

### ***Discussion of Student Experiences in the US, Nigeria, and Clinical Research***

Jennifer Cohen

Welcome to the Voices in Bioethics podcast. I'm Jennifer Cohen. And it's my pleasure today to interview Awele Michael Utomi, a student in the masters of bioethics program here at Columbia University. Awele, welcome to the podcast.

Awele Utomi

Hi, Jennifer. Thank you for having me.

Jennifer Cohen

My pleasure, Awele, you have a fascinating background in healthcare and biotech research. But before we get to that, I'm hoping you can tell us about your personal background. You were born and grew up in Lagos, Nigeria, correct?

Awele Utomi

Yes, that's correct.

Jennifer Cohen

And can you tell us a little bit about your childhood and growing up there, and how you decided to leave and come to America to study.

Awele Utomi

Of course. And that's like a very interesting story. For me personally, now, actually, preparing for medical school interviews is something that comes up more often than not. And I would say that, to me, like that decision kind of started from my environment growing up in Lagos, and my own personal family struggles. So I'll first start with a personal - my mom actually suffered from ankylosing spondylitis. When we were younger, my dad had hypertension. And so my family had its own share of health issues that made it imperative for us to you know, to spend time in hospital with doctors, much more often than most of the people that, you know, in my background, you know, would spend from, I mean, my background, I mean, like, middle class family, you know, my dad and my mom both have master's degrees, but they both run a business. And for me, growing up in Lagos, Nigeria, meant that you were exposed to all of the realities of the situation, right. So I could say that I was doing a bit better in a little way, like, a little more prepared, instead of my, that, you know, there was I could go to school, I could afford to send myself and my three other siblings to school that there was still always, you

know, that struggle. You know, I know, for me, I remember that distinctly. Because those issues were like, huge stories, or huge, like, issues that we had to really like, you know, go through and really define most of my childhood. And you know, and it kind of got, like a more personal interaction with medicine, with science as a young boy growing up, and like, I would always wonder, you know, because for me, my mother didn't get diagnosed with that condition until I actually was in my first year of college. So like, we had known that there was an issue because she was getting immobile, she won't be able to move, and everyone who actually, you know, chip into, you know, to help her with that. So for me, it kind of started that in the fascination. Okay, how this happened? Like, why can't they find something for, like, what's missing? And, you know, and for me to even do that in school, and, you know, at home, I didn't really have any scientists, in my personal or in my circle in my family, those questions kept on coming up in my dad, my mom, and even around me, because I would see that many people that I knew growing up, they never saw a doctor, they would go to pharmacists to get you know, drugs, you know, self-medication, whenever, you know, they needed to feel better, it was definitely hard for people that I knew to even like, go to the doctor, because like that was seen as very expensive. There were very, very few governmental hospitals - the few ones that were there had long lives in a long wait period. So I got accustomed to, you know, to wait in those lines, no. And we were like, you know, looking for fundraisers, looking for money for my family to you know, to fund you know, these things that, you know, we're talking about. And that's kind of like my introduction to that, you know, from my own personal environment, from going to school seeing those disparities and inequities that kind of defined who got access to healthcare, and kind of set me off on this journey, because I knew I want to do research, and I knew I wanted to do medicine, I wanted bring those two together, because like, I feel like for myself, I'm going to recount this gap between the African traditional methods and of course, like the western method, and we haven't quite reached out the way that we can select the Chinese have reached out, you know, with malaria, and you know, and the drugs, like Chinese traditional medicine, which your Western traditional ways of, you know, of clinical research, like, I feel like it's important to find that synergy. So that's kind of like the impetus for that. And even though I didn't have that in high school, you know, I managed to convince my teachers to send me opportunities, you know, to write scholarship exams, and, you know, all of that in my final year. And it was writing on this exam that I was able to get a scholarship to study for the SAT, and eventually secure admissions to US. And that was all laid on scholarship, because my family couldn't really do that. So for me, that was like a huge opportunity. I know from there I got a scholarship to Howard. And that's kind of how you know, I actually ended up in the US.

Jennifer Cohen

Such an inspiring story. So, as you say, you attended Howard University, which is one of this country's premier research institutions and an HBCU, an historically black college and university. You spoke a little bit about your ability to get your teachers to help you and to have this dream come true. But how did you specifically decide on Howard as the place you wanted to study science and then eventually prepare yourself to apply to medical school?

Awele Utomi

Yeah, that's actually an interesting tale on its own because I actually did not decide on Howard so it was actually the school that chose schools for our class, you know, best and brightest. And the school is called MBT trading limited. And they were actually the ones that chose the schools based on, you know, the probability of getting scholarships, your past success rate with previous students. And you know, Howard happened to be the one out of the four or five schools that they chose for me that gave me a full scholarship. So actually interesting story was that my friends and I, when we were on our way, cuz we all went to Howard. Oh, on our way to the US, we actually did not know that how it was an HBC, you know, until we landed in Washington, DC. And it was a very

interesting contradiction when we got to campus expecting the opposite of what we saw. And, of course, that turned out to be one of the best decision I made was, Howard definitely gave me the space and the environment to make to the US, you know, the area, which is the DC, Metropolitan on DC, Maryland, Virginia area, also, you know, has a huge African community. So it definitely made it easier for me to acclimate, you know,

Jennifer Cohen

So interesting. And how did you decide after Howard to come to Columbia.

