

Preface

In 2019, the American Nephrology Nurses Association celebrated its 50th Anniversary, resulting in much reminiscing throughout the organization. This year, 2020, I am celebrating my 50th anniversary as a nephrology nurse, triggering my own review of personal experiences, both wonderful and challenging. My trip down memory lane reminded me how much I appreciate the nurses who paved the way and acted as change agents for nephrology nursing. Likewise, I appreciate the patients, their families, and their experiences.

August 23, 1970. I remember that day well. As I walked into that three-bed hospital dialysis unit for the first time, I was overwhelmed. What had I done? It seemed there were lines everywhere; the machines looked like large washing machines. And I was clueless. My saving grace was the thought that if a person with no medical experience could run one of these machines at home, I, a registered nurse with 2 years of experience, could learn all of the nuances of hemodialysis. It is important to note that in 1970, South Carolina had no outpatient facilities, making home programs the only option for dialysis.

Orientation offered one article from the *American Journal of Nursing* and that was about it! The first edition of the *Core Curriculum for Nephrology Nursing* would not be published for another 16 years. Learning involved show and tell and then do, but always under close supervision of another RN who was a member of the all-RN staff. The patients did not seem to mind the “new nurse” and, more often than not, were willing to provide guidance. They were also learning how to perform dialysis.

The age of the patient population ranged from 18 to 40 years old. They had no other major medical, physical, or emotional problems. If they did not meet these criteria, they were not acceptable candidates for dialysis. There were approximately 50 patients in the program who lived across the state of South Carolina. It was estimated that for every patient who was treated, there were 10 others who died. (By comparison, latest statistics tell us that in SC there are 7,280 patients on dialysis and 157 dialysis facilities [<https://www.dpcedcenter.org>].) Patients needed the financial support of church groups, social organizations, communities, friends, and family to help pay the costs of dialysis. No federal funds were available. To help contain costs, they reused their dialyzers and the connected bloodlines. The sterilant? Formaldehyde.

While attending the 4 to 6 weeks of home hemodialysis training program, the patients were seen by the health care team at each visit — nephrologists and the fellows, a transplant surgeon, a psychiatrist or psychologist, a social worker, a dietitian, and registered nurses. Interprofessional collaboration, teamwork, and good communication were paramount. There was one technician, a medical student, who cleaned the machines after hours and put out supplies for the next day.

There were monumental differences in clinical care. The information found or not found in the 7th edition of the *Core Curriculum* makes this very clear. What is *not* found is a blessing. Take for example:

- Water used for dialysis treatments came straight from the tap. Early on, no water treatment was recommended or required in this unit. The *Core* contains a great deal of information regarding the required quality and testing of the water used for dialysis.
- For their vascular access, all patients had external arteriovenous (AV) shunts that were complicated by clotting, infection, separation, and accidental dislodgement. Today, external shunts are a part of our history.

- The AV fistulas were introduced to the unit a couple of years after my hiring. When it was time to insert those 14-gauge needles, an RN cleaned the arm, laid out a sterile field and supplies, then paged the nephrologist to come and insert the needles. This certainly is not included in this new publication!
- Fluid removal was achieved by creating a positive pressure within the coil dialyzer. An old-fashioned C-clamp was placed on the venous bloodline and tightened to increase the pressure within the coil and “squeeze” the water out. Per chance if the pressure was increased too much, the coil would rupture, resulting in blood loss and the potential need for a transfusion. No coil dialyzers or C-clamps in the 7th edition.
- Clotting times were performed by placing one cubic centimeter (cc) of blood taken from the venous bloodline into a plain glass tube. The tube was open-ended and manually tilted until the blood clotted. The tubes were later washed and reused.
- As if that were not bad enough, there was a procedure used on the sickest of patients with acute renal failure (i.e., today’s acute kidney injury). It was called regional heparinization. Through the use of a Holter pump, heparin was pumped into the blood going to the machine while protamine was pumped into the blood returning to the patient. Clotting times were performed on minimal amounts of blood drawn from both bloodlines. The blood was inserted into nonheparinized glass capillary tubes. The glass tubes were manually broken until the blood inside was clotted as demonstrated by the presence of a string of blood – and, no gloves were worn.
- Infection control was maintained with good hand washing. There were no gowns, masks, gloves, etc. — no personal protective equipment, or PPE, as we know it today. Interestingly enough, we never had a staff member or patient develop HBV (hepatitis B virus). With the one known patient who was admitted with hepatitis B, PPE and isolation were used. This edition of the *Core* has an entire part devoted to infection control.
- Aluminum-based antacids were used as the primary treatment to control serum phosphorous levels. The effects of aluminum toxicity are not soon forgotten. Today the aluminum-based antacids are used only for short-term therapy when absolutely necessary.

It is easy to look back and wonder how any of these poor practices were allowed, but no one knew better at the time. Fortunately, we can all be thankful for the growth and development in our specialty and in realizing that knowledge and change in practice continue to evolve through experience and research. The need for research-based information persists and is critical to yield the best outcomes for today’s patients who are younger, older, and sicker than in 1970.

The 7th edition of the *Core* is built on the work of previous authors. This edition’s authors carefully researched their respective topics and either updated or wrote their chapter. The material was then reviewed by experts in the field. Still, the reader is reminded that knowledge, technology, and practice continue to advance. As professionals, we are responsible for keeping ourselves up to date and for making informed decisions regarding the latest information offered. Never stop asking questions or learning!

The amount of work that went into this publication was colossal. The end product is the result of a team effort. My thanks go to everyone who participated in the construction of the 7th edition — from those who offered suggestions when the *Core* was in its initial stages, to the authors, the reviewers, the staff at the ANNA National Office, and especially to Claudia Cuddy, Managing Editor. And finally and foremost, I cannot help but mention my family who thought the 6th edition was my last hurrah. I love you to the moon and back and appreciate your support and patience — Henry (husband); Chris (son and family), Christina, Cate, and Olin; and Kim (daughter and family), Marty, Birdie Mae, and Capers Marie. THIS is my last hurrah!

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