





#### Editor's Piece

#### UCF SNA Media Director

**Erick Gonzalez, Basic BSN '20** 

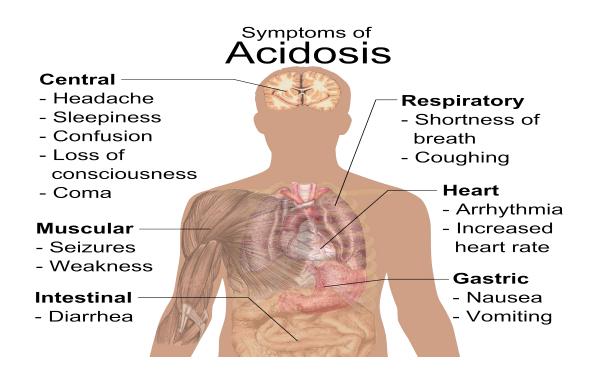
Normal Saline. Physicians order it all the time. Nurses are always setting up, spiking and hanging it so that it can be infused into the patient. Pretty standard practice, right? Have you ever thought about what exactly "Normal Saline" is or what it actually contains? I came across a piece of literature that made me really stop and think about what exactly is in the IVF we give and how it can affect the patient.

0.9% Saline or Normal Saline has approximately 154 mmol/L of sodium and approximately 154 mmol/L of chloride. Nothing else. No potassium, magnesium, calcium or any other electrolyte for that matter. Let's take a look at Lactated Ringers. It has 130 mmol/L of sodium, 109 mmol/L of chloride, 28 mmol/L of lactate, 4 mmol/L of potassium and 3 mmol/L of calcium. So, with this information in hand, one would think





that the solution with potassium would cause an increase in serum potassium in the patient. Well that's what I thought too but that is not necessarily the case. Large quantities of sodium chloride can produce something called hyperchloremic metabolic acidosis. Hyperchloremic metabolic acidosis occurs whenever an overload of chloride ions enters the blood. Bicarbonate is then forced intracellularly to keep the equilibrium of the ions. This in turn leads to a reduction in the available bicarbonate which then leads to acidosis. So what happens when the body enters a state of acidosis? Potassium is then shifted from the intracellular space to the extracellular space which leads to hyperkalemia. So in essence, normal saline will increase the serum potassium levels more than lactated ringer's.



The article directly supports this. The data that was shown showed a mean serum potassium level in the Normal Saline group of  $4.88 \pm 0.7$  and Lactated Ringer's group of  $4.03 \pm 0.8$  meq/L,. This reason I wanted to share this information is because I think as nurses, it is important to really think about all the "whys" and how certain things can cause other sequelae to occur. I know this study only looked at renal transplant patients, but I think this information could potentially be pertinent to all hospitalized patients and the care we provide to them. I personally did not know much about intravenous fluids and I found it to be interesting information. Do not take my word for it though. I encourage you all to read the article to see the information for yourselves.

Note: I used the first article to obtain most of the information and it is the basis for the data shown. The other citations were used for supplemental information.



#### References:

Khajavi, M. R., Etezadi, F., Moharari, R. S., Imani, F., Meysamie, A. P., Khashayar, P., & Najafi, A. (2008). Effects of Normal Saline vs. Lactated Ringer's during Renal Transplantation. Renal Failure, 30(5), 535–539.

Gunnerson, K. J., Saul, M., He, S., & Kellum, J. A. (2006). Lactate versus non-lactate metabolic acidosis: A retrospective outcome evaluation of critically ill patients. Critical care (London, England), 10(1), R22.

Skellett, S., Mayer, A., Durward, A., Tibby, S. M., & Murdoch, I. A. (2000). Chasing the base deficit: Hyperchloraemic acidosis following 0.9% saline fluid resuscitation. Archives of disease in childhood, 83(6), 514–516.

# Faculty Spotlight Dr. Desiree Diaz, PhD, RN-BC, CHSE-A, ANEF

Tell us about yourself and what brought you to the UCF College of Nursing?

Well first and foremost the best thing about me is that I have a strong faith. This faith is what brought me to UCF. I was not actually seeking to leave where I was. I was friends with Dr. Gonzalez and she told me there were opening but I was not ready to move as my son was only a HS freshman.



A few years later, after being one of the first 22 CHSE (Certified Healthcare Simulation Educators) in the world, I began to be recruited. Dean Sole and Dr. Gonzalez reached out again and this time I was interested. UCF made it to the final 2 schools that I was seriously considering. After praying hard about it and talking to my family – I came to Knight nation.

