

## MECHANICAL SPHYGMOMANOMETERS. A STEP TO THE PAST OR FUTURE

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**Introduction** 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 method 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.