

USING A HIGH-TECH MANNEQUIN “MINI ANNE” TO DEMONSTRATE CPR

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Abstract: In recent decades, due to the obvious advantages, the use of high technologies in medical education has been gaining huge momentum. Thus, in Uzbekistan, starting from the 2023/2024 academic year, the theoretical and practical knowledge and skills of undergraduate, graduate and clinical residency students will be evaluated using special robot simulators without the human factor. According to the «Roadmap» approved by the presidential decree on measures for the effective organization of public administration in the field of healthcare within the framework of administrative reform, the task was set to purchase simulators for medical higher educational institutions and institutions for advanced training and retraining of medical workers at the expense of extra-budgetary funds. This equipment is being installed at the facilities. In this situation, the method of teaching how to work with these devices is becoming more and more relevant.

Key words: “Mini Anne”, mannequin, CPR, volunteering program, high-tech education

Materials and methods: On February 16, 2024, as part of a volunteer program organized between the Korean University SNUSR and SamSMU, as well as SamSIFL, students of these universities visited secondary school 51 in the city of Samarkand to teach CPR students in secondary classes. 40 “Mini Anne” mannequins were used in the program as training materials.

Results and discussions: “Mini Anne” is first aid CPR training human model, standard and real, is a tool for repeated learning in the classroom, ideal for laboratory demonstrations. It has facial skin, skin on the neck, chest skin, hair, with imported thermoplastic elastomer mixed rubber material, with anatomical signs accurate. It allows students to perform artificial respiration and extracardiac compression and standard airway opening. Also mannequin`s head can be turned back to simulate the opening of the respiratory tract, and the chest can be returned by pressing the chest cavity itself. The artificial breasts can fluctuate. The main purpose of using the “Mini Anne” was to teach teenagers how to perform CPR in emergency conditions. For this purpose, the school hall was divided into several zones (except for the CPR zone, hand and teeth washing training was organized). The CPR areas were divided into 6, each with its own tables, chairs, training team and mannequins (several spare mannequins were left in case of unforeseen circumstances). 5-7 students took turns approaching each zone to teach first aid skills. Thus, students of Korean and Uzbek universities were tasked with teaching each batch of students in 17 minutes. During the first 5 minutes, the theoretical foundations of CPR were explained to them. Next, the team demonstrated resuscitation on 2 mannequins. After that, the students were asked to repeat the studied material themselves. This part was divided into 2: the first is CPR on the floor and the second is CPR on the table.

Due to the fact that the mannequin completely resembled a human in its structure, appearance and reaction to the manipulations carried out, it was possible to achieve high results in the assimilation of the material by the students. The button in the center of the mannequin's body was used as a guideline for determining the sternum, which made it easier to carry out manipulation. The material

also made it possible to feel the resistance normally created by the human sternum. After the training, all the mannequins were transferred to the use of the school for further training.

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