#### What motivated you to pursue a career in nursing?

I always knew I wanted to be in healthcare. I used to diagnose and operate on all my dolls as a little girl. I decided on nursing as a HS student. I wanted to have a family and help people. I did not think you could truly do that in medicine.

## What are some of your research interests and why are you passionate about them?

Wow- that is a loaded question. My interests lie in improving human health and decreasing healthcare discrepancies (really the term is disparity (the state of being unequal), but I have a whole story as to why discrepancy was the word chosen. Discrepancy is something where the facts are inconsistent. I believe that we chose to act as though healthcare access is equal, but they are not, hence discrepancy).

I expose disparities via the use of simulation and education. I am passionate about this because people have implicit bias and may not know it. Simulation allows people to explore their ideas and beliefs in a safe environment.

#### What are some things you enjoy doing in your free time?

I love to float aka a lazy river somewhere. I also enjoy spending time with my husband because we are huge movie buffs and usually see double features. I enjoy going to sports events with the family as we were all athletes.

#### What is something you hope to do?

I would like to get a English bulldog when I turn 50. I would like to name her SUNSHINE, this way I can wake up in the morning and say- "morning sunshine", plus I am a mom of boys and think some estrogen in the Diaz domicile would be a cool change.



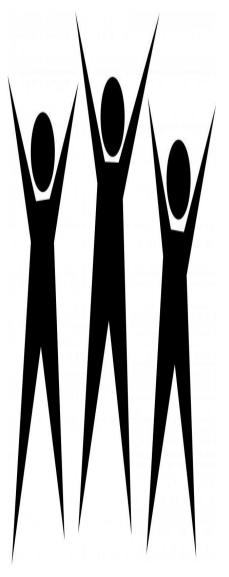
## Student Spotlight Bryana Blanco Basic BSN '20

My name is Bryana Blanco and I am a senior at UCF's Orlando Main Campus within the Traditional BSN Program. As I come close to the end of my nursing school journey, UCF Nursing has instilled in me that there is always an opportunity to show care, passion, and empathy inside and outside the healthcare industry. I am a first-generation college student and the first to enter the medical field, so my desire to become a nurse had no singular answer or moment in life where I felt like it was the right path for me; I just knew



I just knew the type of person I wanted to become. I knew that I loved working with people, I wanted a career that shared never-ending learning opportunities, and a workplace that had the ability to provide equal chances to everyone; I quickly learned that the nursing profession entails all of this and more.

Nurses are real-life superheroes. They fight off the evil we know as illness, provide hope to our community, and advocate for those in need. Through my clinical experience I learned the type of hero I wanted to be within our community was within critical care. Patients within this setting need the greatest amount of help and the nurses are truly saving lives everyday in more ways than one. I enjoy the ability to critically think, to be kept always on my toes, and be prepared for the unexpected; it's such a thrill! As critical care nurses fight during the night, I also want to be a hero during the day for a population I believe needs exceptional care.



I have a passion for advocating for the elderly community and educating others of their needs. In the end, we all age and I personally would not want to be treated anything less than the human I am. Elders have lived a whole life with amazing stories to tell that I only want to provide the ability for them to showcase it for as long as

they can. My future goal is to return to school and receive the education that will allow me to make a difference within our nursing home environments through possibly managing facilities or caring for the residents.

The beauty of nursing is that you can do mostly anything within this career. To those already within their nursing journey, stay strong it will all pay off! For those considering give it a try, I promise you'll find something you're passionate about. Consider being a knight nurse, you won't regret it.



## SNA had some great success with our events last month! These are some of the images that showcase what our members do!



October Bake Sale
From left to right: Jake Sandoval, Bryana Blanco, Kathleen
Jaramillo, SNA member and Dr. Brian Peach



October 2019



Breakthrough to Nursing event at Timber Creek High School from left to right: Stamy Jeune, Cassandra Harriger, Kathleen Jaramillo-Zuniga



# Are Benzodiazepines the Next Opioid Crisis? Cesar Vigil Basic BSN '20

As most of us are aware, there is currently an opioid epidemic occurring not only just in the United States, but also worldwide. However, with all eyes on opioids, other drugs are being overlooked and casted a shadow upon. One of these drug classifications are Benzodiazepines.Benzodiazepines are anxiolytics that are commonly used to treat acute anxiety and can also be used in conjunction with other medications for mental health disorders such as Major Depressive disorder and mood disorders.

$$R^{7}$$
 $R^{2}$ 
 $R^{2}$ 
 $R^{2}$ 

Other uses include but are not limited to: insomnia, preoperative sedation, panic attacks, withdrawal symptoms, muscle spasms. Some examples of commonly used benzodiazepines are Alprazolam (Xanax), Lorazepam (Ativan), Diazepam (Valium).

