Translational Perioperative and Pain Medicine

ISSN: 2330-4871

Short communication | Open Access Volume 7 | Issue 4

Anesthesia Care and Anesthesia Care Providers: Ambiguities in Terminologies

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Abstract

The designated titles for various levels of anesthesia care providers have been evolving. Enormous confusions regarding these titles exist due to ever-changing delivery of anesthesia care and other factors such as conflicting political and financial interests. Confusions exist between the terms of "Anesthesiology care" and "Anesthesia care", Anesthesiologist and Certified Registered Nurse Anesthetist (CRNA), CRNA and Certified Anesthesiologist Assistant (CAA), "Anesthesia clinician" and "Anesthesia provider", and Anesthesiologist and Physician anesthesiologist. Studies comparing the difference between anesthesia care delivered by physician anesthesiologist and CRNA showed conflicting results. The likely changes in anesthesia care have also been discussed in the article.

Keywords

Anesthesia care, Anesthesiology care, CRNA, AA, Anesthesia clinician, Physician anesthesiologist

Anesthesia workforce level has been a topic for years in anesthesia community and health care system administrations. Dr. Kapur and Dr. Atkins published two articles respectively in December 2019 [1,2]. Dr. Kapur provided enormous statistical data which is very helpful for society leaders and policymakers to use and consider in determining what workforce level of anesthesia care will need. Dr. Atkins discussed the relationship between certified registered anesthetic nurse (CRNA) and physician anesthesiologist, the relationship between CRNA and certified Anesthesiologist assistant (CAA), and discussed the need for physician supervision when CRNA provides anesthesia care. Such useful discussion will help to improve anesthesia care. Various terminologies were used in both articles which could potentially be confusing. This article will try to discuss and clarify the terminologies, and offer additional insights about issues that were not discussed in both articles: 1) what kind and to what intensity of challenges anesthesia care will face in the near and remote future; 2) the differences between CRNA and CAA; 3) anesthesia service by CRNA without physician supervision will have compromised quality of patient care.

"Anesthesiology care" vs "anesthesia care"?

Hospital administrations and ourselves have been describing our daily service as "anesthesia care" for many years. In both Drs. Kapur and Atkins' articles, they used "anesthesiology care", can "anesthesiology care" be interchangeably used as "anesthesia care"? Or "anesthesiology care" covers wider area than "anesthesia care" to include critical care medicine, pain medicine, sleep medicine, hospice care, etc., while "anesthesia care" does not? In American Society of Anesthesiology (ASA) website, it seems that nobody uses "anesthesiology care" just yet.

"Anesthesiologist" vs "Physician anesthesiologist" vs CRNA anesthesiologist?

The term "anesthesiologist" had become the preferred designation for the physician anesthesia care provider in the United States since 1950 [3]. In recent years, ASA obviously adopts the terminology of "Physician anesthesiologist" to specify those physicians who provide anesthesia service. The term "Physician anesthesiologist" appears in ASA official website and "physician anesthesiologist" is defined as "highly skilled medical doctors who specialize in the field of anesthesiology". Dr. Pease used "Physician anesthesiologists are highly skilled medical experts. As a physician anesthesiologist, we have the depth of training and experience to be able to react and save a life" [4]. However, "anesthesiologist" seems to fit well into the definition of "Physician anesthesiologist" as it appears in ASA definition. And there are voices to against the name designation as "physician anesthesiologist", Dr. Viswanath et al. pointed out that the term "physician anesthesiologist" is redundant, creates confusion, and is underserving of our specialty [3]. Does "Anesthesiology consultant" used sporadically over the last decades have any implication now and in the future?

Will there be a "Nurse anesthesiologist"? As the trend toward more advanced education for CRNA began in 2004, the American Academy of Colleges of Nursing (AACN) members published a position statement which

advises its member colleges to transition all advanced practice nursing education to the Doctor of Nursing Practice (DNP) degree [5]. CRNA doctoral programs are mandated for students entering the workforce as new graduates in 2025. As a matter of fact, some CRNAs have already be granted Doctor of Nursing Practice [2,6]. This means the CRNAs are also called "Dr. So and So". This will surely confuse those patients who don't have any clear understanding of what anesthesiologist means.

"Anesthesia clinician" vs "Anesthesia provider"?

In Dr. Atkins' article, he used a term called "anesthesia clinician" and he seems to use the term for CRNA and CAA anesthesia providers. Now the question is "are MD/DO anesthesiologists in the category of 'anesthesia clinicians'?". Is "anesthesia clinician" equivalent to "anesthesia provider" as we commonly describe it? "anesthesia clinician" will most likely be perceived as "anesthesia provider", not what was mentioned in Dr. Atkins' article to represent CRNA and CAA.

AA vs CAA vs CRNA?

It is interesting to have noticed that Dr. Kapur used AA to represent "Anesthesiologist assistant", while Dr. Atkins used CAA to indicate "certified Anesthesiologist assistant", any difference exists between the two titles? If CAA only indicates an AA who has gone through the certification process, do certified MD/DO anesthesiologist need to be called "certified anesthesiologist (CA)"?

