

The Mortar & Pestle

Black Student Pharmacist Organization
Quarterly Newsletter

UPCOMING EVENTS

Oct. 5th- General Body Meeting

Oct. 8th - Painting Party!

It is always a great time and vibe to get out and socialize with your peers so why not do it while painting! We hope to see you there for fellowship, laughs, and smiles!

Frog Stomp Art Studio

160 Tracy St #1A
Athens, GA 30601

Oct. 13th - ACCA Presentation

We will be giving a presentation about the career of pharmacy to the students of ACCA. This presentation will highlight the pros and cons of the career field as well as point out the need for a more diverse pool of pharmacists. The goal is to foster relationships with these students and to encourage them to gain interest in pharmacy as a possible career choice.

Nov. 9th - General Body Meeting

Other opportunities to get involved:

Journal Club
Volunteer Opportunities
Game Night
Giveaways!

CONTACT US



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NEW DRUG ON THE BLOCK

Written by: Adesuwa Utomwen

On September 1st, 2021, the Janssen Pharmaceutical Company - Johnson & Johnson, announced the FDA approval of a twice-yearly treatment for adult patients with Schizophrenia. Invega Hafyera™ is a 6-month long acting paliperidone palmitate intramuscular injection [1]. One of the current treatment plans for schizophrenia includes a 4-month duration of Invega Sustenna® (1-month paliperidone palmitate injection) coupled with a 3-month duration of Invega Trinza®. The efficacy of this novel medication for its indication was evaluated in a randomized, double-blind, active-controlled study in adults diagnosed with schizophrenia [4].

Indication - Prior to initiation

Invega Hafyera™ is a 6-month injection used to treat schizophrenia in patients who have been previously treated with either of the following long-term formulations: Invega Sustenna® or Invega Trinza®. It is not known if this drug is effective and safe to use in children under than 18 years old [2].

Adverse Drug Reactions and Cautions

The most common side effects of this new drug include upper respiratory infections, injection site infections, weight gain, and headache. Based on the placebo-controlled trials that were conducted, it has been shown to have an increase in mortality and cerebrovascular adverse reactions in elderly patients with dementia [4]. Specific patient populations where Invega Hafyera™ should not be used in include pregnancy, and patients with renal impairment. It has not been studied in animals or humans for its potential for abuse. As with the majority of current antipsychotics on the market, the use of Invega Hafyera™ has the potential side effects of Neuroleptic Malignant Syndrome (NMS) and Tardive Dyskinesia.

Patient Benefits

A psychiatric clinical study showed that the relapse rate, or the recurrence of psychotic symptoms, after discontinuation of antipsychotics is more than 50 percent [3], consequently making adequate treatment of this disease difficult to achieve. Invega Hafyera™ minimizes the burden of medication adherence that most patients experience and will likely decrease the incidence of re-hospitalizations per year. Results from Johnson and Johnson's Phase 3 non-inferiority study showed that in a 12-month period, more than 92% of the patients studied remained relapse - free [1]. Needless to say, this new long-acting formulation will maximize patient outcomes and satisfaction. This new drug may also save patients from higher medical costs, compounded financial burdens, and worsening of their disease.

Resources:

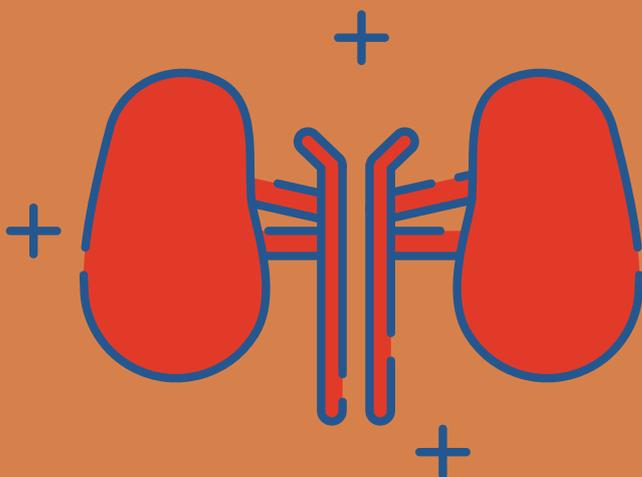
1. Johnson & Johnson . (2021, September 1). Janssen Announces U.S. FDA Approval of INVEGA HAFYERA™ (6-month paliperidone palmitate), First and Only Twice-Yearly Treatment for Adults with Schizophrenia. Content Lab U.S. Retrieved September 23, 2021, from <https://www.jnj.com/janssen-announces-u-s-fda-approval-of-invega-hafyera-6-month-paliperidone-palmitate-first-and-only-twice-yearly-treatment-for-adults-with-schizophrenia>.
2. INVEGA. Package insert. Janssen Pharmaceutics Co; 2007
3. Morken, G., Wilden, J.H. & Grawe, R.W. Non-adherence to antipsychotic medication, relapse and rehospitalization in recent-onset schizophrenia. BMC Psychiatry 8, 32 (2008). <https://doi.org/10.1186/1471-244X-8-32>
4. INVEGA HAFYERA. Package insert. Janssen Pharmaceutics Co; August 2021

