



JOURNEY INTO THE FUTURE OF ACADEMIC MEDICINE

CLEVELAND TEAM VISITS ISRAEL CENTER FOR MEDICAL SIMULATION

notes that surgical simulation is not just about clinical/technical competency; it's about skill in decision-making. Surgical simulation training must include cognitive skills, technical skills, communication skills and decision-making skills.

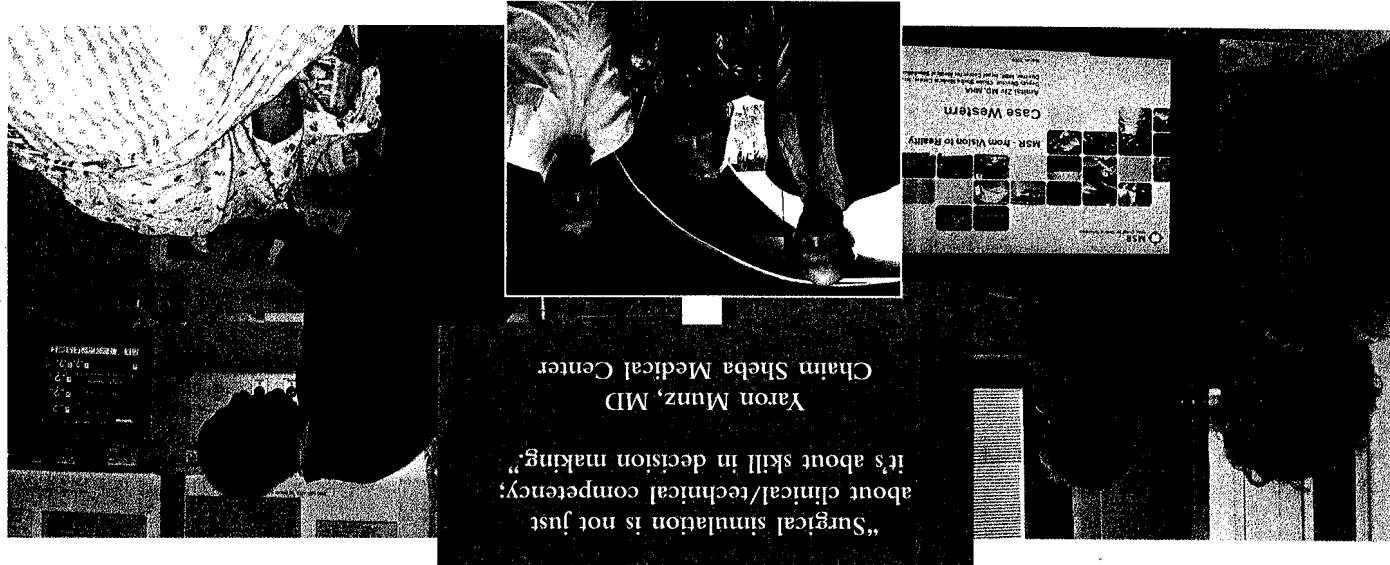
ROLE OF SIMULATION IN SURGICAL TRAINING

Due in large part to Jewish law, Israel does not use cadavers in medical training, and the public is also questioning the use of animals for such purposes. In the absence of these "organic" opportunities, inorganic surgical simulation is critical. Inorganic simulation includes synthetic mannequins, and other task training equipment, as well as electronic virtual reality.

The so-called "low-tech" aspects of surgical simulation training include simple organ models, basic mannequins and the use of standardized patients for case studies and the development of communication skills.

"High-tech" components include computer-based/screen-based simulation, virtual reality procedural simulations, and virtual reality interactive patient simulators (for anesthesia, chest drains, IV lines, bleeding, convulsions, etc.). Among the objectives of the MSSSC/MSR partnership will be to demonstrate the value of surgical simulation training by examining medical errors in practitioners who received such training vs. those who did not.

The simulation field in medicine is still very young and surgical simulation lags behind other disciplines such as anesthesia. The Cleveland/Israel partnership hopes to improve surgical training at the partner institutions while making significant contributions to the field of surgical simulation as a whole.



"Surgical simulation is not just about clinical/technical competency; it's about skill in decision making."
 Yaron Munz, MD
 Chaim Sheba Medical Center

Representatives of both The Mt. Sinai Health Care Foundation and Case Western Reserve University School of Medicine paid a visit to the Israel Center for Medical Simulation in March to formulate a three-year partnership to strengthen surgical simulation at both the Israeli Center and the Mt. Sinai Skills and Simulation Center (MSSSC) at Case. The MSSSC is the result of a multi-million dollar commitment on the part of the Foundation. The partnership is supported by an additional \$300,000 grant from the Foundation.

The Israel Center for Medical Simulation, known as MSR (pronounced MESSER), is a world leader in both high-tech (e.g., virtual reality environments and equipment) and low-tech (mannequins, communication skills, etc.) simulated medical training. MSR has developed training curricula in many areas of medical simulation and is currently concentrating its efforts on "customized simulation"—simulating individual patient diagnosis and treatment, especially for special or complex cases. It has developed expertise in battlefield simulation and most recently has been asked to screen medical school applicants in simulated medical situations using professional actors as patients.

Reducing medical errors is a major impetus for increasing and enhancing medical simulation training. Beginning as early as October 2008, Medicare and Medicaid will not contract with hospitals that exceed medical error benchmarks.

Yaron Munz, MD, a surgeon at Chaim Sheba Medical Center who is leading the MSSSC/MSR surgical simulation partnership for MSR,

Left: Amital Ziv, MD, (right), director, Israel Center for Medical Simulation, with Kim MacMillan, associate director of the Center. *Middle:* The Cleveland team on its visit to MSR are (left to right) Dan Ornt, MD, vice dean, Case School of Medicine; Kathleen Rosen, MD, faculty director, Case/Mt. Sinai Skills and Simulation Center; Foundation President Mitchell Balk. • *Right:* Dr. Ornt examines a simulated patient.