

RESOLUTION
International Conference on Clinical Pharmacology and Pharmacy
"Rational use of medicines"

The International Conference on Clinical Pharmacology and Pharmacy "Rational use of medicines" (hereinafter - the Conference) was held, organized by the Republican Center for Health Development (RCHD) in Astana, September 8-9, 2017.

The conference was attended by more than 300 participants, including representatives of the medical community, public health authorities, international experts.

The participants in the Conference recommend the systematic elimination of the following **problems** that hamper the effective development and achievement of health targets:

1. In the field of state policy on the rational use of medicines in the Republic of Kazakhstan:

1.1 the inflexible functioning of the formular system in connection with the need in accordance with the current regulatory enactments to approve any changes in the Kazakhstan National Medicinal Form (hereinafter - KNF) by the order of the Minister of Health of the Republic of Kazakhstan. Whereas, according to international experience, a regulatory act of the authorized body is not required to amend the national dosage form and the decision is made by the expert community;

1.2 low competence of health managers in cost-effective use of medicines due to lack of training for managers of this competence and as a result - irrational use of resources in health care;

1.3 limited use of evidence-based medicine in clinical pharmacology and not always a rational approach to the use of medicines in the daily clinical practice of physicians due to the lack of monitoring at the national level;

1.4 untimely updating of data in existing disease registries, which leads to irrational use of life-important and other medicinal products; It is not possible to monitor the consumption of medicines in a timely manner by patients with specific diseases;

1.5 lack of synchronism in the name, dosage forms and availability between: registered medicines, medicines in KNF and medicines in some clinical protocols of the Republic of Kazakhstan;

1.6 the lack of proper state control over the appointment, release and sale of prescription medicines (free release of prescription medicines, including antibiotics);

1.7 human resources deficit - clinical pharmacologists and pharmacists;

1.8 **unethical promotion of medicines** - the influence of pharmaceutical companies on prescribing physicians and the recommendations of pharmacists;

1.9 **entry on the market of medicines that do not have evidence base** or have insufficient information about proven clinical effectiveness (registration of import and production by domestic producers).

2. In the field of knowledge, competencies and practices of health professionals:

2.1 **insufficient conditions for quality teaching** of clinical pharmacology and evidence-based medicine at the undergraduate and postgraduate levels, inefficient activities of centers of evidence-based medicine in the regions;

2.2 **unreasonable prescription of medicines by doctors** (without taking into account clinical guidelines and medical forms of health organizations), incl. a large number of medicines (polypharmacy), the clinical consequences of which are undesirable side reactions (USR), inefficiency and cost of treatment;

2.3 **misuse and use of antimicrobial agents** for the treatment of viral infections, administration of antibacterial medicines in inappropriate doses, which leads to the development of resistance to them;

2.3 **excessive use of injectable dosage forms** in cases where oral preparations are more suitable, perverse application of infusion therapy in medical organizations Primary health care;

2.4 inadequate prescribing by doctors of **non-medicines therapies**: a type of life, a rational diet, exercise therapy and physical activity.

2.5 insufficient understanding and **complicity in unethical promotion** of medicines.

3. In the field of informing the public about the proper use of medicines:

3.1 **low efficiency of training the patient and family members** by medical workers and professional organizations for the correct use of medicines, and as a consequence –

- the population's lack of commitment to rational pharmacotherapy based on the principles of evidence-based medicine;
- use of medicines that do not have an evidence base, which leads to inefficient use of resources;
- the emergence of health threats at the population level (as antimicrobial resistance);
- the growth of inefficient use of medicines as the commercialization of pharmaceutical activities increases and the spread of "self-treatment";

3.2 **unreasonably low confidence of the population in medicines** - "generics" and medicines of domestic production;

3.3 **insufficient accessibility and effectiveness of feedback** channels with the population on medicines supply issues, including preferential (free).

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To achieve interdisciplinary interaction and rational use of medicines at all levels of medical care and at home, as well as for the development of clinical pharmacology and clinical pharmacy in Kazakhstan, **the Conference recommends the following actions.**

1. In the field of state policy on the rational use of medicines in the Republic of Kazakhstan:

1.1 **improve the formular system** (KNF and forms of medical organizations) and introduce pharmacoeconomic aspects of medicines therapy through the introduction of changes in regulatory documents and legislation;

1.2 **develop a standard** organization for the service of clinical pharmacology and pharmacology, **standard operating procedures** for medical organizations at different stages of medicines circulation;

1.3 **improve the quality of expertise** in assessing safety, efficiency and quality in the conduct of state registration, re-registration and modification of the registration dossier of medicines;

1.4 **approve the National Plan for Containment of Antimicrobial Resistance** in the Republic of Kazakhstan, agreed with WHO;

1.5 **improve the planning and provision of medicines** to medical organizations and the public, based on a transparent and evidence-based demand generation process, rational calculation of the need for medicines, taking into account patient registers and evaluating the actual consumption of medicines;

1.6 **introduce into practice the methodology for calculating** the need for medicines and calculating the need for narcotic medicines in the provision of palliative care developed by the RCHD;

1.7 **monitor medication errors** (medication error) and almost error (near miss), adverse events (adverse events) at the national level through the post-accreditation monitoring medical organizations;

1.8 **provide medical organizations with methodological support** for reducing medication errors and near misses and using medicines on the principle of:

- the right patient;
- the right medicines;
- the correct dose;
- the correct time;
- the correct route of administration,

and thereby **increase the safety of medicines therapy**, including the safety of routine biological therapy, especially at the stage of primary health care and the

increased risk of the spread of infectious complications in general and in particular - latent tuberculosis of the internal organs and spine;

1.9 **promote ethical promotion of medicines** and regulate the activities of pharmaceutical companies and distributors, the medical community;

1.10 **develop information technologies** in clinical pharmacology and pharmacy for accurate and transparent registration of medicines and their planning;

1.11 **strictly control the dispensing** of prescription medicines and hold them accountable in cases of violation of requirements;

1.12 **take measures to reduce the deficit** of clinical pharmacologists.

2. In the field of knowledge, competencies and practices of health professionals:

3.1 create conditions for quality training of medical specialists in the field of clinical pharmacology, which is possible in the organization of individual special departments of clinical pharmacology at the undergraduate and postgraduate level in medical universities of the Republic of Kazakhstan;

3.2 develop pharmacoepidemiology, pharmacoeconomics and pharmacogenetics in clinical pharmacology;

3.3 heads of medical organizations and universities to support access and subscriptions to databases of evidence-based medicine and to sources of professional literature;

3.4 heads of medical organizations to plan funds for retraining or upgrading the skills of health workers, including health managers with clinical education, on pharmacy, clinical pharmacology, pharmacoeconomics and health technology assessment.

3. In the field of informing the public about the proper use of medicines:

3.1 **use the potential of professional non-governmental organizations** to form a commitment to the rational use of medicines among the population, promote the image of a healthy lifestyle through the allocation of state social contracts and grants;

3.2 3.2 medical personnel and professional organizations actively **teach the patient and family members** the correct use of medicines at the population and individual level;

3.3 in departments for the prevention of medical organizations Primary health care **for different age groups and groups of patients for disease, the promotion of rational use of medicines.**