eGFR in AFRICAN AMERICAN PATIENTS

Written by: Tierra Jackson

As a student of color, I am constantly looking for health disparities that affect my community, and ways to fix these disparities. Going into this assignment I expected to find an overwhelming amount of evidence that suggested that the use of race-based eGFR equations like MDRD and CKD-EPI do nothing but build barriers for African Americans to get proper access to healthcare based on old data that has not been appropriately re-evaluated. What I found was the opposite. Both the recent studies I found highlighted evidence that strongly supported the use of the equations, making it more difficult than expected to come to a conclusion on if I believe there is truly a difference between African Americans and non-African Americans eGFR. Nevertheless, in this essay, I will explain why I believe that the incorporation of race into a medical equation that determines the level of care received can be more harmful to African American patients than helpful.

The glomerular filtration rate is the best overall index for kidney function, so it is used very frequently in diagnosing Chronic Kidney Disease, determining eligibility for kidney transplants, dosing, and monitoring medications, and evaluating a patient's need for dialysis. A patient's serum creatinine (SCr) is a huge indicator in determining how well a patient is removing waste products from their system, and it is used as a factor when calculating the estimated glomerular filtration rate (eGFR). Creatinine is a by-product of muscle degradation. The common thought has been that African American patients are believed to have a naturally higher muscle mass, resulting in a higher concentration of SCr. Not accounting for this extra SCr could result in underestimating renal function, and insufficient treatments.



In 2015, there was a study published in the Journal of the American Society of Nephrology titled “Effects of Genetic African Ancestry on eGFR, and Kidney Disease”. The purpose of this study was to determine the significance of the correlation between APOL1 genetic variants (higher volumes of the variant exist in African American populations), and the level of creatinine in their system.

Resources:

1. Udler MS, Nadkarni GN, Belbin G, et al. Effect of Genetic African Ancestry on eGFR and Kidney Disease. J Am Soc Nephrol. 2015;26(7):1682-1692. doi:10.1681/ASN.2014050474
2. “Race and EGFR: What Is the Controversy?” National Kidney Foundation, National Kidney Foundation, 17 Aug. 2021, <https://www.kidney.org/atoz/content/race-and-egfr-what-controversy>.

eGFR in AFRICAN AMERICAN PATIENTS

Written by: Tierra Jackson

When individuals in the study were separated by the percentage of genetic African ancestry determined from a test (<25%, 25%-50%, 50%-75%, and \geq 75%), a significant increase in serum creatinine levels was seen in patients with \geq 50% genetic African ancestry compared with those with <25%. With each 10% increase in African ancestry, there was a 1% increase in creatinine in African American patients.

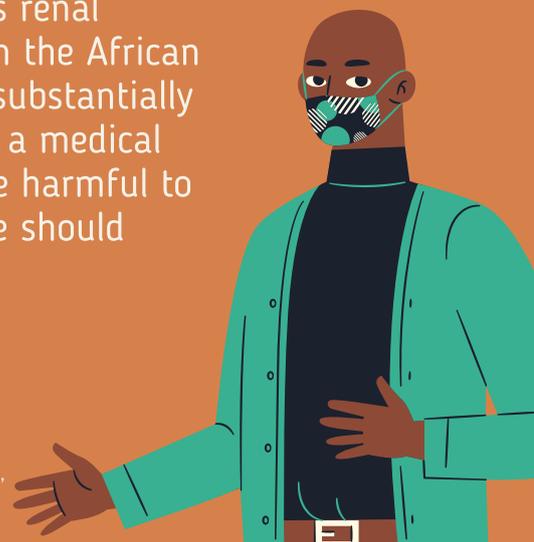
At first glance, this study seemed very convincing and validated the use of these equations, but when analyzing the limitations of the study, it made me re-evaluate. This study did not account for socioeconomic and environmental factors that could impact the patient's serum creatinine including diet, and lifestyle. Another huge limitation presented in practice is that ancestry is self-reported. In this study, they were able to distinguish African American patients by greater than 50% of a specific gene, but people will not always have that information readily available. Race is also not a biological concept, but a social construct. Using race as a factor for calculating eGFR does not account for the diversity within communities of color. For patients with mixed heritage, it is more difficult to determine if they should be considered African American for eGFR determination.

