Too Little, Too Late
To the editor: My eyes filled with tears as I read the Editor’s Desk article in the June 2019 edition of AANA Journal. Dr Biddle’s essay on child abuse and neglect was not only a service to our profession, it hit home to me on a close personal level.

My great-grandson, Jackson James (JJ) Newman was abused by his father and died as a result in February of this year. The autopsy showed blunt force trauma to the head, body, malnutrition, and methamphetamine in his bloodstream. JJ was only 2 years old, a bright, active, and happy child.

There was a major system breakdown in Las Vegas where they lived. Child Protective Services and the police ignored our calls for welfare checks and parental and grandparent rights. There has finally been an arrest and charges are pending, but nothing will bring back our precious baby.

I am begging all CRNAs and SRNAs to read Dr Biddle’s essay and to be alert to signs of child abuse and report it. To quote the essay, “Never be part of the continuum of wrongs. Remember, too little, too late.”

Mary Jeanette Mannino, JD, CRNA
AANA Former President, 1987-88
Laguna Niguel, California

Waking Up Safer? An Anesthesiologist’s Record
To the editor: I would like to respond to the slanted letter that was published in the AANA Journal with respect to my recently published book: Waking Up Safer? An Anesthesiologist’s Record (Silverwood Books, 2018, 270 pages, ISBN: 978-1-78132-749-4) in which I celebrate the advances of anesthesia by telling the brief life stories of the many protagonists that transformed anesthesia from its humble beginnings to its present sophisticated (much safer) state—through the autobiographical lens of my own career as an anaesthesiologist in South Africa, then England—progressing on to become Professor and Chair of Anaesthesiology at Penn State University—where the final chapter of the book tells of the teamwork that is inherent to running an academic medical center operating room where I serve as the OR coordinator and my colleague CRNA and I look after a complicated patient for life-enhancing robotic surgery on Valentine’s day.

Rather than reading the book in its proper context the author of the letter distorts my writing and wrongly claims that:

(a) “the author makes clear that he believes today’s anesthesia is safer only because of physician involvement”

Clearly wrong: witness the many protagonists – chemists, physicists, mechanics, dentists, surgeons, nurse anesthetists (who trained Dr Virginia Apgar at Columbia University), involved.

(b) “his soft spot against non-physicians recurs later in his book in the form of bias against nurses.”

Unsubstantiated slander.

(c) “Dr Mets then describes the next 100 years of anesthesia history as if chloroform, cyclopropane, and halothane were the only consequential developments of the entire century.”

Clearly the letter writer has not recalled the chapters entitled “Drugs, Equipment and Monitors – an Alarming Situation” nor “Magic! the Unfolding Mystery of Anesthesia.”

And finally, and most unfortunately, the letter writer misinforms by stating incongruously:

(d) “Elsewhere he refers to non-physician anesthetists as “tyros” beginners or novices. This is clearly disparagement.”

This is a most unfortunate twist, occasioned by using a twenty-first century concept, (non-physician anesthetist) to describe a historical detail, in order to make a contrarian statement. Here is what I actually wrote with regards to happenings in 1894:

“Anesthetic practice had to be separated from well-meaning but inexpert surgeons who had relegated the responsibility of this hazardous pastime to inadequately trained tyros. Witness Dr George F. Shrady’s description of the situation in New York: “Strange as it would appear to an intelligent layman, hospital surgeons continue to delegate this important duty to junior assistants, dressers, and medical students.”

The result: the almost dead patient at the end of the proceedings would require “hypodermatic stimulation with strychnine or digitaline” to avert total collapse. Thought unnecessary, Shrady continued, “if the proper vigilance and expertise had been applied, including the administration of a hot saline enema containing whiskey.”

At that time, “Anyone can give an anesthetic” was the surgeon’s rallying cry, and just about anyone did! Once drafted, these novices in the anesthetic craft received yelled instructions on anesthetic administration from inexpert surgeons. No wonder things went wrong! In turn, surgeons were distracted from anesthetic care by
the need to perform the operations which required all their attention. Predictable failures and emergencies resulted, which the drafted tyros were untrained to manage, resulting in a high mortality rate."

In closing, I would encourage the reader of this rebuttal to read the book yourself—I think that you will find this award-winning book on the history and development of anesthesia—fun, enlightening, and most informative in its celebration of the progress of our specialty.

Berend Mets, MB ChB, PhD
Hershey, Pennsylvania

Response: Dr Mets is correct in noting that he devoted two chapters to describing how non-physicians developed the pharmacology, drugs, and equipment that support anesthesia. He credited by name numerous chemists, physicists, mechanics, and dentists, and he detailed much of their work. So, I stand corrected on this.

But I do not think I was wrong to say Dr Mets favors physicians over nurses. He mentioned nurse anesthetists just six times in isolated parts of his book. Three such mentions relate to staffing matters like communications, scheduling, and staff meetings. In the fourth reference a nurse anesthetist wishes Dr Mets a happy Valentine’s Day. In these examples nurse anesthetists are inconsequential and immaterial to history. In a fifth example, he described a “highly competent nurse anesthetist” as his “co-pilot, anesthetizing with me all the patients booked for surgery in OR 20 today.” Only one reference acknowledges, remotely and obliquely, our active educational role. It reads Virginia Apgar “spent a year with the nurse anesthetists” prior to entering residency training. This does not do justice to the history of nurses as anesthetists.

Dr Mets could have written that nurse anesthetists saved anesthesia from its 19th century perils. He could have written that they facilitated the first safe trauma operations in World War I. And his discussion of anesthesia education could have included Agnes McGee, Agatha Hodgins, and Helen Lamb who had pioneered anesthesia education long before Ralph Waters opened the first residency program.

