Quality in cardiac anesthesia: Is there an alternative to its practice?

The concept of total quality management (TQM) was introduced in the USA in the 80s and popularized by the Japanese industry in the 90s. It is nothing but organization-wide efforts to install and make permanent a climate in which an organization continuously improves its ability to deliver high-quality products and services to customers. This was welcomed with open arms by most industries, especially the automobile, but in contrast, an effort to extrapolate it to the medical industry was met with resistance from the medical fraternity. The clinicians perhaps perceived it as the method adopted by the administrators to “clip their wings” using “numbers” to assess clinical care. Medicine in their view could not be practiced using fish bone graphs and statistics. By now thankfully, the concept of evidence-based medicine had become acceptable to a majority of the doctors; this made TQM gain inroads into the minds of the clinicians. Soon, the benefits of benchmarking safety issues, setting targets for oneself and showing improvement in patient care converted most medical practitioners to support the idea of TQM. But, despite these positive spin-offs, even at this point, participation of clinicians in the areas of quality and clinical excellence is mandated and not volunteered. Quality and safety are two inseparable facets of healthcare as much as in other industries. The “products” here indicated the clinical outcomes and the “customers” the patients. While escalating the attention of the stakeholders, (the community of clinicians) toward these improves patient outcomes, mere spending on resources does not. The Institute of Medicine (IOM) defined quality healthcare as not only safety but also timeliness, efficiency, efficacy, equitability, and patient centeredness. The institute of healthcare improvement further defined the IOM’s definition with trifold aims: Improving the patient experience of care (including safety, quality, and satisfaction), improving the health of the population, and reducing the per capita cost of healthcare.

Anesthesiologists not only adopted to the TQM model fairly early in contrast to the other clinicians and but busted the myth that medical topics cannot be addressed on the TQM platform using processes and systems. Introducing and accepting safe surgery checklist, report of adverse anesthesia events, raising continuous quality improvement forms, conducting root cause analyses (RCA) for adverse as well as cardinal events are evidences. Oft repeated actions become good “models to standardize.” Cardiac anesthesia provides excellent opportunities for providing one such model to harmonize procedures if not standardizing; it has been well utilized by the cardiac anesthesiologists, world over. A few of such “models” are, standardizing and assessing administering anesthesia in patients with valve disease/ischemic heart disease, carrying out transesophageal echocardiogram as per the guidelines instituting cardiopulmonary bypass, and weaning from it, discontinuation of postoperative ventilation etc., Similar opportunities are aplenty in the field of cardiac surgery and cardiology as well. Many of us have developed “our” own “protocols” and treated our patients accordingly.

In a brilliant exhaustive review, recently, Merry et al. highlighted the importance of improving quality and safety of patient care in cardiac anesthesia. They adopted the concept proposed by Wahr et al. that care of patients undergoing cardiac surgery is a team endeavor. It was proposed that the triple aim be pursued while providing patient care: They
were: Measurement and the improvement of safety, doing the right things and doing things right.

Most difficult among these tasks in pursuit of safety and or quality is gathering meaningful data. Often, clinicians find it difficult to capture data pertaining to quality issues themselves amidst their busy clinical schedules. The health care has to appreciate this fact and provide support staff capable of extracting data on a daily basis. It is not only important to work with low error rate but also provide high-quality care, resulting in an excellent outcome. There is an immediate need for the healthcare facilities to place stress on quality, by not only escalating the focus of clinicians on quality issues and providing manpower to extract data but also provide other logistic supports such as information technology, statistical and managerial. Clinical audits, adverse event reporting, RCA for near misses and cardinal events go a long way in self-appraisal and improvement. Creating a robust mechanism to audit the processes and systems is a worthy investment in terms of man hours. The parameters to study and analyze each “model” could be decided by the clinicians themselves.

It has been shown that clinician engagement is important to deliver a strong message about quality in the healthcare facility. Whenever that happens, it is easy to percolate the concept of quality and safety down the order. Many cardiothoracic centers in India which are accredited with the National Accreditation Board for Hospitals, and Joint Commission International walk the extra mile to procure data and present the same to the clinicians. It is time that clinicians appreciate the need to dive head down into quality issues in healthcare. In order to understand the Indian benchmarks, it is highly appropriate to rely on Indian data; it is incorrect to interpret local problems with western data. Time and again, it has been shown that data obtained in India is not only grossly variant from the western one, but also clinically more useful. This author’s work about sharp injuries in India clearly diverged from that of the west; it had yet another group other than nurses and doctors among the most frequently injured-the housekeeping.

The society of thoracic surgeons took up the humongous task of collating the data of isolated coronary artery by pass graft (CABG) surgery and put it on the public domain. Thanks to that data, we now have certain quality measures for CABG such as the rate of use of internal mammary artery, morbidity, mortality, and use of important medications after CABG. Similarly, the Indian Association of Cardiovascular and Thoracic Anesthesia has taken its early steps in creating a software for capturing the details about cardiac surgeries and anesthesia with intentions to benchmark the Indian scene.

India caters to its cardiac surgical patients predominantly via corporate hospitals. Several such corporate hospitals have rightfully taken upon themselves to pursue the path of quality and clinical excellence. At the author’s institute, several quality initiatives have been installed. Antimicrobial stewardship is driven via a mobile phone app. This enables the end users to search for appropriate antibiotics at the bedside. Other patient-related quality issues that are captured using “Clinical Excellence Score Card” which comprises of 18 clinical parameters, which are analyzed at the unit level on monthly basis and is discussed at the corporate level annually. A few other examples are: The data obtained from safe surgery checklist (are analyzed on a monthly basis and important “catches” are publicized within the organization), and drug resistance index (is used widely instead of antibiotic resistance). It is very important for the healthcare facilities to promote a culture of safety and no blame. This not only promotes reporting of errors and near misses, but also junior members of the team to speak up. In India, several senior cardiothoracic anesthesiologists, apart from their routine work, have additionally chosen the responsibility of quality of clinical care. This augurs good for not only the patient community but also for enhancing the quality in cardiac anesthesia.

It is appropriate to reminisce the words of the great French poet Victor Hugo “An invasion of armies can be resisted, but not an idea whose time has come.” The time for practicing the idea of quality has come, and it is unlikely to be resisted for a long time. Therefore, it is relevant for cardiac anesthesiologists to realize that there is no alternative but to practice TQM; they better practice “scientific art!”

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