The study also evaluated the theoretical impact that removal of race from the MDRD equation calculation could have. eGFR values changed enough to modify dosing recommendations in 18.8% of participants and CKD staging changed in 5.3% of participants when the adjustment was removed. While these values aren't extremely high, they are significant, because they could affect a black patient's access to care, and quality of care. There are so many individual factors that were not accounted for.

The Journal of the American Medical Association published an editorial that did a great job of highlighting the pros and cons of incorporating race as a factor. Ultimately, while removing this factor classified people into certain treatment categories sooner, it also declassified some individuals from end-stage treatment options sooner as well. There was a trade-off presented. The purpose of this essay was to suggest that personalized, and unbiased methods are needed to accurately evaluate a patient's renal function and CKD classification. This is particularly important in the African American community where the incidence of kidney disease is substantially higher than in any other community. Incorporation of race into a medical equation that determines the level of care received can be more harmful to African American patients than helpful, and for that reason, we should be working to identify new ways to determine patients eGFR.

Resources:

1. Udler MS, Nadkarni GN, Belbin G, et al. Effect of Genetic African Ancestry on eGFR and Kidney Disease. *J Am Soc Nephrol.* 2015;26(7):1682-1692. doi:10.1681/ASN.2014050474
2. "Race and EGFR: What Is the Controversy?" National Kidney Foundation, National Kidney Foundation, 17 Aug. 2021. <https://www.kidney.org/atoz/content/race-and-egfr-what-controversy>.

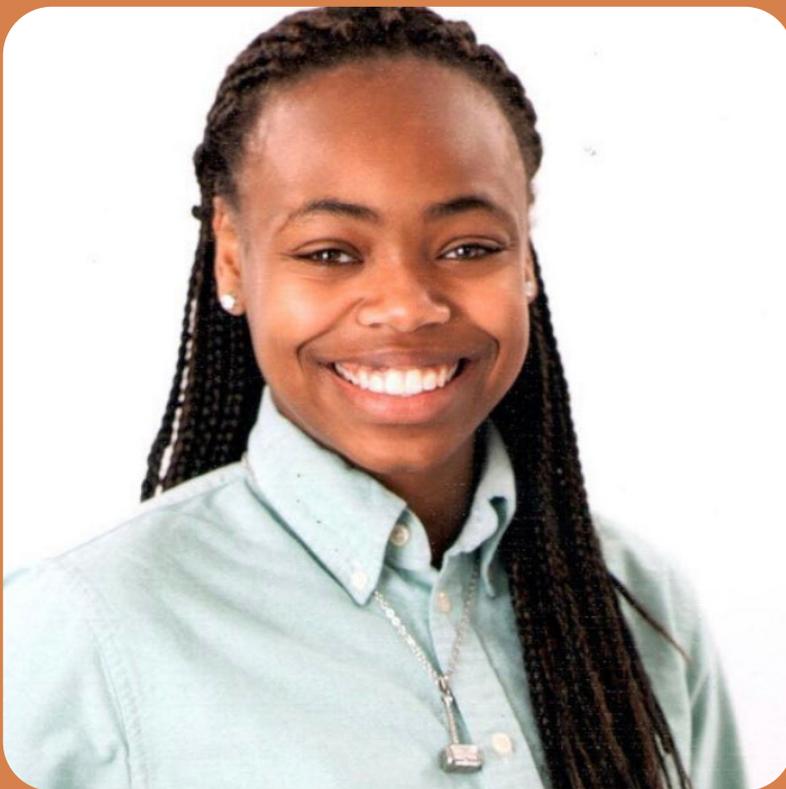


BLACK-OWNED BUSINESS SPOTLIGHT: DAWG GONE GOOD BBQ

If you're looking for the best barbecue in Athens, make sure you stop by Dawg Gone Good BBQ! It is owned by Mr. William Hardy, also known as Chef BJ. Chef BJ, who trained as a cook in the Army, began by making his grandmother's recipes for friends and family and eventually opened Dawg Gone Good BBQ in 2009. The menu consists of barbecue classics including pulled pork, ribs, mac-n-cheese, baked beans, and more!

Be sure to stop by and tell him BSPO sent you!

**224 W Hancock Ave.
Athens, GA 30601**



MEET OUR P1 LIAISON HALLE TUKES

"To graduate as a Black pharmacist would mean the world to me because I would be able to inspire those who have similar dreams, aspirations, and backgrounds. No one should ever put their goals on hold because of their color, but should let the adversity they encounter encourage them to fight harder."

