Leadership in anesthesiology: not just a one man show

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Anesthesiology had been one of highly skilled professional specialty with diversity of training but with a structured model of leadership culture. The culture which could be drawn back since medical training to become a medical doctor. School of medicine had already established a standard model of teaching and training. The tutoring method is implemented mostly based on classroom meetings in traditional basic lesson, bedside teaching for clerkship and internship and lately adopted method of case-based discussion.

Professional teaching is definitely different than regular and traditional teaching method. Bachelor degree is not the only main goal but good attitude, work ethics and communication as part of character building hold some key points too. Mentoring system not only based on teachers, professors, counselors, seniors who put themselves as trailblazers but also need to establish new foundations for pupils, juniors, and successors to become future leaders.

Our predecessor, Ki Hadjar Dewantara had already synthesized a leadership Javanese-rooted-philosophy but could be accustomed to Indonesian culture as a whole country. “Ing ngarso sung tulodo, ing madya mangun karso, tut wuri handayani” was a deep philosophy that could build a strong value of leadership in every needs. These strong words also could be internalized in every anesthesiologist, starting from junior residents and high profile professors and consultants. All of us would start as fresh and highly fascinated residents, embracing knowledge, sharpening our skills, make our way up to become a professional anesthesiologist. Without personal confidence and conscience awakening of the leadership value, our journey to become an anesthesiologist would only be filled with disputes, breakdowns, and restraints. As the old sayings, we need to become servants to others in order to become true leaders.

According to published research from Florida Society of Anesthesiologists, about 60% US citizens did not know about anesthesiologist, what were their job and competencies, and even did not know that anesthesiologists are also a trained medical doctor. United States of America employs nurse anesthetists that could provide anesthesia service in accordance with their competency level who become rivalries with anesthesiologist in anesthesia service. This evolving matter would make anesthesiologists need to find a way to level up their services and competencies in order to get higher marks and reputation. One of true competencies that future anesthesiologist should have to overcome others is leadership. The true leadership not only lies on commanding others but also managing ourselves and coworkers into a solid team to improve performances.

Theory of Leadership had been evolving in time. Not all of theories could be applied to special healthcare working team who faced exceptional challenges. The team needs to provide consistent high-quality patient care and at the same time train and develop each team member especially the novice members. Their tasks would be uncertain, unpredictable, urgent and complex. A special team that really need a good team leader to build, guide, and coordinate its member to overcome challenges. Those theories especially which could be practiced on a special trained unit and perfectly derived and compared with anesthesiologist way of leadership are already in research field of Katherine J. Klein and her colleagues (2006). Klein and team had drawn four leadership perspectives of particular relevance to extreme action teams of the Trauma Resuscitation Unit (TRU). They are contingent leadership, functional leadership, shared team leadership, and flexible leadership.

Contingent leadership theory emphasized that leaders must be matched to, or must match their style to characteristics of the situation. Leaders urged to provide directive leadership when subordinates are inexperienced and their tasks are unstructured and complex. Leaders are advised to allow subordinates more influence in decision making if the subordinates share, rather than oppose, organizational goals. The theory suggests leaders of extreme action teams may adapt their behaviors to the changing nature of their team’s tasks.

Functional leadership theory describe the broad functions a leader may serve for his or her team. Some key leadership functions identified in this theories include monitoring team performance an
environment to discern threats to team’s effectiveness, structuring and directing team members’ activities, teaching and training team members to develop skills and knowledge, motivating and inspiring team members to enhance their commitment to accomplishing team tasks, and intervening actively in teamwork. The functional theory suggests leaders who perform the functions above may be particularly effective in guiding members of extreme action teams to meet challenging task demands.

Shared team leadership theory was described as dynamic, interactive influence process among individuals in work groups in which the objective is to lead one another to the achievement of group goals. The theory suggests that effective leadership of extreme action teams may transcend the influence of a single formal leader, rather, leadership may be shared among several team members.