AA and CRNA are different in many aspects, such as entry requirement for their training, educational programs, certification process, practice scope, though "Both CRNAs and CAAs earn a minimum of Bachelors and Masters Degrees, pass a written national certification test, and completed requirements for annual continuing education and ongoing testing", as Dr. Atkins pointed out [2].

Physician supervision vs No physician supervision

Dr. Atkins stated that "The care team model allows anesthesiologists to be outside of the operating room to participate in administrative, research, training, quality, and safety related activities", anesthesiologist participation in administrative, research, training, quality improvement, and safety related activities does not necessarily need team care model as long as anesthesiologist is offered enough non-clinical time, and team care model was not initially developed to let anesthesiologist participate non-clinical involvement. Team care model was developed to have anesthesiologist more involved in perioperative care (pre-, intra- and post-operative care) instead of only intraoperative care. As an ASA statement pointed out, "The practice of anesthesiology includes the evaluation and optimization of pre-existing medical conditions, the perioperative management of coexisting disease, the delivery of anesthesia and sedation, the management of postanesthetic recovery, the prevention and management of periprocedural complications, the practice of acute and chronic pain medicine, and the practice of critical care medicine" [7]. CRNA organization and non-CRNA supported studies comparing anesthesia outcomes have shown conflicting results. Independently funded famous Silber study showed that 2.5 excess deaths within 30 days of admission and 6.9 excess failures-to-rescue (deaths) per thousand cases when an anesthesiologist was not involved [8]. Memtsoudis et al. looked into the factors that potentially influencing unexpected disposition after orthopedic ambulatory surgery and they found an increased risk of adverse disposition in cases where the anesthesia provider was a non-anesthesiologist professional [9]. CRNA funded study by Needleman and Minnick found that hospitals using only CRNAs, or a combination of CRNAs and anesthesiologists, did not shown systematically poorer maternal outcomes when compared with hospitals using anesthesiologist-only models [10].

Will the CRNA practice scope widen in the future?

Very likely, the practice scope for CRNAs will continue to increase due to several factors. As new technologies and monitoring devices which offer more advanced perioperative patient monitoring, anesthesia practice will get safer and safer. CRNA organizations will push more independent practice in more states, especially when all CRNAs have doctor's degree. And the overall health care environment will continue to be favorable for CRNAs to achieve that status.

In summary, there are many confusing terms being used concurrently. This article discussed the ambiguities in "Anesthesiology care" and "anesthesia care", Anesthesiologist and CRNA, CRNA and CAA, and "Anesthesia clinician" and "Anesthesia provider". The CRNA practice scope will likely continue to widen.

Disclosure: No conflict of interest

References

1. Kapur, Patricia A. Anesthesiology Workforce Challenges in the US. Transl Perioper Pain Med. 2020;7(1):168-170
2. Atkins JH. The Anesthesiology Care Team: Who, How, Why?. Transl Perioper & Pain Med 2020; 7(1):172-173
3. Viswanath O, Jones MR, Diaz JH, Kaye AD. It's All in the Name: Anesthesiologist Versus Physician Anesthesiologist. A&A Practice: September 1, 2018 - Volume 11 - Issue 5 - p 144. doi:10.1213/XAA.0000000000000781.
4. https://www.aamc.org/data-reports/workforce/interactive-data/active-physicians-age-and-specialty-2017; last accessed November 23, 2019

5. https://www.asahq.org/whensecondscount/anesthesia-101/role-of-physician-anesthesiologist/ cited on December 28, 2019

6. https://www.staffcare.com/physician-blogs/raising-the-bar-in-crna-education-what-the-2025-deadline-means/ cited on December 28, 2019

7. Statement on the Anesthesia Care Team. Committee of Origin: Anesthesia Care Team (Approved by the ASA House of Delegates on October 26, 1982 and last amended on October 23, 2019)

8. Silber JH, Kennedy SK, Even-Shoshan O, Chen W, Koziol LF, et al. Anesthesiologist Direction and Patient Outcomes. Anesthesiology. 2000, Vol.93, 152-163.

9. Memtsoudis SG, Ma Y, Swamidoss CP, Edwards AM, Mazumdar M, et al. Factors influencing unexpected disposition after orthopedic ambulatory surgery. J Clin Anesth. 2012 Mar;24(2):89-95. doi: 10.1016/j.jclinane.2011.10.002. PMID: 22305625

10. Needleman J, Minnick AF. Response to Commentary: What Conclusions Can We Draw from Recent Analyses of Anesthesia Provider Model and Patient Outcomes? Health Serv Res. 2010 Oct; 45(5 Pt 1): 1397–1406. doi: 10.1111/j.1475-6773.2010.01155.x PMCID: PMC2965512

Citation: Liu H. Anesthesia Care and Anesthesia Care Providers: Ambiguities in Terminologies. Transl Perioper & Pain Med 2020; 7(4):268-270

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Additional publication details

Journal short name: Transl Perioper & Pain Med

Received Date: January 28, 2020

Accepted Date: May 20, 2020

Published Date: June 01, 2020