

Mary Fran Tracy, PhD, RN, APRN, CCNS
Symposium Editor

Drugs: Friends and Foes

Mary Fran Tracy, PhD, RN, APRN, CCNS

edication management and administration represent a large portion of health care provider time in the intensive care unit (ICU) because medications are powerful tools in the arsenal for patient care. While we mainly think of medications and their outcomes in a positive light, they can have negative effects as well, especially when purposefully misused. Consequences of illicit drug use can result in critical illness requiring an ICU admission. The articles in this series explore both the positives and negatives of drugs in the context of the ICU.

Cajanding examines increasing use of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy), which can cause severe liver toxicity and failure. It can be difficult to predict who will have an adverse outcome with use of this drug because of such factors as varying levels of the active ingredient based on the maker, use of additional deleterious unknown ingredients, and individual genetic variability that impacts user susceptibility to the drug's adverse effects. Cajanding provides details about the proposed mechanisms of liver failure related to MDMA, patient presentation to the ICU, and the nursing care of this population to prevent and/or mitigate detrimental outcomes.

Coletta and colleagues report the results of a quality improvement project that optimized use of an amiodarone protocol to reduce the incidence of post-operative atrial fibrillation (POAF) in patients undergoing coronary artery bypass graft surgery. Postoperative onset of POAF can lead to complications such as hemodynamic changes, instability, and stroke and can result in significant increases in length of stay and health care costs. Use of prophylaxis in those patients at risk for POAF has the potential to improve patient outcomes in addition to promoting efficient use of health care resources.

In ICUs, sedatives and analgesics can provide comfort and optimize outcomes, but they can also have unintended consequences that may delay recovery in critically ill patients. Brock presents a review of the literature on use of dexmedetomidine in patients after cardiac surgery and reports on evidence outlining the advantages and disadvantages of its use as a sedative in this population.

As you read these articles, consider the role and impact of drugs in today's critical care setting—the ever-advancing knowledge we are gaining related to standardizing and optimizing use of new and traditional drugs as well as our increased understanding of the impact of individual responses to medications with both appropriate and illicit use. Our goal with the thoughtful and purposeful use of drugs in the ICU is to help patients recover more quickly so they can return to their baseline level of function with as little iatrogenic impact as possible.

Mary Fran Tracy is Associate Professor, University of Minnesota School of Nursing, and Nurse Scientist, University of Minnesota Medical Center, 5-140 Weaver-Densford Hall, 308 Harvard St. SE, Minneapolis, MN 55455 (tracy005@umn.edu).

The author declares no conflicts of interest.

DOI: https://doi.org/10.4037/aacnacc2019986