Spotlight on Simulation Based Learning (Skill Lab)

Presented

By

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Vision

Preparation of Student to be Efficient Physician in the hospital

Mission

Building and Developing of the Clinical Skills of Medical Student

VIEW

- It is the field of **training** preceding the field of **practice**.
- It is helper, supportive tool **not** a substitute for hospital.
- It is transitional and preparatory stage.
- It facilitates skills learning in a safe, efficient, qualified and interactive method through immersion, reflection, feedback and practice without any risk to the patient or the healthcare professionals.

SIMULATION BASED LEARNING
WHY ?

- Bad performance of medical graduate .
- Shortage of clinical sites in some medical schools.
- Low rate of patients attendance.
- Shortage of qualified staff members.
- High risk situations and Medical errors .
- Ethical and legal issues.
- Application of problem solving and knowledge in the critical situations .
- It gives a chance to for practice, repetition, and correction of mistakes in safe environment.

DOMAINS OF SIMULATION BASED LEARNING

- **Training and assessment of technical procedures**

  Endotracheal intubation, nasogastric tube or urinary catheter insertion.

- **Training and assessment of clinical skills performance (**History taking – physical exam**)** by using the **standardized patient.**

- **Team training in complex situations. (virtual hospital)**

  The real team work in the real or simulated environment such as an **operating room**, **delivery room** and **intensive care unit** with a **computerized simulator.**

TYPES OF SIMULATION

- **Human simulation**

  Role play and Standardized patient

- **Non-human simulation**

  Manikin and Computer based simulation.

