THE ROLE OF INFORMATION SUPPORT IN IMPROVING SAFETY OF DRUG THERAPY AND INSURING RATIONAL USE OF DRUGS IN GERMANY

A. Ayaou, S. V. Zhadko
Pharmaceutical Marketing and Management Department, Kharkiv, Ukraine
ayaou@bluewin.ch

The use of medicines is apart from the personal discussion the most important and the most frequently used therapeutic instrument of the physician. Statistically, a prescription for medicines is issued at every doctor's visit. About the same amount of medicines are used in the context of self-medication. This means a per capita consumption in Germany of 20 drug packages per year - a total of approximately 1.7 billion packages.

The high demand for medicines always implies the risk of side effects. Even with the intended use of medicines, side effects may occur. They are always accepted risk and therefore an inherent part of any drug therapy. In addition to these unavoidable side effects, there are also side effects that can be attributed to errors and inadequate risk management of the drug therapy process. The causes of avoidable damage due to drug therapy are manifold and can occur during the entire medication process during the prescription, distribution, delivery or administration or administration and monitoring. Medication errors are usually not due to individual misconduct, but to suboptimal processes in the medication process. Self-medication and prescription medication not discussed with the doctor or pharmacist may also lead to avoidable side effects.

National and international experts agree that medication errors are a relevant problem in medicine. The World Health Organization (WHO) estimates the rate of patients hospitalized for side effects due to adverse events to be up to 10 % of all hospital admissions. According to WHO experts, a large part of this would be avoidable.

In 2005 the "Congress for Patient Safety in Medicinal Therapy" took place in Germany and together with the Federal Ministry of Health, the first concept for an "Action Plan for Improving Medication Safety in Germany" was developed to initiate a continuous process in this field. All groups involved in the healthcare process are involved in the analysis of the problems of the medication process under the management and in cooperation with international manufacturers, with the aim to minimize the risk of side effects for patients.

In addition to numerous research projects, the provision of quality indicators and the study of intersectional transition issues, another focus was the inclusion of

patients to improve safety in drug therapy, also improving the safety culture. In addition to an information leaflet on sensitizing patients for safe drug therapy, the Action Plan has developed various information offers. For example, the use of some professional web-pages an databases in the pharmacy and medical centers while counseling patients, where pharmacists and also patients can find out about the benefits and risks of medication during a therapy. With the opening of the databases of the Paul Ehrlich Institute (www.pfe.de) and the Federal Institute for Drugs and Medical Devices (www.bfarm.de) on side effects, a high degree of transparency was achieved for this topic.

An important factor in preventing errors is the correct transmission of information, for example, from hospital to surgery and vice versa. Here, the Action Plan provided different instruments and solutions. For the reason that without the exact knowledge of the patient's medication, which also includes self-medication, the programs to improve the medication safety are always in vain. Thus, a specification for a standardized patient-related medication plan (e-health or electronic patient card) was developed. For the preparation of this specification, all groups involved in drug therapy (physicians, pharmacists, patients, caregivers, federal authorities, representatives of inpatient and outpatient medical institutions) have been invited to a professional workshop and trained. At these workshops, the basic data set and the structure of the medication plan were agreed. This resulted in a specification detailing the structure and use of the individual data fields as well as the exact appearance of the medication plan.

The specification allows manufacturers of practice, hospital and pharmacy management systems to integrate the plan of drug therapy into their structures as a "Medication Plan" module. Physicians can easily transfer their patient's medication data from their own records to the medication plan and supplement it as needed.

An investigation in 2018 showed that the medication plan has been successfully implemented by various software manufacturers from the outpatient and inpatient sectors as well as software manufacturers for pharmacy management systems.

Due to the use of national and international databases and the implementation of the Action Plan and its role in the Coordination Group, side effects of medication were significantly reduced. Thus, the experiences and ideas of the medical profession can be asserted and several goals have been achieved. For the recording of medication errors, the government had established a National Database initiated by the European Medicines Agency with the amendment of the guideline on pharmacovigilance, there are concepts that can be tested within the framework of a future Action Plan.