Flexible leadership theory was built from arguments that in times of rapid change, leaders must be highly flexible, responsive, and adaptive. This perspective suggests that the leaders of extreme action teams must demonstrate considerable flexibility in responding to their teams’ changing task conditions and composition.

These four theories of leadership had shown the nature of leadership in extreme action teams which could be contingent, functional, shared, and flexible. But in real practice, team composition changes frequently, reliable performance of urgent and interdependent tasks is critical, and novice team members must be trained and developed on the job. Based on those theories, researchers were developing further qualitative studies and building new perspectives in leadership theories. Researchers found a hierarchical, deindividualized, and dynamic system of shared leadership in extreme action teams. The key was dynamic delegation, in which senior leaders’ rapid and repeated delegation of the active leadership role to and withdrawal of the active leadership role from more junior leaders of the team in response to challenging task demands.

Hallmark of dynamic delegation is the rapid and repeated transfer of active leadership role up and down the leadership hierarchy. Dynamic delegation could be enabled when there are elements of deep commitment to the development of unit novice members, equally deep commitment to the production of consistent, high-quality work outcomes and hierarchy of expert authority. Dynamic delegation also well occur in other settings not only in extreme action teams as long as there are structured task performance routines, expert support staff, fixed and sequential time structures, and deindividualization. Anesthesiologists are well experienced in both settings whether in extreme action teams or other integrated working settings and this model of leadership could be well employed.

Katherine J. Klein and her colleagues suggest that extreme action teams and other “improvisational” organizational units including ourselves as anesthesiologists to achieve swift coordination and reliable performance by melding hierarchical and bureaucratic role-based structures with flexibility-enhancing processes.

In other study that conducted by Cooper and Wakelam (1999) about leadership in resuscitation team, they mentioned a term called ‘lighthouse leadership’ as an analogy related to lighthouse keeping. Leaders might like to imagine themselves as a lighthouse keeper whose ‘light’ should guide and direct the team from afar, only occasionally launching themselves into the situation for those that require assistance. The effective way to lead an emergency team, namely through initiation of a structure and establishing a system of control that directs, guides, co-ordinates and maintains performance standards. The truly effective leader demonstrates a holistic approach to the process of resuscitation, by not only encourage action but transform their teams approach. Leaders still need training, so the next phase of study is development of suitable training program with parallels drawn from other life support teams, incident teams, ambulance, even aircraft cockpit crews. Useful lessons could be drawn from other teams to promote and enhance team performances and ultimately leadership skills.

But how could we become leaders in our workplace? Sometimes the best way to overcome challenge is by continuing practices. Deriving theories into practical deeds need more than just effort, but also good intentions, urge of improvement and astute working ethics. Edward R. Mariano in his lectures had given some practical tricks to become a leading anesthesiologist:

1. Be a good doctor
   Becoming a good doctor not only doing a daily practice according to standard operating procedure but also performing an act of humanity, considering patient and feelings and agenda and avoid any potential conflict of interest between our own judgment, stakeholders or pharmaceuticals benefit, and private interests.
   - Have your own identity
   We as anesthesiologist rarely seen outside the operating theater and be known to our patients. Diversify our practices ranging from emergency department until pain management, and also make some ways to communicate with patients and families in our professional practice according to standard operating procedure.
attitude. Remember to open our masks outside the operating theater and show other workers and patients that we are also human with needs to communicate.

3. Know the rules of game.
Anesthesia practice is evolving from traditional private practice into horizontal or vertical integration. Several private practice in US had already been acquisitioned and taken by major health providers and companies. A good leader should have a good vision of future opportunities of employment. Investments, future co-operations, sharing costs, and other joint ventures are economical and business matters that could be built from good anesthesia service and quality. It is important for anesthesiologists to promote and sell their qualified service.