#### **FAST FACTS**:

- More than 30% of overdoses involving OPIOIDS also involve Benzodiazepines.
- 4 out of every 10 people taking benzos daily for six weeks or longer face possibility of addiction.
- Between 1996 and 2013 the number of adults who filled a benzodiazepine prescription increased by 67% (from 8.1 million to 13.5 million).
- Benzodiazepine addictive power is similar to that of OPIOIDS.
- Benzodiazepines were associated with greatest number of early deaths among all the prescription medications tested.



The prescription/use of benzodiazepines has frequently become subject that is now present in many aspects of people's daily lives, especially in the young population. The use and abuse of this drug is a common theme in certain music genres such as rap, hip-hop and rock. People who commonly listen to these genres can hear many verses that have to do with phrases such as "popping bars" and taking these medications to help them "relax" and go about their day. This has led to the normalization of these types of drugs and falsely promoted recreational use as a method to "relax" and have "fun." This leads to the ideation that if you want to be "cool" like the artist, that you should also participate in taking the drug. What would happen to an artist's career/image if he/she releases a song about the so-called "wonders and positives "of being addicted to heroin?



This would lead to a flooding of negative criticism and enragement about how the artist could promote themes such as addiction and dependence. As nurses we must spread the importance of recognizing the mass use of benzodiazepines and begin to remove the normalization of this potentially dangerous drug to those who are taking it without medical supervision.

The opioid epidemic is indeed still a problem and we must work towards fixing that too. But it is also casting a shadow on the abuse of other potentially hazardous medications. We as nurses can help change the stigma by educating the public and patients about the different methods of coping with individual problems. It is time to spread the spotlight solely from the opioid epidemic to other drugs such as Benzodiazepines. I included these song quotes from popular artists to showcase the normalization of the abuse.

#### Song Quotes:

"Xanny help the pain, yeah, please, xanny make it go away, I'm committed not addicted but it keep control of me, all the pain, now I can't feel it, I swear that it's slowin' me, yeah

Lil Uzi Vert- XO Tour Llif3

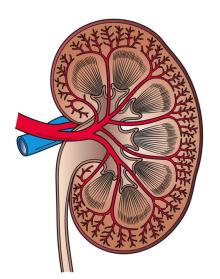
"I did half a **Xan** thirteen hours til I land, had me out like a light" Travis Scott, Drake- Sicko Mode

#### Reference:

Brett, J., & Murnion, B. (2015). Management of benzodiazepine misuse and dependence. Australian prescriber, 38(5), 152–155.

## End Stage Renal Disease and Dialysis Jacqueline Pajarillo Basic BSN '20

End Stage Renal Disease (ESRD) is the last stage of Chronic Kidney Disease. ESRD is when renal function can no longer sustain life. At this stage, the kidneys are not able to remove water or waste from the body. This results in the retention of fluid and metabolic waste accumulation. With the retention of metabolic waste, the person will begin to show uremic manifestations.



This means that the person will begin to show signs of weakness, malaise, loss of appetite, abnormal mental function, shallow respirations, and metabolic acidosis. Once ESRD has been diagnosed, the only treatment for this patient is dialysis. Dialysis must be started once the uremic manifestations are no longer controlled by medication or other therapies.

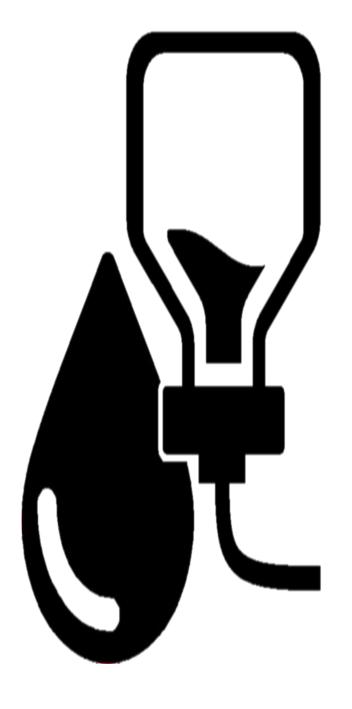
This usually begins when the glomerular filtration rate (which is how well the kidneys are filtering blood, water, and waste) is less than 15mL/min.

Dialysis is the process of "cleaning the blood." Blood is removed from the body, goes through the dialysis machine, and then returned back to the body. A dialysate is a solution that corrects the fluid and electrolyte imbalance. Dialysis requires the use of a fistula (the anastomosis of an artery and a vein) through which blood will be pulled and returned back to the body once it has been cleaned. The fistula must ripen before it is ready for use.



