The traditional method of acquiring surgical skills by observing and assisting in surgical procedures involving human beings has been challenged during the past several years. Lessons obtained from aviation suggested that the use of simulators is related to reduce costs, increased efficiency in performing certain tasks and above all safety. A shift in paradigm is also required in modern surgical training. The development of endoscopic surgery allowed for the incorporation of medical simulators into training programmes. Surgical training with box trainers and/or virtual reality simulators confers a significant benefit in terms of surgical skills development, increases patient safety and reduces costs. Nevertheless, the use of virtual reality simulators was significantly more expensive. Simulation training allows trainees to learn from their mistakes, to repeat surgical tasks multiple times so as to establish muscle memory and enhance skill competency with the aid of informative feedback. Simulators are necessary for the development of the skills required to meet the specific needs of endoscopic surgery in the 21st century. Teaching hospitals should introduce simulation training programmes in order to increase efficiency, reduce costs and improve patient safety. As medical advancements continue to transform the way we perform surgery day by day, simulation training will play a pivotal role in every surgical specialty.


CHANGING THE WAY WE TRAIN SURGEONS IN THE 21ST CENTURY: BOX TRAINERS AND VIRTUAL REALITY SIMULATORS AS TRAINING MODELS IN GYNECOLOGIC ENDOSCOPY

Ioannis G Papanikolaou
University of Athens, Greece

Ioannis G Papanikolaou was born in Athens in 1985. In 2009 he takes the Medical Degree with excellent votation. Afterwards, he was selected to participate in the two years Postgraduate programme in Robotic surgery, Minimally Invasive Surgery and Telesurgery, in the University of Athens, Medical School, Greece. In 2011 he was distinguished again with excellent votation and obtains the title of “Master of Science” from the Athens Medical School in “Robotic surgery, Minimally Invasive Surgery and Telesurgery. He was distinguished with the PhD (Doctor of Philosophy) from Athens Medical School, Greece with Excellent votation in 2018. He has gained the first Prize in “Robotic Surgery Marathon”, as well as the First Prize in the “Laparoscopic Simulation Cup”. He is the author of many publications in national and international journals and he is also selected as reviewer for many journals such as The British Medical Journal, Stem Cells International, Surgical Laparoscopy Endoscopy & Percutaneous Techniques, The International Journal of Medical Robotics & Computer Assisted Surgery, The European Journal of Obstetrics, Gynecology and Reproductive Biology. Currently he works in the 1st Department of Obstetrics & Gynecology of the University of Athens, Medical School in Greece, in “Alexandra” Hospital.

papanikolaou85@gmail.com