PHARMACOVIGILANCENEWSLETTER

Issue 1, September 2016

MESSAGE FROM THE DIRECTOR GENERAL
DIRECTORATE GENERAL OF DRUG ADMINISTRATION

Pharmacovigilance (PV) secures the health of the public by ensuring the safety, effectiveness, and quality of medicines and other health products. The Directorate General of Drug Administration (DGDA) established the Adverse Drug Reaction Monitoring (ADRM) Cell in January 2013, and the Ministry of Health and Family Welfare (MOHFW) declared DGDA as the National PV Center for Bangladesh; oversight of the center has been given to the ADRM Cell. The MOHFW also set up an independent committee known as the Adverse Drug Reaction Advisory Committee (ADRAC) in April 2013 that works in conjunction with the ADRM Cell to provide technical guidance for PV activities, evaluate adverse drug event (ADE) reports, and make recommendations for regulatory decisions and actions by the DGDA. In December 2014, Bangladesh became the 120th member of the World Health Organization's International Drug Monitoring Centre (WHO-UMC). Through this membership, Bangladesh has gained international recognition and access to early, worldwide information about potential safety risks. To this effect, DGDA has plans to phase-in PV activities across the country with cooperation from all stakeholders.

By publishing this newsletter, DGDA will be able to communicate information on the safety of medicines and other health products to health care professionals, consumers, and the public on a regular basis. In the event of an emergency, when serious risks arise, that information will become crucial to ensuring the availability of safe, effective, and quality medicines. We wholeheartedly thank the United States Agency for International Development (USAID)-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program (implemented by Management Sciences for Health) for their continuous support in these efforts. The journey will continue for the betterment of mankind.

Major General Md. Mustafizur Rahman
Director General
Directorate General of Drug Administration

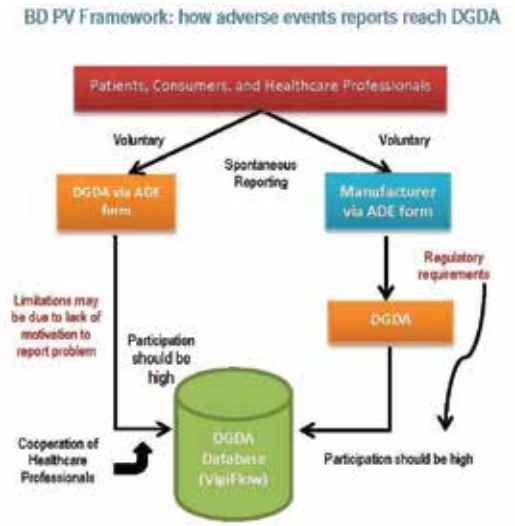
Directorate General of Drug Administration (DGDA)
Ministry of Health & Family Welfare
Mohakhali, Dhaka

"Act on Pharmacovigilance Today, Don't Wait for Tomorrow"

The aim of this newsletter is to disseminate information about the PV activities of the DGDA and to communicate with health providers any concerns about drug safety for locally manufactured and imported drugs.

INTRODUCTION TO THE NATIONAL PHARMACOVIGILANCE CENTER IN BANGLADESH

In the field of drug safety, Bangladesh has joined with other countries to participate in the international network that helps ensure safe medicines for its people. Pharmacovigilance (PV), also known as drug safety, is now one of the important functions of the DGDA, which is the drug regulatory authority of Bangladesh. International and national support to revive and strengthen the PV program has resulted in the necessary structures to implement a functional PV system and collect important medicine safety data, including development of a standard national ADE reporting form. As a result, more than 750 reports have been received since January 2014, and completed and analyzed reports have been entered into WHO's database for further analysis. With Bangladesh becoming the 120th member of the WHO Program for International Drug Monitoring (better known as WHO-UMC) in December 2014, a link has been established between the two organizations. Through this membership, Bangladesh has also gained international recognition and access to international networks and a wealth of information about potential safety problems. DGDA plans to build on this foundation and develop PV activities across the country.



Bangladesh PV program diagram

REPORTING ADES IS MANDATED BY THE MOHFW

What to report: Patients should report all suspected adverse reactions to drugs—undocumented or unexpected reactions, serious adverse drug reactions, unexpected therapeutic effects, product quality problems, treatment failures, and medication errors—to health providers (physicians, pharmacists, and nurses) or directly to the ADRM Cell of DGDA.