4. Questioning about status quo
Developing new ideas, improvise procedures, looking for new opportunities are ways of us human to ask for changes. Medicine is a science which continuously evolving, so every part of it needs to change and evolve as well. Anesthesiology is build based on thousand researches and scientific papers. As an anesthesiologist, making progress should be done not only by better techniques but also in scientific writings.

5. Build trust and celebrate team winnings
‘No man is an island’ is an old proverb that still holds up-to-date meanings for humanity. Anesthesiologists work for and with humans. Humans with different perspectives and personalities are not easy to manage. Teamwork should be built on trust not by force or political or economic interests. Nurses, healthcare personnel, management, quality board, even stakeholders are considered to be workmates and their statements are counted. Deeper understanding and win-win solution by a potential negotiator should be employed. Anesthesiologist could play roles in negotiating, uniting opinions, solving disputes to overcome burdens and hindrance in teamwork.

6. Be open to opportunities even they would ask for more workload.
Lots of working fields could be cultivated as opportunities for anesthesiologists. More opportunities means more workload. To become a trendsetter or trailblazer in new field, we need to set paces and paths for others which could ask for more hours to train and teach, even fix mistakes and faults. Leaders are not afraid of new technologies, they are afraid of incompatibilities of adjusting into latest updates and improvements. They could improvise themselves in order to get better performance. Anesthesiologists should not be afraid of changes because changes are the living proof and the beat of anesthesia work rhythm. Embrace the changes just like we improvise with intraoperative hemodynamic changes could be keys to manage and deal with them in proper ways.

We have already seen the upcoming challenge of regulations, accredited hospital standards, and reimbursements in medicine, which also challenge us as professional healthcare personnel to build and improvise our service and managerial skills. Anesthesiologists could expand their roles in one of hospital core standards, Anesthesia Surgical Care (ASC) to help surgeons provide cost-effective and high-quality patient care. Based on Lawrence A. Bauss, MD and Tony Mirá’s point of view, both are experts in Anesthesia and Perioperative Care, anesthesiologists could have larger roles in patient quality determination which would make us to become leaders more than surgeon. There are four key areas that could be more cultivated by anesthesiologists to expand our roles, which are:

1. Perioperative Care.
Anesthesiologists are expected to become leaders in perioperative periods rather than simply providing intraoperative anesthesia. To provide total medical care from pre, intra and postoperative care could determine patient’s quality in their surgical experience better than to be held by surgeon only. This concept is in accordance with Perioperative Surgical Home model that consisted of patient-centered, physician-led system of coordinated care. This area would broaden anesthesiologist’s scope of practice to improve clinical outcomes.

2. Productivity and Cost Savings.
Anesthesiologists are experts in treating the whole patient, not only focused on specific anatomical site, so they would decide highly individualized preoperative testing that would lead into reduced costs without ruling out necessary information. Anesthesiologists could also treat patients in proactive way to reduce complications and minimize recovery times to ensure patient satisfaction.

3. Postoperative Pain Relief.
The new paradigm in medical practice emphasize the striving of value-based, outcome-oriented and satisfaction-guaranteed patient care. From data surveys, it appeared that pain and postoperative nausea and vomiting are primary concerns of patients.
Anesthesiologists play a vital role in tailoring anesthetic drugs and pain management to quicken recovery and discharge with minimum side effects. Several researches have suggested regional anesthesia superiority to opioids for postoperative pain management and morbidity reduction in patients with no contraindications of regional anesthesia. Sophisticated technique in regional anesthesia combined with pain relief questionnaire system are considered best practice model in postoperative pain relief.


Lots of data are available about patient health and payment status. Anesthesiologists who are experts in evaluating patients as a whole could dig deeper in those data to provide cost-effective approach in quality service. Especially in ambulatory anesthesia, anesthesiologists could play vital role as a leader to promote safer, cheaper, quicker service based on thoroughly examined data.