Compiler Driven

Event Driven

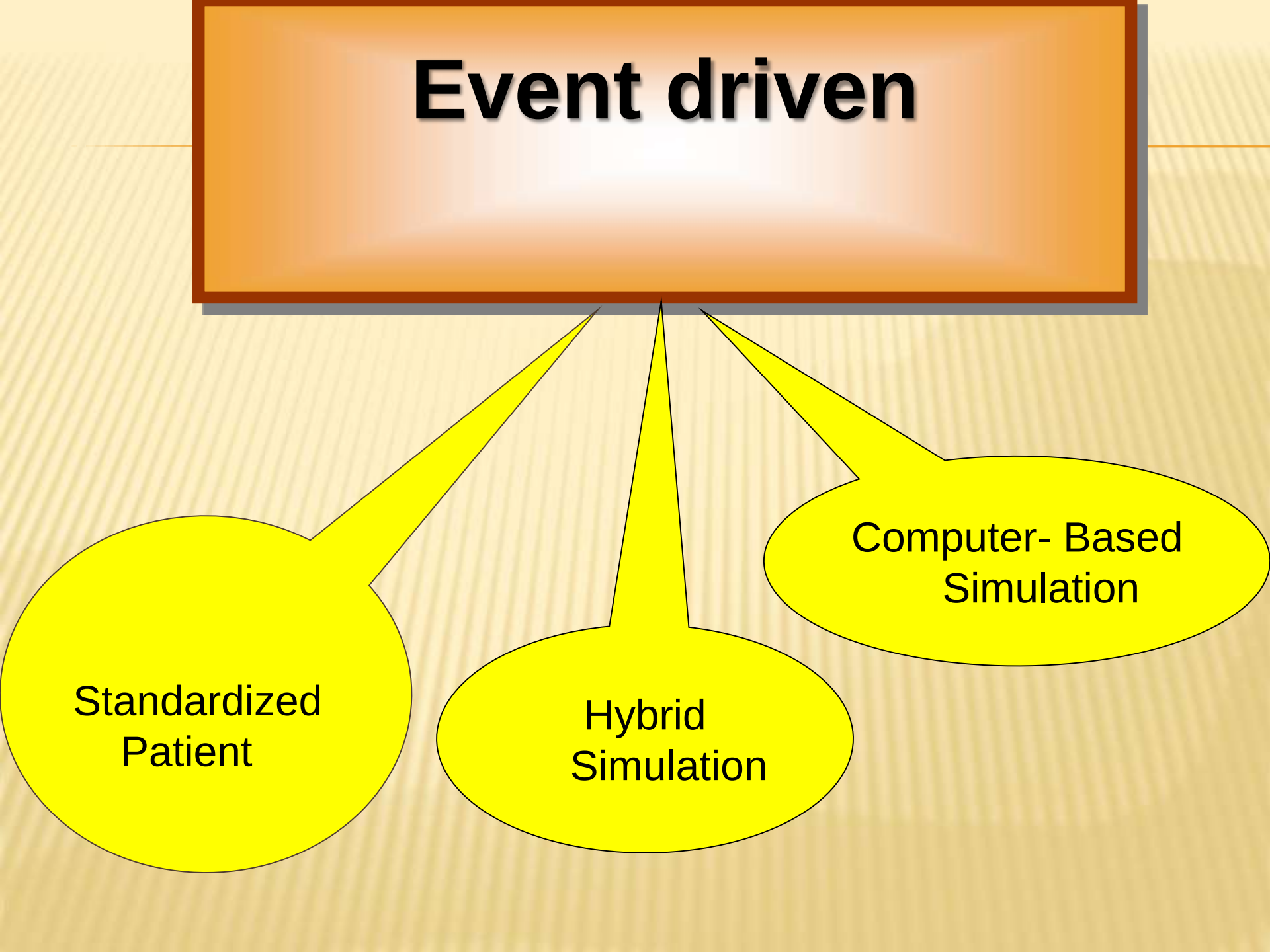
Types of Simulators

Compiler driven

It is specific task trainer representing a part of anatomy for a training on specific procedures.
arm for IV - leg for suturing - urinary manikin for catheter insertion