We want to thank everyone who applied to be our P1 liaison. It was an extremely competitive process. We want to encourage everyone to stay involved and look for more opportunities in the near future!

MENTAL HEALTH CHECK

Written by: Angelle Newman

According to the American Psychological Association, imposter phenomenon is the situation in which highly accomplished and successful individuals illogically believe that they are frauds who will ultimately fail and be deemed incompetent. Symptoms of this phenomenon include generalized anxiety, depression, and lessened self-esteem and self-confidence. As a result of these feelings, individuals experiencing imposter syndrome tend to exhibit mental health issues, perceived feelings of competition, burnout, and other negative consequences. Imposter phenomenon can be experienced by all races, genders, and occupations. Particularly, black students in STEM professions could be experiencing impostor phenomenon fueled by racism, microaggressions, and stress due to underrepresentation and a lack of role models in their field.

In this study, researchers utilized convenience sampling to identify 15 individuals who met the following criteria: identify as black, currently a PhD student or postdoctoral scholar in STEM at a U.S.-institution, and familiar with the impostor phenomenon and experienced it recently. These participants' ages were in the range of 20-39 years of age, 13 of which were women and 2 were men. They first completed an online survey which included the Clance Imposter Phenomenon Scale, a 20-item survey with a 5-point Likert scale that quantifies impostor feelings. This online survey was followed by individual phone interviews that focused on their imposter feelings related to being a black person in STEM, factors that contributed to their imposter feelings, manifestations of these feelings, and other identities that contributed to imposter feelings.



MENTAL HEALTH CHECK

Written by: Angelle Newman

After the survey and interview were analyzed, six significant themes were revealed: (1) being the only one, (2) lack of belonging, (3) stereotyping, micro-aggression, and judgment, (4) external appearances, (5) feeling like the “diversity enhancers,” and (6) complications of intersecting identities. Notably, most of these themes were provoked by interactions with peers and professors of other races. Some students were openly judged and labeled as only being in academia due to affirmative action and diversity quotas. Their accomplishments and qualifications were downplayed based on having attended an HBCU and receiving grants diversity grants and fellowships. Nearly all the participants were able to recount an occasion when they were mistaken for custodians, the help, or administrative staff. These encounters have been internalized by the participants, resulting in feelings of self-doubt, and questioning the merit of their own positions and accomplishments.

The researchers propose that doctoral training should be all-encompassing and welcoming of diversity in multiple aspects such as gender and race/ethnicity. They assert that practitioners should consider the implications of the black identity and how it relates to training experiences in STEM. Impostor phenomenon fueled by race shapes an individual’s interactions with professors, peers, and colleagues. With this in mind, an understanding of impostor phenomenon and its consequences could be helpful in designing professional development programs for black people.

Resource:

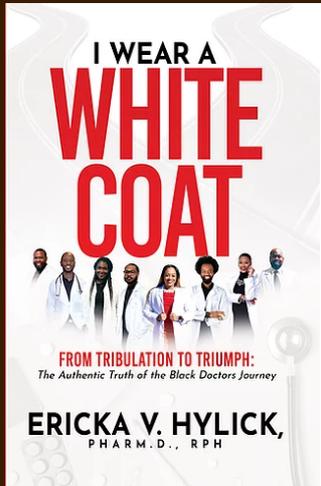
1. Chakraverty, D. (2020). The impostor phenomenon among black doctoral and postdoctoral scholars in STEM. *International Journal of Doctoral Studies*, 15, 433-460. <https://doi.org/10.28945/4613>

GOOD READS

I Wear a White Coat

From Tribulation to Triumph: The Authentic Truth of the Black Doctor's Journey

Written By: Tierra Jackson



The word ‘inspirational’ does not begin to describe the impact that this book has. Reading through this text is like looking at a reflection of my own experience during pharmacy school. The author, Dr. Ericka Hylick, did an amazing job of incorporating the stories of different healthcare professionals into one cohesive mirror that represents the shared experiences we can all relate to. In each chapter, we heard from a wide range of professionals including PharmDs, MDs, DDSs, and more. Common themes resonated throughout each of their stories. Most of them were unsupported and underestimated, but their drive and passion helped them push through. From overcoming microaggressions, and deficits in representation, to controlling imposter syndrome, these authors offered their authentic truths. Their goal was to “boldly expose the hindrances that serve as barriers to success..” for African Americans who are interested in medical professions. Not

only did the authors offer details about their relatable trials as providers of color, they also provided reassurance that our journeys are not in vain. They highlighted the successes we can look forward to and the impact that we can make in our communities with appropriate planning and direction. This book is applicable for everyone at every stage of their journeys. I highly recommend this good read.