How to report: Suspected and observed drug-related reactions must be reported using the electronic version of the reporting form available in a fillable pdf on the DGDA website (www.dgda.gov.bd) and submitted to the ADRM Cell by post, email (dgda.gov@gmail.com), or fax (+8802 9880854). In emergency cases or when forms are not readily available, reports can also be made to the ADRM Cell by phone (+8802 9880803).

Health professionals reporting ADEs

Why report: All suspected and observed drug-related reactions must be reported immediately when encountered; delays in reporting can cause harm to users or patients and impair health care providers' abilitites to deliver safe, effective treatment.

"The responsibility for reporting suspected adverse drug reactions for quality treatment lies with you."

ACTIVITIES PERFORMED BY THE PHARMACOVIGILANCE CENTER - UPDATES

After the launch of PV, 30 public and private medical hospitals in Dhaka district city were selected as sentinel sites for PV activities. Recently, the program was extended to two divisional medical teaching hospitals in Chittagong and Rajshahi districts. So far, approximately 450 health providers have been trained in adverse event monitoring, and information, education, and communication materials were distributed to the hospitals. As a best practice, DGDA continues to visit hospitals that have reported ADEs, send biweekly emails, and conduct follow-up phone calls. DGDA circulated an executive order to all medical college hospitals as well as pharmaceutical companies in and around Dhaka to ensure participation in the required monitoring and reporting of the safety profiles of the companies' products.

Facility Focal Persons Receive Orientation on PV

The ADRM Cell organized two day-long workshops in September 2014 and December 2015 with technical assistance from SIAPS for 60 focal persons from 60 public and private hospitals and pharmaceutical manufacturers. The objective was to orient the focal persons on the importance, skills, principles, and practices of PV in the country, thereby creating awareness and ensuring their involvement. The event also provided updates on the activities of the ADRM Cell; created opportunities for five hospitals and pharmaceutical companies to highlight ongoing PV activities in their respective institutions; identified the existing challenges/gaps of DGDA, hospitals, and pharmaceutical representatives with ADE reporting; and explored practical solutions to the underreporting of ADEs. One of the solutions is electronic media awareness.

One of the participants sharing PV activities in her organization

Discussions Held to Strengthen Adverse Event Monitoring

Face-to-face discussions on adverse event monitoring have been carried out by ADRM Cell members, with technical assistance from SIAPS, in 28 public or private hospitals in Dhaka. A presentation on strengthening PV monitoring and strategy for effective reporting was made at five of the hospitals: BIRDEM, the National Institute of Disease and Chest Hospital, National Cancer Hospital, Government Employee Hospital, and United Hospital. The number of participants averaged 50 in each hospital and was comprised of physicians (general practitioners and specialists), pharmacists, nurses, and health officers. During the visit, the progress that has been made by DGDA on PV was highlighted, including differences or similarities between adverse drug reactions and side effects; what, how, when, and to whom to report; and potential challenges that may be encountered. Finally, 100 copies of the standard ADE form and 20 copies of the instructions were given to the assigned hospital PV focal persons to distribute to the staff, and participants were made aware of the availability of the form on the DGDA website. The hospitals appreciated the program, and as a result, there has been a significant increase in the number of ADE reports received by the center.

Major General Md. Mustafizur Rahman, Director General of DGDA, sharing ADE report analysis and lessons learned at a workshop

DGDA Extends PV Activities to Two Medical College Hospitals

As part of DGDA's efforts to promote and extend PV awareness outside of Dhaka, workshops were organized at the medical college hospitals in Chittagong and Rajshahi district on December 1 and 14, 2014, respectively, with SIAPS' technical assistance. The target audiences were the physicians and nurses at the hospital, including general (private) practitioners around the area, and more than 80 people were in attendance. The program highlighted the activities and functions of the ADRM Cell within DGDA and discussed the benefits of PV as it relates to patient safety. Copies of the ADE forms were distributed to the assigned hospital focal persons.