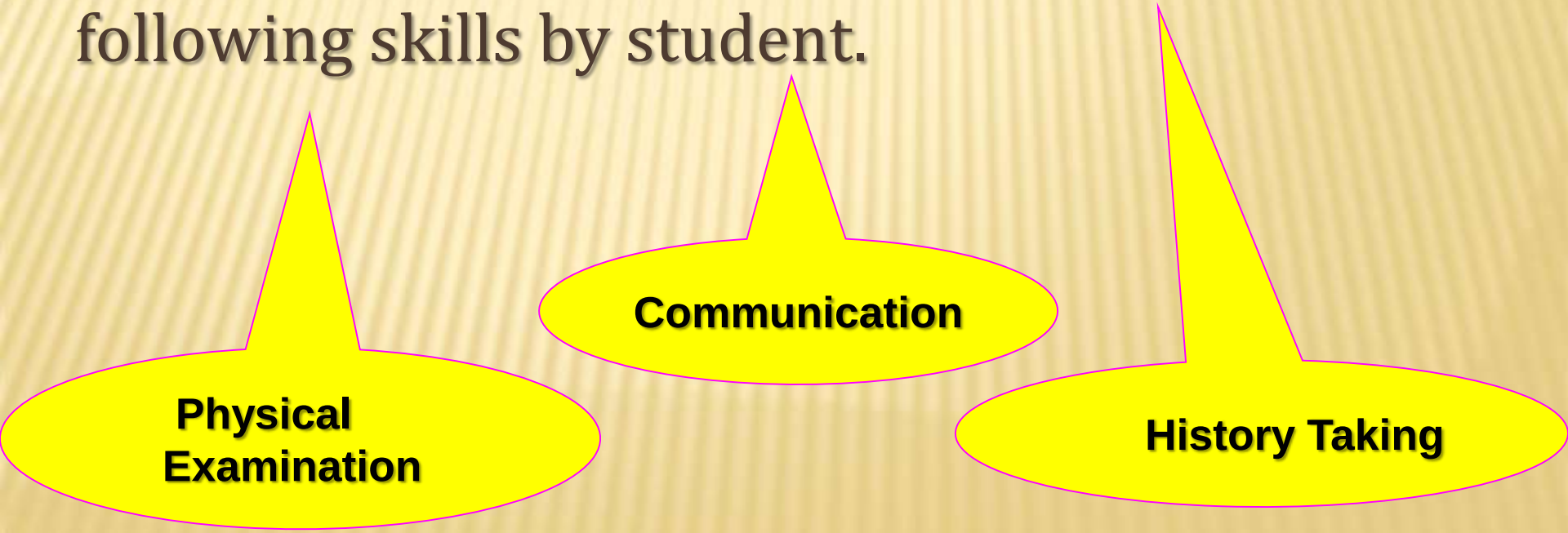


Event driven



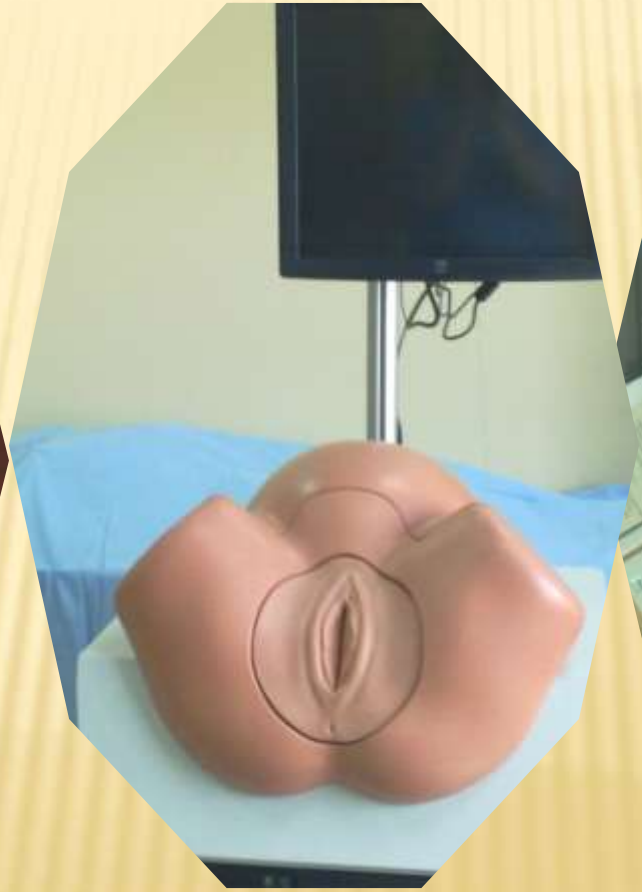
Standardized Patient

- Standardized patient is an actor who is trained to the role play of the patient for practice the following skills by student.



Computer-Based Simulators

- It is different according to the fidelity that reflects the degree of realism and technical complexity.



Standardized Patient

Specific Part-Task Trainer

Hybrid simulation

Computer-Based Simulators

- It is different according to the fidelity that reflects the degree of realism and technical complexity.

Fidelity

- Full interactive simulation
- Suitable clinical environment.
- It gives the chance to the trainer to perform task in a real environment with psychological adaptation for the situation.

Hands on – Training session

1- Suitable training place.

