



HISTORY OF DEVELOPMENT AND IMPORTANCE OF THE SIMULATION CENTER IN THE FIELD OF MEDICAL EDUCATION

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Abstract: One of the most important aspects of medical education is practical work with students. Thanks to the development of technology, today simulation devices can replace a living patient, which is more effective in terms of practice - patient safety.

Key words : simulation center, history of simulation technologies, robotics in education

The first medical simulation center was created as a result of the development and application of simulation technologies in training. Simulation learning in medicine began to develop in the mid-20th century, and here are the main milestones of this process:

1. **Early Developments** : One of the early developments in medical simulation was the resuscitation training mannequin known as the " Resusci" Anne " which was introduced in 1960. This mannequin was used for cardiopulmonary resuscitation (CPR) training.
2. **" Sim One " - the first full-scale medical simulator** : One of the first comprehensive medical simulators was " Sim One ", developed in the early 1960s. This simulator was introduced in 1967 and was the first of its kind to simulate human anatomy and physiology for training anesthesiologists.
3. **Development and distribution** : After the appearance of " Sim" One " concept of simulation training began to spread in medical circles. Further developments in simulation technology followed in the 70s and 80s, leading to the creation of more complex and realistic simulators.
4. **Establishment of the First Simulation Centers** : In the 1990s, with the expansion of simulation technology and growing interest in patient safety, specialized simulation centers began to be established at many medical schools . These centers provided equipment and space for training students and healthcare professionals using simulations.
5. **International Recognition and Expansion** : In the early 21st century , simulation centers have become a standard part of medical education in many countries around the world due to their effectiveness in training medical professionals and improving patient safety.



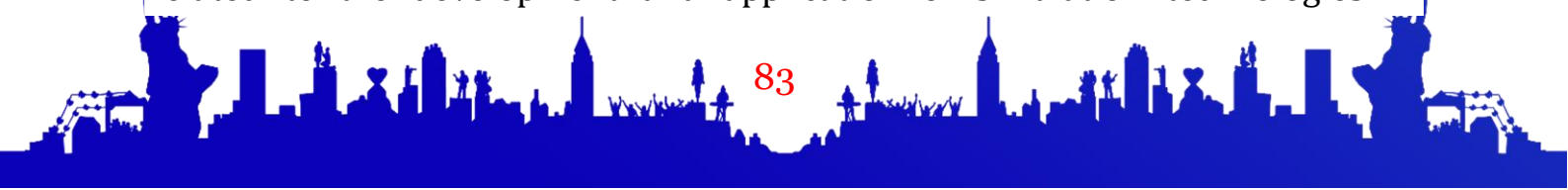


Thus, the history of the first medical simulation center is closely connected with the development and application of simulation technologies in medical education and practice.

The creation of simulation centers in medical schools is part of a broader trend in medical education to improve the quality of training. Let's look at the main stages and reasons for this process.

1. **Origins of simulation training** : Simulation training in medicine began to develop in the mid-20th century. One of the first devices was an anesthesiologist training simulator known as the " Resusci" Anne ", introduced in 1960.
2. **Technological Advancement** : With the development of technology, particularly computer technology and artificial intelligence, simulation centers have become more realistic and functional. This made it possible to create complex scenarios for training future doctors.
3. **Increasing requirements for the quality of education** : In the context of the constant development of medicine and increasing requirements for the quality of medical services, the need for more in-depth and practical training of students has increased.
4. **Patient Safety** : Simulation training allows students to learn how to perform various procedures and make decisions in a controlled, safe environment, reducing the risk of errors in real clinical practice.
5. **Development of interdisciplinary interaction** : Modern simulation centers often simulate real clinical situations, which promotes the development of teamwork and interdisciplinary interaction among students of different specialties.
6. **Global educational standards** : The introduction of simulation centers has also contributed to the unification and improvement of educational standards in medicine at the international level.
7. **Funding and support** : Establishing simulation centers requires significant investment. Therefore, their development often occurs with the support of government programs, private investment and international cooperation.
8. **COVID-19 Pandemic** : The pandemic has led to increased interest in simulation training as it has highlighted the importance of flexibility and adaptability in training healthcare professionals.

Conclusions: Thus, the history of the first medical simulation center is closely related to the development and application of simulation technologies in





medical education and practice. In each medical university, the history of creating a simulation center may have its own characteristics associated with local conditions, resources and the needs of the educational process

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