Recently, patient safety has become a major public concern. Anesthesiologists work in a complex, rapidly changing, time-constrained and stressful work environment. The anesthesia domain is in many ways similar to aircraft cockpits, air traffic control rooms, and combat information centers where effective performance demands expert knowledge, appropriate problem-solving strategies, and fine motor skills. The anesthesiologists view their task as managing single highly interactive system composed of the patient, clinical equipment, surgeons, other operating room personnel, and broader environment. Human factors research in other high-risk fields has demonstrated how rigorous study of factors that affect job performance can lead to improved outcome and reduced errors. There should be more human factors research in anesthesiology in order to achieve safe administration of anesthesia leading to ultimate patient safety.

The safe administration of anesthesia requires vigilance, time-sharing among multiple tasks, and the ability to rapidly make decisions and take actions. Vigilance is a subset of situational awareness and depends on alertness attention, and diagnostic skills. Vigilance can be adversely affected by many factors including experience, attitude and motivation, task complexity, workload, and faulty equipment or system design. Vigilance should be trained and intensified with experience to become one of sharpest weapon of an anesthesiologist. It should be enhanced as an individual and also as member of healthcare team.

In the other hand, Parry has described the term competency as a cluster of related knowledge, skills, and attitudes that affects a major part of one’s job, correlates with successful job performance, can be measured against well-accepted standards, and can be improved through training and development. If all team knowledge, skill, and attitude competencies could be combined, we would get a successful teamwork in healthcare. Continuous and comprehensive team training would emphasize on important phases such awareness, skills practice and feedback, and recurrence. Numerous medical team training programs have been developed and implemented in response to patient safety concern. Among several programs, the Crisis Resource Management for anesthesia personnel had shown to be the best result training program implemented for healthcare teamwork. The CRM training was developed interactively, introducing and testing the effectiveness of different strategies, and evaluated throughout time. It also emphasize on leadership training, debriefing skills, and adherence to established procedures but modified with adverse clinical events.

Based on those world challenges, safety concerns and our consistent habitual response as vigilant medical expert and have interchangeable role with other operating room personnel, it is unsavable that anesthesiologists could be dynamic leaders and patient safety corroborators. Lots of experiences, teamwork trials, delegation methods and even healthcare training modes to build and create leaders. Supreme materials and craftsmanship had already been internalized in every anesthesiologists. But in order to become leaders, anesthesiologists should step out and become astounding figure in patient concerns. Anesthesiologists should be the epitome of patient safety doctor. Our exemplification could draw other healthcare personnel and workers not only in operating theater but also in other hospital settings.

Leaders are not those who pointed fingers and do nothing. Leaders could serve and provide assistance for other personnel in different settings. Restricted roles and stiffness would only gain negativities and contra-productivity. Leaders have already a ‘big picture’ in their mind and they would devise and conform their team in order to score some goals. Flexibilities is the tool that only leaders could use to conform their team in order to score some goals. Leaders could serve and provide assistance for other personnel in different settings. Restricted roles and stiffness would only gain negativities and contra-productivity. Leaders have already a ‘big picture’ in their mind and they would devise and conform their team in order to score some goals. Flexibilities is the tool that only leaders could use to get closer into their goals by managing their team ahead of, behind or with the team members.

Effective communication and integrative teamwork are also two inseparable things that leaders should promote. Clear, substantial, and evidence-based information would be processed quickly when it is communicated in correct and structured way. Team should also work as one unity, not in fractions, even in interchangeable roles and
dynamic leadership. Trust is the main key to build unity and then it would be strengthened by effective communication.

Lots of disciplines are involved in these matters, not only medicine and anesthesiology. Sociology, philosophy, psychology, behavioral science, communication skills, and even management aspects are involved in these matters. Anesthesiologists, who are also scientists, need to overcome their superiority feelings as medical experts and try to cultivate other fields, which undoubtedly, linked to their job and agendas. Leadership is definitely could be achieved by anesthesiologists who are open into opportunities, ready to learn new things and believe that successful leadership is not just a one man show, but lies in a good teamwork.

REFERENCES