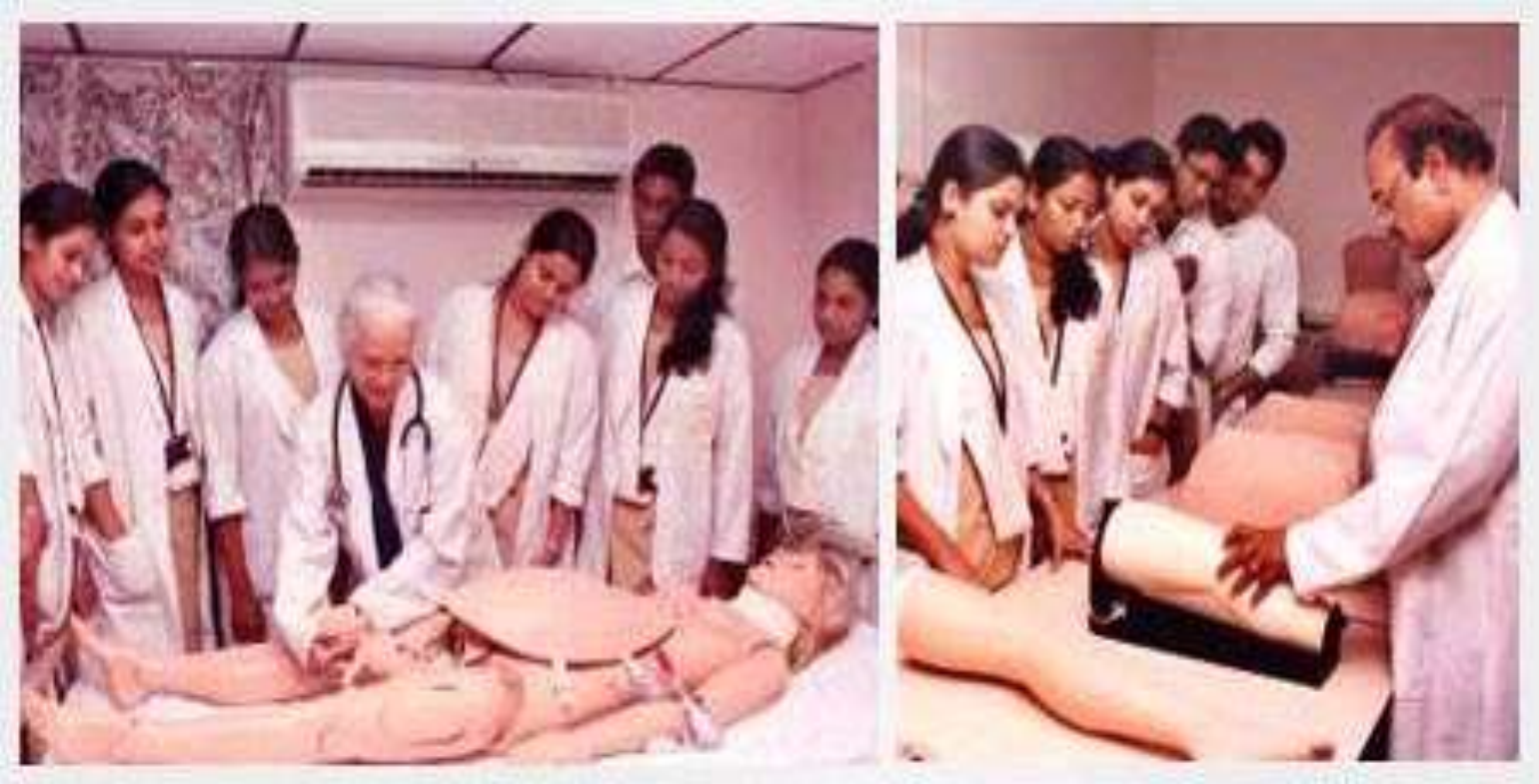
2- Training students group (10-15).

3- Facilitator (trainer).