Order your copy at www.iwearawhitecoat.com!

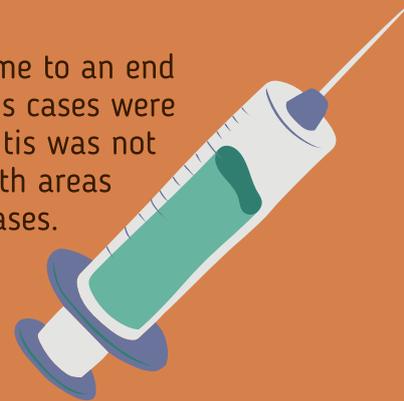
HEALTHCARE ABROAD

Written By: Dayana Pimentel-Dominguez

A meningitis outbreak was declared by the World Health Organization on September 20, 2021 in the Dominican Republic of Congo [1]. There have been 161 deaths with 608 suspected cases reported and is expected to increase due to its contagious nature [2].

Earlier this year, the Dominican Republic of Congo had an Ebola outbreak that came to an end in May. The outbreak was alerted in early July of 2021. When suspected meningitis cases were being reported, Ebola testing on the specimens were conducted. However, meningitis was not suspected until September 16, 2021 [3]. As of September 18th, 16 of the 20 health areas have reported at least one suspected case of meningitis and have 12 confirmed cases.

The WHO response measures were in place such as supplying 5000 doses of ceftriaxone to reinforce antibiotic stock [4]. As well as revaccination campaigns with the vaccine containing meningococcal W antigen, and in depth monitoring. Organized mobile clinics will be in place to support the health clinicians with infection prevention protocol and sample collection. The WHO also passed the global risk level as low, due to cross-border monitoring in place already set in place for COVID-19 [4].



Resources:

1. Democratic Republic of the Congo declares a meningitis outbreak in north-eastern province. (2021). WHO | Regional Office for Africa. <https://www.afro.who.int/news/democratic-republic-congo-declares-meningitis-outbreak-north-eastern-province-0>
2. Democratic Republic of the Congo - Meningitis outbreak (DG ECHO, WHO, authorities) (ECHO Daily Flash of 09 September 2021) - Democratic Republic of the Congo. (2021, September 9). ReliefWeb. <https://reliefweb.int/report/democratic-republic-congo/democratic-republic-congo-meningitis-outbreak-dg-echo-who>
3. Meningitis outbreak declared in Democratic Republic of the Congo: WHO. (2021, September 8). UN News. <https://news.un.org/en/story/2021/09/1099332>
4. Meningitis - Democratic Republic of the Congo. (2021). Who.int. <https://www.who.int/emergencies/disease-outbreak-news/item/meningitis---democratic-republic-of-the-congo>

LOCAL MINORITY OWNED BUSINESSES

Restaurants

Punta Cana Latin Grill

367 Prince Ave Ste 1, Athens, GA 30601
Phone: (706) 850-8960

Dawg on Good BBQ

224 W Hancock Ave, Athens, GA 30601
Phone: (706) 613-9799

Weaver D's

1016 E Broad St, Athens, GA 30601
Phone: (706) 353-7797

Food for the Soul

1965 W Broad St, Athens, GA 30606
Phone: (706) 546-0052

Cool World Ice Cream

1040 Gaines School Rd #218, Athens, GA 30605
Phone: (706) 850-8306

Church/Religious

Hill Chapel Baptist Church

1692 West Hancock Ave, Athens, GA 30606
Phone: (706) 543-1377

Hair Care

Studio 74

145 Epps Bridge Rd, Athens, GA 30606
Phone: (706) 543-9144

Jet's Cuts

400 Hawthorne Ave, Athens, GA 30606
Phone: (706) 850-3379

Businesses

Eric's Tailor Shop

630 Hawthorne Ave, Athens, GA 30606
Phone: (706) 247-6446

Barbara's Alterations

100 Northcrest Dr, Athens, GA 30601
Phone: (706) 548-2440

McRae Family Dental

995 Baxter St, Athens, GA 30606
Phone: (706) 480-9410



TIPS FOR A GREAT SEMESTER

- Go to office hours! Don't be afraid to talk to professors, especially when you don't understand the material. You will end up developing some amazing relationships!
- Separate your drug cards into drug classes. Studying the drugs in these groups will help identify common side effects and counseling points within that drug class.

INSPIRATIONAL QUOTE

"The most important thing is to try and inspire people so that they can be great in whatever they want to do."

- Kobe Bryant



Scan the QR code to enjoy a study playlist created by our Treasurer, Stanley Otiwu!