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## Using cybertherapy to reduce postoperative anxiety in cardiac recovery intensive care units

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José Luis Mosso Vázquez is a surgeon, pediatrician and scientist in Mexico. At the age of 37 he has completed his studies in laparoscopic surgery in Lyon and Saint Etienne, French Universities. He graduated as a Pediatrician, general surgeon, and gastrointestinal endoscopy in Mexico. He is currently working as a surgeon at the Universidad Panamericana, Faculty of Medicine and Endoscopist in public hospitals. His research interests are robotic surgery, virtual reality, smart phones and tablets as surgical simulators and currently neuroscience. He has published more than 15 papers and also serving as an editorial board member for the Journal of Cybertherapy and rehabilitation.

### Biography

Surgical anxiety creates psychological and physiological stress, causes complications in surgical procedures, and prolongs recovery. Relaxation of patients in postoperative intensive care units can moderate patient vital signs, reduce discomfort, and shorten length of stay. This study explores the use of virtual reality cybertherapy to reduce postoperative distress in patients that have recently undergone cardiac surgery. Twenty-two patients were monitored at IMSS La Raza National Medical Center within 24 hours of cardiac surgery. Patients navigated through a 30-minute virtual reality simulation designed for pain management and stress reduction. Results were analyzed through comparison of pre and postoperative vital signs and Likert scale survey data. Likert test data showed that 21 of 22 subjects reported less discomfort after navigating through the virtual environment. Physiological data generally supported the Likert data, with 64% of patients lowering respiratory rate, moderated blood carbon dioxide levels, and decreased diastolic blood pressures in another 64% of patients. Thus, due to the innocuous and non-invasive nature of cybertherapy, virtual reality demonstrates promise in reducing postoperative anxiety.

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