4- Training manikins and tools- Standardized Patient

Historical Review

Skill lab Founding




Starting Point






Old Models

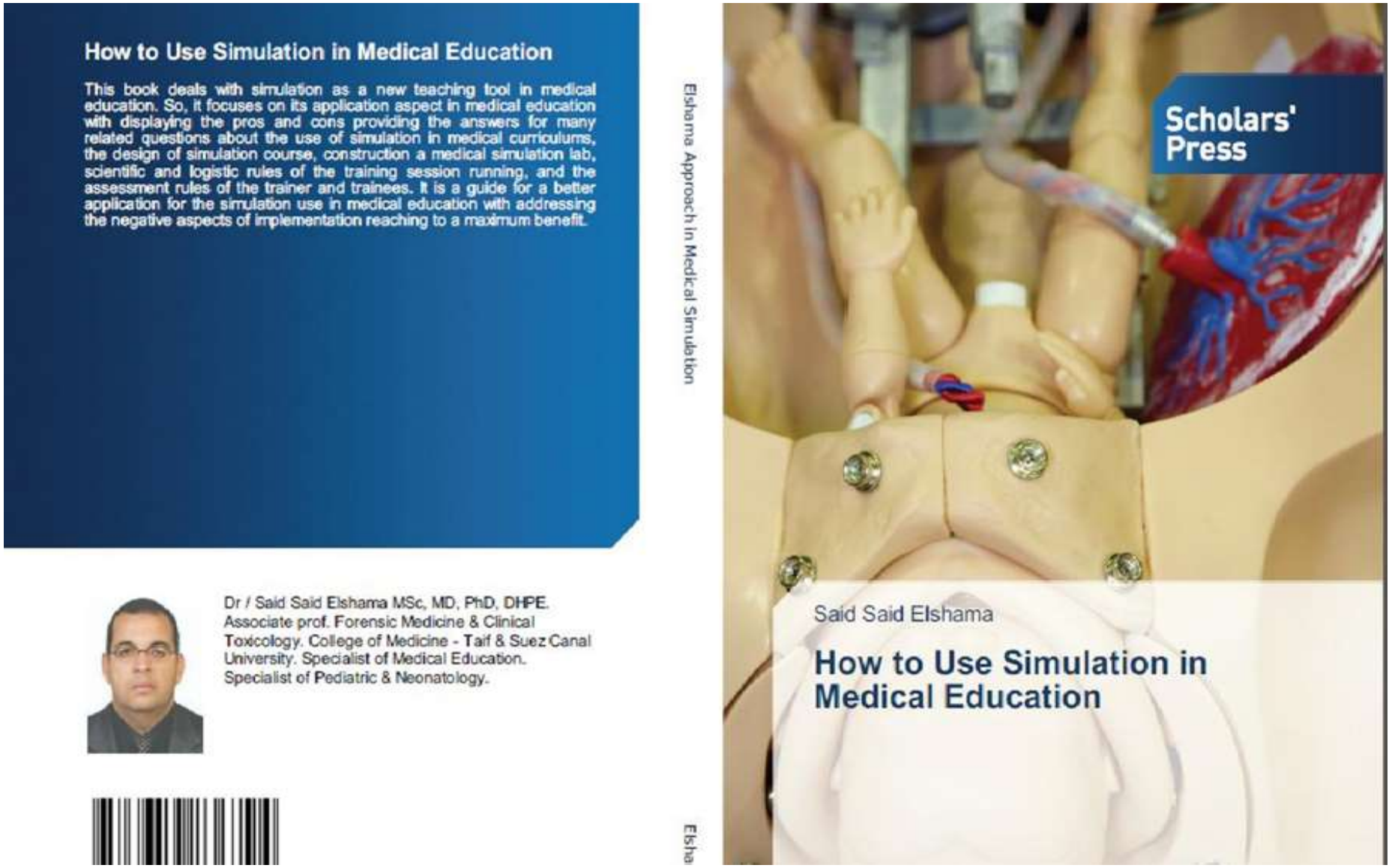

Pharmacy

New Building

Skill lab (CME)

Clinical Skills and Simulation Center

References


How to Use Simulation in Medical Education
This book deals with simulation as a new teaching tool in medical education. So, it focuses on its application aspect in medical education with displaying the pros and cons providing the answers for many related questions about the use of simulation in medical curriculums, the design of simulation course, construction a medical simulation lab, scientific and logistic rules of the training session running, and the assessment rules of the trainer and trainees. It is a guide for a better application for the simulation use in medical education with addressing the negative aspects of implementation reaching to a maximum benefit.
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Elshama Approach in Medical Simulation
Scholars' Press
Said Said Elshama
How to Use Simulation in Medical Education

References

How to Develop Medical Education

This book draws a road map for medical education development depending on an implementation view. It discusses a collection of principles of medical education development in a simple and short narrative way whereas it gives answers for many questions that are related to the medical education renewal based on educational experiences that monitored defects and problems during the application of programs of medical education development in the different medical schools.

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978-3-639-86059-7

Elshama Approach in Medical Education

Elshama

Scholars' Press

Said Said Elshama

How to Develop Medical Education

Implementation View

Thank you