A participant sharing at the PV workshop at Rajshahi Medical Hospital

Capacity of ADRM Cell Members Improved through Training

To strengthen the ADRM Cell in the management of ADE reports received from health facilities, training was provided in April 2014, for the members on the use of VigiFlow, which is the WHO global individual case safety report database for ADE reporting and handling of data. The training was on VigiFlow's processes, including data entry and mining. DGDA has subsequently adopted VigiFlow as their national database for the management of PV data. ADRAC successfully evaluated and performed causality assessment on 189 suspected ADR reports, which have now been uploaded into VigiFlow. Consequently, Bangladesh attained full membership in the WHO-UMC in December 2014.

ADRM Cell members during training

SUMMARY OF ADE REPORTS RECEIVED BY ADRM CELL IN 2014 AND 2015

Reporting Rate Increased

The DGDA received more than 750 ADE reports between January 2014 and March 2016, of which 189 had complete data; they were reviewed by the committee and uploaded into the VigiFlow database. As of March 2016, 48% and 56% of 30 hospitals and pharmaceutical manufacturers, respectively, are regularly reporting adverse events. To better describe the preliminary data based on ADE reports obtained from public and private health facilities, the reports (n = 189) were analyzed using Excel and the WHO tool VigiLyze. Figure 1 shows a four-fold increase in the number of reports received. The analyses identified the types of reporters (figure 2) and patient age groups experiencing ADEs (figure 3). More than 60% of ADEs were reported for adults and more than 20% for the elderly (> 75 years) (figure 3). Figure 4 shows the outcome of events. In addition, approximately 50% of ADEs were reported for both males and females. The notable takeaway from the analysis is that two-third of the ADE reports were incomplete, so health care providers need to be educated on how to submit high-quality, complete reports; continuous efforts should be made to strengthen ADE reporting, especially in pediatrics, where only 3% of ADEs were reported; and to reduce the cases of fatal, unknown, and not recovered ADE outcomes, active and immediate follow-up should be adopted.

ADRAC members evaluating ADE reports

Figure 1. Cumulative number of ADE reports received

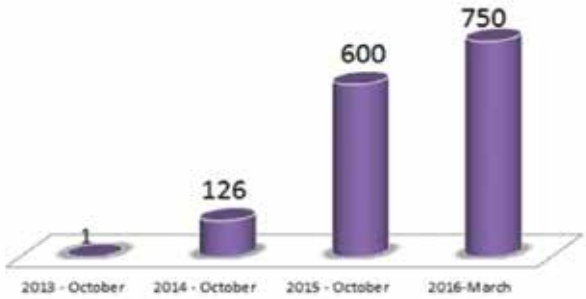


Figure 2: Physicians and other health care professionals reported more than 80% of the ADEs

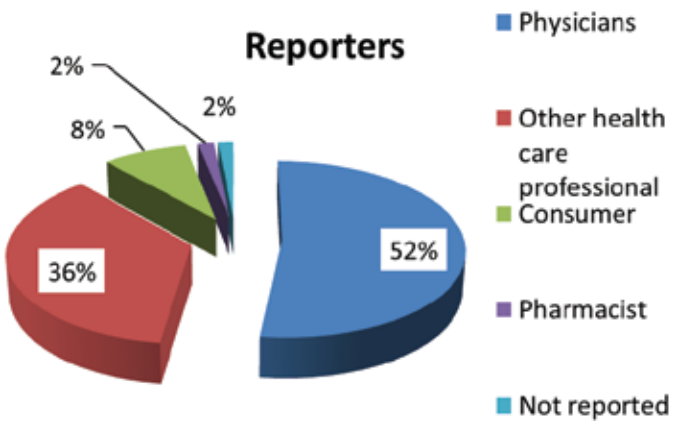


Figure 3: More than 60% of ADEs were reported for adults and more than 20% for the elderly (>75 years)

