

Healthcare Newsletter

October Issue

This fall, we are focusing on career opportunities that are available in the healthcare industry. In this month's issue of our newsletter, we have published an interview with a local dialysis technician, Dennis Newberger. Healthcare Newsletter's Lisa Stone conducted the interview.

Lisa: Good morning, Dennis, and thank you so much for meeting with me today.

Dennis: I'm glad to be here to share my professional experience as a dialysis technician.

Lisa: I'd like to begin our interview by explaining to our readers why people receive kidney dialysis treatments.

Dennis: Patients receive treatments if they have kidney disease. Basically, this means that their kidneys are not able to properly filter toxins from the blood. Some patients are ill and have temporary loss of kidney function. Others are fairly stable but have chronic kidney disease with permanent loss of function. Through the use of highly specialized equipment, dialysis takes over the process of kidney filtration. Without dialysis, our patients would have lethal amounts of toxins like urine building up in their blood.



Kidney dialysis technicians are responsible for operating dialysis machines.

Lisa: It's important that we discuss the process of dialysis in further detail. However, before we do that, can you describe the main responsibilities of your job?

Dennis: I am responsible for operating the machines used for hemodialysis, which is a technical term for the artificial process of filtering blood. It is my job to make sure the machines are properly maintained. I must alert my supervisor if any of the machines are in need of professional repair or replacement. On a daily basis, I work directly with patients as they come in for treatments. I also coordinate patient care with the nurse on duty, which includes monitoring their vital signs before, during, and after treatment. I'm also responsible for teaching patients about any in-home follow-up care they may need.

Lisa: It sounds like a dynamic and challenging work environment. Now, let's discuss the process behind these dialysis machines. How do they filter blood?

Dennis: Our hemodialysis machines utilize the basic process of diffusion. As many of us learned in science class, diffusion is a natural cellular process by which molecules move freely

across a semi-permeable membrane. The molecules move from an area of high concentration to an area of lower concentration. Our machines apply the principle of diffusion by exposing unfiltered blood to a selectively permeable membrane. The blood is pumped into the machine through cellulose tubing, which acts as the membrane. The tubing is immersed in a salt solution that allows most of the excess substances in the blood to diffuse through the tubing while retaining essential proteins and cells.

Lisa: And so the blood that is pumped back into the patient is actually filtered by a tube. Wow, that's amazing technology. What sort of education is required in order to become a dialysis technician?

Dennis: Technicians must have a high school diploma or GED certificate and complete a state approved program at a technical school.

Lisa: And as far as you know, what is the job outlook for dialysis technicians?

Dennis: As more people are living longer, there is a greater need for most forms of medical care, including kidney dialysis. Because of this, the job outlook is quite promising. I know that here at our outpatient facility, we are currently looking for experienced dialysis technicians, nurses, and medical receptionists.

Lisa: Well, that's great news for anyone considering a career in the healthcare field. Thank you again for sharing your professional experience with us Dennis.

