EDITORIAL VIEW

Is Pakistan ready for 'Enhanced Recovery After Surgery' (ERAS)?

Shireen Ahmad, MD

Professor of Anesthesiology and Obstetrics & Gynecology
Associate Chair for Faculty Development
Anesthesiology Program Director for Enhanced Recovery After Surgery (ERAS)
Northwestern University Feinberg School of Medicine
Chicago, Illinois, USA

Correspondence: Shireen Ahmad, MD, Professor of Anesthesiology and Obstetrics & Gynecology, Northwestern University Feinberg School of Medicine, Chicago, Illinois, (USA); E-mail: sah704@northwestern.edu

SUMMARY

The concept of 'Enhanced Recovery After Surgery' (ERAS) was introduced over 15 years ago, and consisted of multimodal pain management, measures to decrease the perioperative stress response and the use of minimally invasive surgical techniques, and resulted in a decreased duration of postoperative hospitalization and increased patient satisfaction. The concept has been proved beneficial after long standing clinical experience and well-designed studies that continue to demonstrate shortened recovery and decreased postoperative morbidity. Enhanced recovery programs require close cooperation between all members of the care team including anesthesiologists, surgeons and nursing staff. In order to adopt ERAS in Pakistan, healthcare teams will need to carefully examine current surgical outcomes and the existing literature in order to implement well designed protocols to benefit to the local patient population. **Key words:** Recovery; Recovery, Postoperative; ERAS; Opioids; Minimally invasive surgical techniques

Citation: Ahmad S. Is Pakistan ready for 'Enhanced Recovery After Surgery' (ERAS)? Anaesth Pain & Intensive Care 2017;21(1):4-5

Received: 26 Nov 2016; Reviewed & accepted: Mar 2017

Traditional perioperative care is often based on institutional culture and practices that have been passed on from one generation to the next. It is only recently that evidence based studies have demonstrated that many traditional approaches to perioperative care such as preoperative and postoperative starvation, use of opioid analgesics, large volumes of perioperative fluid and prolonged periods of bed rest are not only unnecessary, but impair recovery.

The concept of 'Enhanced Recovery After Surgery' (ERAS) was introduced over 15 years

ago, by the Scandinavian surgeon, Henrik Kehlet, when he described the effect of multimodal pain management, measures to decrease the perioperative stress response and the use of minimally invasive surgical techniques, to decrease the duration of postoperative hospitalization and increase patient satisfaction. This was followed by a rapid adoption of his "fast track" principles

and a systematic review in which he demonstrated that the multimodal evidence based protocols significantly shortened postoperative recovery and decreased perioperative morbidity.² The protocols are now accepted throughout Europe, the United Kingdom, Canada and more recently the United States.

ERAS is based on the adoption of evidence based practice guidelines to decrease the perioperative stress response and facilitate patient recovery. Important elements of Enhanced Recovery programs include preoperative carbohydrate loading, minimally invasive surgical techniques, avoiding the use of nasogastric tubes and surgical drains, use of opioid sparing anesthesia, avoiding sodium and intravenous fluid overload and early resumption of enteral feeding and mobilization. The greater the adherence to these various elements, the greater the improvement in clinical outcome.³

Since there are many disciplines involved in the perioperative period, the process involves coordination and integration of multiple medical specialties, nursing personnel and hospital administration to ensure optimal patient outcomes. This team-based approach in health care has been validated in multiple models from the intensive care unit to primary care. ^{4,5} There is also evidence of greater patient satisfaction as well as greater satisfaction among care team members involved in ERAS programs. ^{4,6}

Creating change within a healthcare system is a daunting, but not an impossible task. It requires a group of committed providers with established track records as change makers, who are motivated and most importantly, able to work within the existing system to create change. Before undertaking ERAS programs, it is essential to conduct a detailed analysis of healthcare outcomes such as length of stay and morbidity and mortality rates for the given surgical procedure / group in order to identify opportunities for improvement. It cannot be assumed that the reasons for prolonged postoperative hospital stay in Pakistan are the same as in Europe, Canada or the United States.

There also needs to be a continuous audit of

the ERAS programs to evaluate compliance and outcomes, since programs undergo many minor changes during the formative phases. While the Enhanced Recovery protocols in the United Kingdom have been associated with a reduced length of stay, but inconsistent improvement of the patient experience. However, in the United States it was shown that a trust based audit model that included senior hospital leadership and care providers resulted in improved outcomes and patient experience.⁷

Over the years anesthesiology has expanded from the operating room to the intensive care unit and pain clinic and more recently to numerous non-operating room arenas. The advent of Enhanced Recovery programs will necessitate an expansion of the traditional role to embrace Perioperative Medicine.⁸ The anesthesiologist's skill set and training makes them the best suited to lead Enhanced Recovery programs in collaboration with their surgical colleagues - anywhere in the world! It is hoped that this editorial will foster a national interest and awareness in Enhanced Recovery programs to create a new paradigm of care in Pakistan.

Conflict of interest: Nil declared by the author

REFERENCES

- Kehlet H. Multimodal approach to control postoperative pathophysiology and rehabilitation. Br J Anaesth 1997; 78:606-17. [PubMed]
- 2. Kehlet H, Wilmore DW. Evidence-based surgical care and the evolution of fasttrack surgery. Ann Surg 2008;248: 189-98. doi: 10.1097/SLA.0b013e31817f2c1a. [PubMed]
- Gustafsson UO, Hausel J, Thorell A, Ljungqvist O, Soop N, Nygren J: Enhanced Recovery After Surgery Study Group. Adherence to enhanced recovery after surgery protocol and outcomes after colorectal cancer surgery. Arch Surg 2011; 46: 571–7. doi: 10.1001/ archsurg.2010.309 [PubMed] [Free full text]
- 4. Kim MM, Barnato AE, Angus DC,

- Fleisher LF, Kahn JM. The effect of multidisciplinary care teams on intensive care unit mortality. Arch Intern Med 2010; 170:369–76. doi: 10.1001/archinternmed.2009.521. [PubMed] [Free full text]
- Katon WJ, Lin EHB, Von Korff M, Ciechanowski P, Ludman EJ, Young B, Peterson D, Rutter CM, McGregor M, McCulloch D: Collaborative care for patients with depression and chronic illnesses. N Engl J Med 2010; 363:2611–20. doi: 10.1056/ NEJMoa1003955. [PubMed] [Free full text]
- Youngwerth J, Twaddle M: Cultures of interdisciplinary teams: how to foster good dynamics. J Palliat Med 2011; 14:650–4. doi: 10.1089/

- jpm.2010.0395. [PubMed] [Free full text]
- Wick EC, Galante DJ, Hobson DB, Benson AR, Lee KHK, Berenholtz SM, et al. Organizational Culture Changes Result in Improvement in Patient-Centered Outcomes: Implementation of an Integrated Recovery Pathway for Surgical Patients. J Am Coll Surg. 2015 Sep;221(3):669-77; quiz 785-6. doi: 10.1016/j.jamcollsurg.2015.05.008. IPubMedl
- Cannesson M, Ani F, Mythen MM, Kain ZN: Anaesthesiology and perioperative medicine around the world: Different names, same goals. Br J Anaesth 2015; 114; 8-9. doi: 10.1093/bja/aeu265. [PubMed] [Free full text]