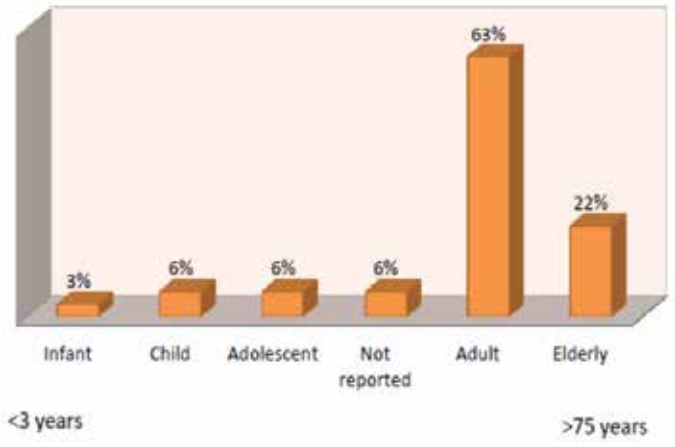
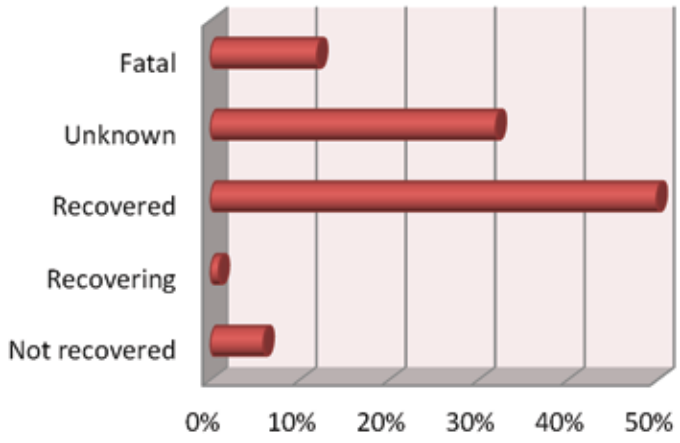


Figure 4: Outcome of adverse events; more than 50% of patients recovered



National Drug Safety Updates

The following drugs were determined to have significant drug-safety problems due to severe adverse drug reactions and, as a result, were banned by the DGDA based on recommendations from the Drug Control Committee (DCC).

DCC 243 meeting, 11 October 2014

All product batches for the drugs listed below that were on the market were withdrawn:

1. Gatifloxacin (except eye drops)
2. Tegaserod
3. Sibutramin

DCC 244 meeting, 2 July 2015

Registration of the following drugs manufactured by 51 pharmaceuticals were cancelled due to serious adverse effects and were withdrawn from the market:

1. Paracetamol 500 mg + DL-methionine 100 mg tablet; methionine-based paracetamol was banned because an excess of methionine can cause cancer, hepatic encephalopathy, acidosis, ischemic heart disease, and stroke
2. Pioglitazone 30 mg and 45 mg tablets; increases the risk of bladder cancer
3. Rosiglitazone 2 mg and 4 mg tablets; increases the risk of cardiovascular disease

Official letters were sent to the officers of DGDA, including field officers and manufacturers, instructing them to take action to prevent these drugs from being used by the public. The news on the cancelled products was also published in newspapers to increase awareness of the general public to stop using these drugs.

Additionally, because of adverse drug reactions, the following fixed-dosed combination drugs from 34 pharmaceutical manufacturers have been suspended from further production and marketing:

1. Glimiperide 1 mg + rosiglitazon 4 mg
2. Glimiperide 2 mg + pioglitazon 30 mg
3. Glimiperide 2 mg + rosiglitazon 4 mg
4. Glimiperide 4 mg + pioglitazon 30 mg
5. Metformin HCl 1 gm + rosiglitazon 2 mg
6. Metformin HCl 500 mg + rosiglitazon 1 mg
7. Metformin HCl 500 mg + rosiglitazon 2 mg
8. Metformin HCl 500 mg + rosiglitazon 4 mg

Directorate General of Drug Administration

QUALITY MEDICINE WILL ENSURE QUALITY CARE

INFORM YOUR PATIENTS ABOUT SIDE EFFECTS AND COMPLICATIONS WHEN PRESCRIBING MEDICINE

- Encourage your patients to immediately report back to you if they experience any side effect or adverse reaction after using medicine
- Fill out the ADR form for reporting adverse drug events and send to the Directorate General of Drug Administration (DGDA)
- The **ADR** form can be easily downloaded in a fillable **PDF** from the website **www.dgda.gov.bd**
- Email the filled-out forms to **dgda.gov@gmail.com**
- To make a report by phone, call **88 02 9880803**

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Ministry of Health & Family Welfare
Mohakhali, Dhaka

USAID FROM THE AMERICAN PEOPLE

SIAPS Systems for Improved Access to Pharmaceuticals and Services

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