

the possibility of effective rehabilitation of persons with disabilities is actual and perspective direction. The purpose of the work was to analyze the general commodity characteristics of orthoses

Materials and methods: Scientific publications, as well as systemic, logical, analytical, retrospective method.

Results and discussion. An orthosis is an externally applied device used to modify the structural and functional characteristics of the neuromuscular and skeletal system : unloading, fixing, activating and correcting the functions of the damaged joint or limb . An orthosis may be used to: control, guide, limit and/or immobilize an extremity, joint or body segment for a particular reason; restrict movement in a given direction; assist movement generally; reduce weight bearing forces for a particular purpose; aid rehabilitation from fractures after the removal of a cast; otherwise correct the shape and/or function of the body, to provide easier movement capability or reduce pain.

Classification of orthoses according to functional purpose: spinal orthoses (cervical collar tires, corsets, declinators, maternity braces); orthoses for upper limb joints (elbow orthoses; forearm-wrist orthoses; forearm-wrist-thumb orthoses; forearm-wrist-hand orthoses; hand orthoses; upper-extremity orthoses (with special functions)); lower-limb orthoses (orthoses of hip, knee and ankle joints, knee pads, orthopedic insoles, special footwear).

Classification of orthoses by production technology: serial – consist of standard modules and are not subject to partitioning if necessary; collapsible – formed and consist of directly in the area of the damaged joint, taking into account its features; the individual ones are made to order by the mold of the patient.

Conclusions. Therefore, when choosing orthoses, most attention is paid to the main commodity characteristics: type, manufacturer, functional purpose of orthoses, technology of production of orthoses, material of manufacture, degree of fixation, simplicity and reliability in operation.

COMPARATIVE ANALYSIS OF STETHOSCOPES

Ravalison D., Kagabo A.

Scientific supervisor: ass. prof. Bezchasnyuk E. M.

National University of Pharmacy, Kharkiv, Ukraine

eluat16@gmail.com

Introduction. The systematization of knowledge of the modern product range of stethoscopes and phonendoscopes will help the professional to carry out professionally all stages of commodity analysis, as well as pharmaceutical care in the implementation of these devices, to understand all the advantages or disadvantages of this type of product, to orient the consumer when choosing and buying this type of device. The stethoscope is one of the most used diagnostic medical devices.

Auscultation of internal organs, particularly the lungs, especially in cases of colds and viral diseases, is an important component of proper diagnosis when examining patients. For auscultation, stethoscopes, phonendoscopes, or stetho-phonendoscopes are used, which are commonly known by modern physicians as the “stethoscope”.

The aim of our study was to conduct a comparative analysis of stethoscopes of foreign production.

Materials and methods of research. Foreign and domestic literature and own research were used to perform this comparative analysis.

Results and discussion. All stethoscopes can be classified into the following varieties by design and purpose:

- pediatric stethoscope; a stethoscope for adult patients;
- obstetric stethoscope; stethoscope obstetric wooden;
- obstetric stethoscope metal; Rapport stethoscope.

Manufacturers of stethoscopes are analyzed. Among the best are companies from Germany, Switzerland, the United Kingdom and China. Unfortunately domestic manufacturers are absent. A comparative analysis of varieties, design features, configuration, principle of operation of stethoscopes. Modern electronic stethoscopes have important advantages: they give better and clearer sound; can record audio and archive records. However, they have a number of disadvantages: much more expensive, less durable.

Conclusions. The main difference is that the phonendoscope membrane can conduct pulses of a higher frequency. A stethoscope specializes in low-frequency listening, which can drown out a high level. A special phonendoscope membrane does not reduce the sounds of different frequencies and determines them well, so it is the best option for the diagnosis of heartbeat and digestive organs. It is the functionality of the devices that are the main difference between a stethoscope and a phonendoscope.

MECHANICAL SPHYGMOMANOMETERS. A STEP TO THE PAST OR FUTURE

Savelyeva V.

Supervisor: prof. Baranova I. I.

National University of Pharmacy, Kharkiv, Ukraine

tovaroved@nuph.edu.ua

Intoduction It is known that the most common cause of death on the planet is cardiovascular disease. The modern consumer in a certain period of his life faces the problem of choice of medical devices for correct measurement of arterial pressure. Arterial pressure measure non-invasively metod with a sphygmomanometer. The sphygmomanometer (blood pressure meter, blood pressure monitor, blood pressure gauge, blood pressure monitor, Riva Rocci's mercury sphygmomanometer.) use for the diagnosis and management of hypertension. Mercury sphygmomanometers are considered the gold standard. The next sphygmomanometers is mechanical (aneroid). At the moment despite this, they are increasingly used digital devices (semiautomatic and automatic), mechanical sphygmomanometers are relevant.

Aim. Assess the need to use mechanical sphygmomanometers in today's environment.

Materials and methods. Public information, consumer surveys.

Results. Mechanical sphygmomanometer is a system of a manometer, a cuff (proper cuff sizes, the size depends on the diameter of the upper arm), mechanical compressor (rubber cylinder with valve), stethoscope.

Advantages of mechanical sphygmomanometer. Less expensive device in comparison with automatic semiautomatic and automatic devices. It is also recommended when measuring the pressure in newborn, infants, toddlers and preschoolers etc. When it is necessary to measure the pressure in the machine, for example, the ambulance. In case you needed for various reasons to see the readings of the systolic pressure above the 250 mmHg. Measurement capability animal blood pressure. Disadvantages of mechanical sphygmomanometer. The arterial pressure measurement process can cause difficulty in the consumer that has visual and hearing problems. The consumer cannot pump the cuff sufficiently. The pulse cannot be measured at the same time as an automatic sphygmomanometer. In some patients, Korotkoff sounds may disappear altogether for a short time between phase II and III (auscultatory gap), this will result in an incorrect pressure measurement The device must be calibrated continuously.

Conclusions. Based on the survey we are determined, which is not currently a correct presentation of information to exclude the use of mechanical sphygmomanometers.