

## **Development of sub or super specialties in Anesthesiology- Bangladesh perspective**

Now a day's Anesthesiology is one of the demanding and essential specialty of modern medical science, not only providing anesthesia for operative procedure but also involve in the management of different medical condition. Anesthesia is the largest single hospital specialty across the globe but is probably the least well understood in the developing countries. Still the general public has little idea of the role of anesthetists and sadly even the medical profession often mirrors this lack of knowledge. During Covid 19 pandemic situation, the vital role of anesthesiologist somehow recognized by the health authority and government of Bangladesh. Anesthesiologists treat patients of all ages with a variety of medical problems. Anesthesiologists operate on a wide range of cases, from heart and brain procedures to births and natural manmade catastrophes.

The successful modern anesthetics were given in the early 1840s. Since the mid 19th century, the sciences of pharmacology and physiology have greatly expanded, and this expansion in knowledge has been followed by an concomitant development in anesthesia. The early times simple and easy administration of ether and nitrous oxide has evolved into a highly specialized and complex science today. Another cause of this complexity was instrumental development and wide range of surgical and medical disease process management which is essential for safety of patient. It is often forgotten that none of the high profile advances in surgical practice could have taken place without efficient and effective methods of anaesthesia and intensive care medicine. So Anesthesiologists treat patients of all ages with a variety of medical problems. Anesthesiologists operate on a wide range of cases, from heart and brain procedures to births and catastrophes.

So Anaesthesia is a rewarding and challenging specialty and acute in nature. In developed country Anesthesiology is an exhilarating field where patient may put to sleep, but their professions are anything but restful due to their acute nature. Anesthesiologists work in more urgent conditions than many other medical professionals. It combines manual dexterity with

intellectual stimulation and is truly one of the few specialties where decisions made in critical situations can mean the difference between "life and death." There is most important truth in the old adage that "every good surgeon deserves a good anesthetist, while every bad surgeon needs one," but remember that anaesthetists' work is not limited to the operating theatre. Anesthesiologists frequently collaborate to provide pain management to patients before, during, and after surgical, obstetrical, or therapeutic procedures and other acute service in hospital.

Now a days wide range of activities performed by anesthesiologist are splitting with the aims of more achieve skill and advance knowledge for safety of patient in the developed country. This is also essential for corps with the development all surgical specialties and super specialties. The American College of Surgeons recognizes 14 surgical specialties: cardiothoracic surgery, colon and rectal surgery, general surgery, gynecology and obstetrics, gynecologic oncology, neurological surgery, ophthalmic surgery, oral and maxillofacial surgery, orthopaedic surgery, otorhinolaryngology, pediatric surgery. In Royal college of Surgeon UK recognized ten surgical specialties, all of which will provide with different challenges and rewards throughout career. A large specialty like general surgery is containing many sub-specialties including: breast, colorectal, endocrine, upper and lower gastrointestinal (GI), transplant (of kidney, liver, pancreas) and vascular. Laparoscopic and endoscopic surgery may also be practiced as a sub-specialty.

With the development of surgical specialty and sub specialties, there are various subspecialties of anesthesiology was developed by the Royal college of anesthetist, UK and National broad Anesthesiology USA. Those are 1. Obstetric anesthesia, 2. Adult Cardiac Anesthesiology, 3. Pediatric Anesthesiology, 4. Pain Medicine, 5. Critical care medicine, 6. Intensive Neuro-critical Care, 7. Palliative and Hospice Medicine and 8. Sleep Medicine. So every anesthesiologist can choice the specialty and they can provide excellent service to patient and

developed themselves according to needs. Many of the physicians are considering a career in anesthesiology. Anesthesiologists are ranked first on U.S. News & World Report's list of the Best Paying Jobs. Seven Highest Paid/Paying Countries for Anesthesiology Subspecialty in the World are 1 Switzerland, 2 United States of America, 3 Germany, 4 France, 5 Canada, and 6 Netherlands and United Kingdom. There are various subspecialties of anesthesiology however, additional training and examination as stipulated by the board are required for certification in one of the anesthesiology subspecialties.

In Bangladesh perspective, basic Anesthesiologists are shortage according to government statement. In spite of that there are the different surgical specialty and sub specialty growing continuously according to time demand manner but service to people is very limited. In Bangladesh there is limited facility is available in spite of demand from different surgical specialties to development anesthesia sub specialty to achieve more patient safety and provides excellent service. In every medical hospital there are 10 to 15 surgical specialty and sub specialty, and in district hospital 6 to 10 surgical specialty and subspecialty department which needs anesthesia subspecialty for proper and adequate anesthesia service. In capital city and other divisional city has specialized surgical hospital which also needs sub spatiality anesthesia trained person. In government 37 Medical college hospital, 63 district hospital and 10 specialized hospital have plan to increased ICU bed and newly develops ICU service which needs huge trained manpower. Considering the whole meter Government of Bangladesh and Bangabandhu Sheikh Mujib Medical University should take initiative to develop the essential sub or super-specialty in Anesthesiology. It will not require any excessive investment but this initiative can improve the condition and more young physician will be interested to do career in Anesthesiology. Hopefully Bangladesh health service will be able to provide excellent all advance surgical service with the help of Anesthesiology within 2041 like developed country.

BSMMU and BCPS like the Royal College of Anaesthetists, UK and American Board of Anesthesiology may be the professional body responsible for the specialty of anaesthesia throughout the Bangladesh. They set standards

in subspecialty of anaesthesia, critical care, pain management, and for the training of Post graduate anaesthesiologists. Certification in all standard subspecialties requires additional training and assessment as specified by the authority.

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