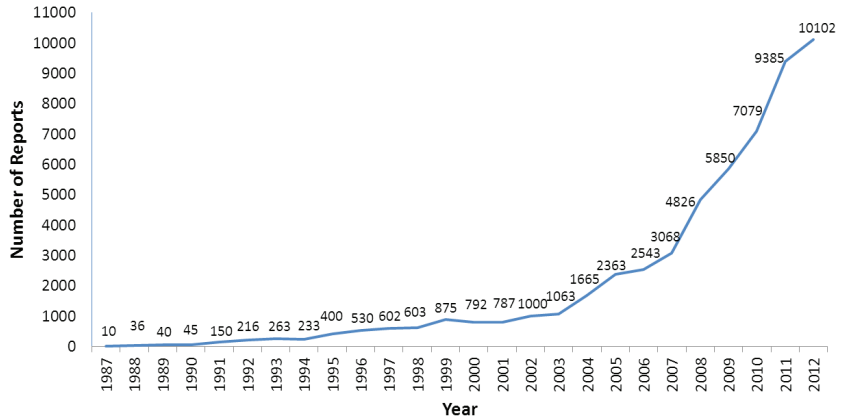
The number of ADR reports received by the NPCB has been increasing rapidly throughout the last 25 years. When it was first established in 1987, just ten (10) ADR reports were received then. As a result of active efforts to promote reporting of ADRs, this number has escalated to 10,102 reports in 2012 (Graph 1).

The WHO recommends that 200 or more reports are submitted per million population[1], which sets a target of about 6000 reports for Malaysia's population of 28.9 million.

Although this target has been achieved, there remains a need to increase ADR reporting especially among private healthcare professionals.

In 2011, 89% of the reports were submitted by Ministry of Health personnel, with only 12 reports received from private general practitioners and 3 reports from community pharmacists.

The development of an efficient online-reporting system, lectures, and promoting ADR reporting by community pharmacists through the Malaysian Pharmaceutical Society (MPS) bulletin are several steps that have been taken to attain more reports.



Graph 1: Number of ADR Reports Received from Year 1987-2012

Sale of Drugs Act 1952: Control of Drugs and Cosmetics Regulations 1984
(amended 2006)

- The product registration holder or any person who possesses any registered product shall inform immediately the Director of Pharmaceutical Services of any adverse reactions arising from the use of the registered product.

Reference:

1. The Uppsala Monitoring Centre, WHO (2000). *Safety Monitoring of Medicinal Products: Guidelines for Setting Up and Running a Pharmacovigilance Centre*.

The Way Forward

These are exciting times for pharmacovigilance. From being seen as a technical activity concerned with monitoring ADRs, it is developing into a broader area with the aim of detecting and preventing potential ADRs while avoiding the premature withdrawal of safe and useful medicines from the market.

Some of the measures planned to improve **detection** of ADRs are to improve quality of reporting thus increasing vigilance, and training reporters to perform causality assessment accurately. Efforts to promote reporting include consumer-reporting through healthcare professionals, encouraging reporting by private healthcare professionals, and electronic submission of reports through the Pharmacy Information System (PhIS). Other measures are providing updated guidelines for reporting and monitoring of ADRs, safety monitoring by pharmacological group, and active surveillance of specific drugs with safety concerns or affecting specific populations, for example in the elderly, children, and pregnancy.

Steps that need to be taken to improve **assessment** of drug safety issues are an improved signal detection system, increased collaborative links between countries to allow assessment and response to drug safety crises, and integration of local drug usage data with pharmacovigilance information.

The **prevention** of ADRs requires ready access to reliable and unbiased drug information at all levels of healthcare. In addition, awareness on drug safety and rational drug use must be increased among health professionals and the public. The integration of pharmacovigilance activities and principles into national drug policies and clinical practice, and improved regulation and pharmacovigilance of traditional and herbal medicines will also help prevent ADRs.

A **research unit** will be developed, focusing on pharmacogenetics research for personalised medicine to prevent ADRs and improve treatment efficacy. Research will also be conducted on the safety of newer products such as biosimilars.