

Results and discussion. According to the Order of the Ministry of Healthcare № 677 of Ukraine from 29.09.2014 «On the Approval of the Medicines Quality Control Procedure during Wholesale and Retail»: the input quality control of medicines in pharmacies is carried out by an authorized person, who was appointed by order of the head of the enterprise and who is responsible for the quality of medicines that are coming to the pharmacy.

The competence of the authorized person includes the preparation and execution of the conclusion of the input quality control of medicines with a note of their transfer to the implementation.

The authorized person at the pharmacy must: check medicines that come at the pharmacy and the accompanying documents information about the state registration of the medicines; draw up the conclusion of the input quality control of medicines by marking on the incoming invoice; keep a register of medicines that are coming to the pharmacy; check the availability of medicines in the pharmacy, the circulation of which is prohibited in Ukraine and medicines that are not registered in Ukraine and have expired; take measures specified in decisions of the central executive body, that implements the state policy in the field of quality control and safety of medicines, regarding the quality of medicines; continuously monitor the storage conditions of medicines in accordance with the requirements of the instructions for use of the medicines; grant permission to dispense medicines to the pharmacy's departments.

Conclusions. The authorized person of the pharmacy, through the total visual inspection of each package of medicine, is intended to prevent the entry of substandard medicines to the end user.

THE FEATURES OF RUBBER GLOVES UTILIZATION

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Introduction: According to WHO data, about 20% of the total amount of waste from medical institutions are considered dangerous materials, that can be infectious, toxic or radioactive. Rubber gloves are belong to such materials.

Rubber gloves are used to protect medical staff from diseases in case of contact with body fluids. Even after the first using 15-85% of gloves turn to be damaged, and the half of the defects can not be identify by eye.

Therefore, rubber gloves can be a probable factor of the infectious diseases transmission, such dangerous as AIDS and hepatitis.

Aim of the research: To analyze methods of rubber gloves utilization.

Materials and methods: A review of the scientific literature, using the descriptive, searching and logical methods.

Results and discussion: Only authorized organizations are able to recycle used rubber gloves. There is an administrative responsibility for improper gloves recycling.

Utilization of used rubber gloves starts with sterilization. This operation is carries out by irradiation with gamma rays, gas treatment or evaporation.

There are a lot of various methods of medical gloves recycling which include sterilization.

The method of chemical sterilization includes the treatment of gloves with antiseptic substances vapor, for example formaldehyde, ethylene oxide, hydrogen peroxide. Method of high temperatures influence includes treatment by hot air, steam under pressure and radiation sterilization.

After the cleaning process, disinfected gloves are regenerated to the latex regenerate, which can be used to obtain rubber mixtures.

The recycling of rubber gloves made of natural latex carries out in a rubber mixer. After the regeneration process, obtained light-colored homogeneous mass unloads from the rubber mixer and cooles to room temperature. After cooling, latex regenerate, compared with the regenerate obtained from conventional raw materials and thermomechanical method, has sufficiently high strength and relative elongation, which can be used in the rubber industry as an additive to rubber compounds based on nonpolar rubber.

Conclusion: The utilization of rubber gloves is an obligatory part of the all medical institutions functioning.

INNOVATIVE TECHNOLOGY IN DRUG PACKING

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Introduction. Packaging has become a very important part of the production of drugs, as innovations in the development of new drugs and new systems for their delivery to the body have reached a very high level. This package must keep up to increased requirements, as it must preserve the quality of medicines and not interact with it.

Aim. The purpose of these studies is to analyze the modern range of packages for medicines.

Materials and methods. In order to study this topic, informational materials, Internet sources (official websites of manufacturers, scientific articles) and the results of their own conclusions were used.

Results and discussion. The emergence of modern technologies contributes to the improvement of consumer properties of any types of products, including packaging.

Innovative methods are particularly significant in the development of packaging for medicines containing biomolecules, in particular proteins that have properties to interact with the primary container. The solution of this problem may be the application of innovative plasma coating technology when the surface of the inner container is covered with silicon dioxide, which avoids the chemical interaction between the container and its contents. This coating can be used in the manufacturing of various types of containers, i.e. cartridges, syringes, ampoules or vials.

For unstable medicines that lose activity in solutions or require preparation immediately before use, packets are developed for separate storage of components. This is a combination package with two separate chambers with medicinal substances ready for mixing at the time of consumption.

There are packages made with serial delivery of drugs (convenient on the road, out of house conditions), which are disks with cells, pencil cases with open windows to receive a dose of drugs.

It is very important to design it. The designers developed various color schemes of the packages and made the inscriptions depending on the purpose of the drug: «I have a headache,» «I have allergies,» «I have a stomach ache,» etc.

Another example is original package called Medi Flower. It is created in the form of a flower, whereas the petals – cells with pills placed in them. In addition, if you retract the carved plastic in the «flower» package, a stand will come out, which will allow the tablet to be placed in any prominent position for remembering to take the medication on time.

Modern inventions have reached a high level. The so-called «Intelligent Packaging» was created. It can be divided into the following groups: «Smart Packing» (packaging with certain helping elements for the patient, for example, the schedule for taking the drug on the days of the week, aiming to increase compliance in people with memory impairment, as well as the elderly); «Active packaging» (for example, complete set with the drug include spoons, cups or other dispensers); «Information packing» (with NFC technology or adding screens to screens and various sensors on the package), all aimed to directly transfer information about the specific packaging of a specific product to a smartphone or a screen on the package itself. Intelligent packaging can provide consumers with a better understanding of products and how to deal with it securely, for example by exchanging data with technology on smartphones, tablets, and other devices with Wi-Fi support to remind the patient of the need to take medications and provide a dosage schedule to achieve optimal results. These data can be passed on to the patient's doctor, which will allow them to track the treatment plans and print out recipe without the need for a formal request from the patient.

We shouldn't forget modern packaging of drugs with expiration notice. Hewlett-Packard has invented a special drug package that monitors the shelf life and storage conditions. The novelty contains a thermometer, a clock and a mini computer. The pharmacist programs the packaging by entering data on the drug. As soon as it expires, the computer will inform the patient about it.