While Dr Mets suggested that my critique was unjust, my criticism was not meant to be malicious or defamatory. Viewing our exchange of opinions within each of our own context might prove to be helpful, and hopeful.

Until just recently, anesthesia history books focused solely on one provider group, physicians or nurses. It was as if each author had a blind spot. In 2015, The Wondrous Story of Anesthesia became the first and only book (so far) that includes both medical and nursing history.

An anesthesiologist who contributed to that book said to me: “It is long past time for us to stop talking only to ourselves and start talking to one another.” I agree with him, and I urge all who attempt to write the history of anesthesia to do the same. If we talk, and listen, to one another we might rightfully claim to know our history.

Bruce E. Koch, MSN, CRNA
Spirit Lake, Idaho

Anesthetists’ Ethical Responsibility Behind Pharmacogenetics

To the editor: I am writing regarding the AANA Journal article “A Primer to Pharmacogenetics of Postoperative Pain Management,” published in April 2019. I want to take a moment and reflect on the AANA Scope of Nurse Anesthesia Practice, which states, “Nurse anesthetists are innovative leaders in anesthesia care delivery, integrating progressive critical thinking and ethical judgment.” I am honored to be part of a profession of leaders who critically think and ethically judge their actions. I applaud Aroke and Kittelsrud’s introduction of a highly controversial subject as useful science. However, genetic testing as a determinant of medication allowances requires an ethical discussion. The use of a patient’s genomic variation offers the anesthetist a powerful tool. However, with power comes responsibility, a global responsibility to patients, and our profession. I think this is an opportunity for anesthetists to lead by example; a chance to show patients and other members of the anesthesia care team to not only review the numbers but always the patient as a whole.

Often, reliance on these numbers moves and motivates decisions, which in turn, allow us to silence the voice inside, our gut instinct. I then ask, do you believe your instinct? Who better knows the patient? We see how they respond and react to our questions during that first encounter in the preoperative area. We understand the impact midazolam has on their body as we roll them back to the operating room. We learn how their vital signs have responded to other medications at induction. We are the instruments of best measure; genomic analysis cannot exceed our gut instinct and vigilance. Let us never forget the patient right before us, entrusting us with their life. Let us be cognizant how actions of the nurse anesthetist and nursing as a whole create a culture of integrity in which our discipline is founded.

I appreciate the work these authors have introduced, but as nursing leaders, we have an ethical obligation to consider all factors affecting our profession and our patients. Genetic testing should never yield discrimination of any kind. We should not allow any one test to classify allowance of pain relief. Anesthetists are privy to all forms of pain management, therefore entrusted with its use.
REFERENCES

Lisa Ferrand, MSA, CRNA, APRN
Hollywood, Florida

Response: We thank Lisa Ferrand for her interest and comments regarding our article published in April 2019 by the AANA Journal entitled “A Primer to Pharmacogenetics of Postoperative Pain Management.” We appreciate your comments regarding ethical use of genetic information and we believe that the use of genetic results in the clinical setting must be governed by principles of bioethics: autonomy, beneficence, non-maleficence, and justice. We are in the midst of a genetic renaissance as such, and information seems to be moving quite quickly from research to clinical practice most notably since the completion of the Human Genome Project. However, pharmacogenetics itself has roots dating back to 510 BC, when Pythagoras first understood that fava bean ingestion was detrimental to those deficient of G6PD. Furthermore, the use of genetic information about drug metabolism has been clinically beneficial to providers since the 1950s when Vogel coined the term pharmacogenetics. Thus, we respectfully disagree with your assertion that pharmacogenetic is “a highly controversial subject.”

Indeed, CRNAs routinely ask patients about personal and family history of malignant hyperthermia (MH) during preoperative assessment. MH is a pharmacogenetic disorder of the L-type calcium channel and ryanodine receptor that is inherited in an autosomal dominant manner. A sophisticated research study is not necessary to prove that knowledge of the genetic nature of MH has made it possible for many MH susceptible individuals to successfully undergo anesthesia. In the era of precision health, there is a change in the clinical paradigm towards preemptive genotyping and incorporation of genetic data into clinical decision making. We agree with your caution that healthcare providers should “not only review the numbers but always the patient as a whole.” Institutions that have implemented preemptive genotyping such as Mayo Clinic, have integrated clinical decision support and pharmacogenetic data into the electronic health record to optimize the delivery of the right drug, at the right dose, to the right patient, at the right time. Awareness of some of the nuances of pharmacogenetics is the main focus of our article. For example, when a clinician understands that CYP2D6*5 is a deletion allele, then the fact that a patient with a CYP2D6*5/*5 genotype still reports a pain rating of 9/10 after taking codeine for pain control makes clinical sense. This knowledge can also provide more clarity, especially in the situation of a patient who is labeled as a “drug seeker” when genetically they are unable to metabolize many pain medications.

Finally, pharmacogenetics is a useful tool which can aide our understanding of physiological processes that produce proteins that transport medications, metabolize medications or site of action of medications. This knowledge can only enhance our practice and help guide our “gut instincts” to a more informed practice. The Genetic Information Nondiscrimination Act (GINA) of 2008 protects individuals against health insurance and employment discrimination based on genetic make-up. As clinicians we should strive to improve the quality of care and patient outcomes. Pharmacogenetics/ pharmacogenomics information is simply a single piece of the puzzle, and should not undermine the clinician’s final decision, nor override ethical decision making. Thank you.

REFERENCES

Edwin Aroke, PhD, CRNA
Birmingham, Alabama