Dialysis requires strict compliance as it ESRD patients are usually scheduled for 3 to 4 hours a day, 3 days per week at a dialysis center. Once on dialysis, the patient must comply with this treatment to prevent cardiac dysrhythmias, pericarditis, encephalopathy, or even death.

Though renal transplantation is the best option available for ESRD patients, only 4% of diagnosed patients actually receive a transplant. This is due to the overwhelming demand for organs but not enough supply. While dialysis treatments require strict adherence, it gives ESRD patients more years to enjoy the best that life has to offer.



# The Valor Program Dana Monsalvatge Basic BSN '20

Applying for an internship in nursing school, is an incredible opportunity to grow and strengthen your skills and critical thinking. I had the privilege to be selected as at VALOR Student Nurse Intern at the Lake Nona VA Hospital. When I first heard of it back in the first semester of nursing school, they described the VALOR Program as "being the nurse without the license" and "You'll learn a lot of skills before your classmates will learn them".I initially applied because I wanted to enhance my skills over the summer while we weren't in clinicals.

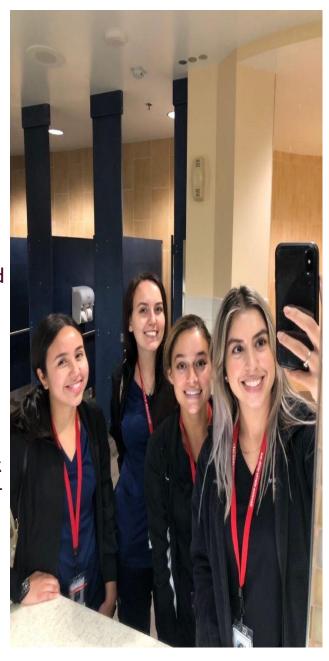
The skills and experiences that I gained in just the last 4 months I have been at the VA are far greater than I had expected. While in the VALOR Program, I had the opportunity to do monthly rotations throughout all the inpatient units.



I worked on Med-Surg, Surgical, Hem/Onc Step-down, and floated to ICU. While working in the inpatient units, I learned how to start IV's, draw blood for labs and blood cultures, do EKGs, access and de-access ports, and give medications. Although at the time I felted unprepared because we hadn't learned or practiced any of these skills in nursing school yet, being pushed out of my comfort zone allowed me to walk into Adult II clinicals with confidence. Besides the physical skills that I gained, my ability to critically think like a nurse flourished. While on the inpatient unit, although I worked alongside my preceptor, I would be the one taking care of their patient's. On a typical day, I would have 5 patients and I would do all of their assessments, charting, medications, calling the doctors for orders, and any other care that they needed during my shift.



Most of the time, my preceptors would just follow my lead and tell the patients that there were "serve as a mentor and to answers along the way." At times, having 5 patients at a time was stressful but nursing is all about flexibility. It helped me gain skills in prioritizing care and knowing which patients were more critical and needed to be seen first. Now after working for the last four months, I feel that my skills as a future RN have strengthened tremendously. Before starting the VALOR Program, I would always think "There is no way that in a year I can be taking care of people's lives I'm not ready." But now I can confidently say that this internship has made me confident in my ability to be a registered nurse at the end of May.



When I started in May, I was not all that familiar with the military, but I wanted to be able to serve those that have served our country. Now after working for some time, I have learned that I have passion for working with our Veterans. One of the most common sayings I've heard is that "the Veterans are their own breed of people" and they definitely are but in the best way. They have gone through so much in their lives but they have the best spirits and stories. When it comes time for graduation, I am thankful that I have the opportunity to have career with the VA and serve our Veterans.



#### Announcements & Upcoming Events!













### November General Meeting 11 / 20 @ 1700 in room 602!

November 4th Share-a-Meal @ Arnold Palmer Hospital (4-6pm) November 8th: Northlake Park Community School STEM Night

5:30pm-8:00 pm

#### Announcements & Upcoming Events!















#### Contact Info for the 2019-2020 SNA Board!



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#### **Social Media Buzz**

Facebook: Student Nurses Association-Orlando

Instagram: snaucforlando Twitter: @snaucforlando Website: snaucforlando.com

#### **Top Point Earners**

Basic BSN 2021: No top 3 point earners at this time

Accelerated 2020: Erin Lucore, Nicole McCormick, Natalie Zanella

Basic BSN 2020: Lindsay Greene, Destiny Miller,

Jacqueline Pajarillo