Awele Utomi

Columbia was also very much a part of just my environment, I was in my final semester at Howard, and I took a class called senior seminar class, which is like a required class for my biology degree. And in that class, we had a very amazing professor, Dr. Fatima Jackson, and we were talking about social justice, you know, there's so many issues, and this was back then. And I feel like now it's much more to the forefront. And then there was, you know, those some of the issues that we could see the wrong, you know, we talk about police brutality in the US, we talk about, you know, numbers, you know, of black men and, and women, you know, and all just, you know, different kinds of things, and we were just talking about this thing that we're trying to, okay, how do we in, you know, in the scientific world, you know, how do we advocate for this, because, of course, you have your different ways, but like, it seems like there wasn't any field in medicine or in science do that. And that's where she started talking to us about bioethics. And I was really interested in the field, because it seemed like, I should have known about it even before graduating, but it had took me that long of a time to find out about it. And, you know, from that class led on to, you know, find about scholarships, you know, to support and Columbia HBC fellowship was new at a time about two years old, and she sent me the link to Prof Jackson, you know, to apply for it, and some other programs. And, you know, I went through an application person, and that was how, you know, I came to, you know, decided that, so I specifically look for programs that offer bioethics and that offer, you know, a funding for that, and Columbia HBC fellowship was like, you know, multi major ones, and I was really happy to be a graduate now, you know, finishing the program, and it's an amazing fellowship, but I can't, you know, are competitive with like, more highly.

Jennifer Cohen

Now, that's wonderful. Yes. As you say, You're an HBCU Fellow, during the program, did you find that experience exciting? Or were there aspects of it that surprised you being a fellow?

Awele Utomi

It was definitely like a huge learning curve. For me, it seemed that throughout the course of my educational journey, I've continued to, you know, to go to like, higher institutions, I remember, like, I went to a public school, for high school in Lagos. And I remember just how different it was for us, you know, compared to them, that went to private schools. And I definitely noticed in terms like the resources, you know, they have, like practical classes, or like the science, knowing that your practical class might not have necessarily materials or, you know, I kind of grew up with all of that. And so like, for me, like, it's kind of reinforced the idea that even just as I continue to go to these spaces, and for me, like going to Columbia University was definitely a huge change. Personally, I was in New York, so I was definitely a little bit, you know, estranged from my immediate family that I had built up in the US while I was at Howard, even just like, you know, Columbia is a huge school, you know, it's one of the top schools so for me, like, come in and looking how I look, I know come from where I come from, that definitely a lot I had to get used to that feeling of overcoming imposter syndrome. You know,

reaching out to the professor's feeling like you were ever to be in the classroom. And, and I felt like it was a huge learning curve for me - fellowship helped a lot because like, you know, we had this immediate family, immediately getting into the fellowship and into university that okay, hey, like it says, 28 other fellows that you can call your family, you know, all from all across the US. So he was definitely interesting mesh of people, ya know, and ideas, and everyone is in New York, and this has been the COVID-19, of course, so we had to adapt to all of that. So it was definitely a huge learning curve for me and like, a lot of things I had to get to, but like, I wouldn't trade it for like, you know, anything else.

Jennifer Cohen

Wonderful. Okay, let's turn to your work as a researcher talking about your learning curve at Howard, you were inducted into Phi Beta Kappa, the most prestigious academic honor society. And that's where you began your career as a researcher. Can you tell us a little bit about some of the projects you worked on while a student at Howard?

Awele Utomi

Yes, and I believe you're referring specifically to research project, right?

Awele Utomi

Yes

Awele Utomi

Of course, so I was very much involved in research on Howard because you know, like, that was my whole reason for going to the US in first place to try and get a more practical understanding of research projects to conduct that. And I already knew that I couldn't get that a whole match to people back home you know, even certainly mentioned University of Lagos, which is where I applied for medicine and actually was accepted to before or to give me a scholarship. And like, for me, winning those things was important for me. So it makes like a go to Howard, you know, I'm excited for things and of course, it was hard being international students, and, you know, coming all the way from Nigeria, there was those a lot that I had to do to, you know, like, prove, you know, that was worth it. And, of course, I was given a bunch of opportunities. I, my first lab was actually in a new biology lab with Dr. Mike Burke. And under him, we kind of looked at projected HIV infections using monkeys, as our test subjects in monkeys is called Siv simian immunodeficiency virus, and, you know, we applied, you know, even the flourescent techniques, you know, we studied the brain cells, you know, I mean, the brain tissues, and we kind of, you know, looking for those markers, or looking for those probes to use as indicators. And for me, like, that was also like a very big opportunity, like big an eye opening time for me, because I was learning how to become a scientist, taking the things I was learning from my theoretical world to practical world, you know, letting you techniques know, learn how to time manage, also, like, you know, me, like just meet, interacting with, you know the lab equipment and technology, because, of course, everything is expensive. So, you know, even like, any mistake you made is always gonna be expensive to the the PI. But you know, I had a great understanding PI, I was gonna look into research, and he was big for me actually worked it for three years. And I also worked at a computational biology lab with Dr. Campbell. And under him, he had discovered this mass PRF method to people, mutations of new diseases, you know, and so like, I need a lot of my introduction to data science, I learned MATLAB, I attended a conference at MIT to kind of get up to date on that, and I was looking for signatures of positive selection that were critical to human evolution. So we were comparing both human and chimpanzees, DNA is supposed to be 95%, you know, our closest relation. And we're looking for, you know, the dose changes to see if there were any specific data and the pathogenesis of

disease like that. I know we're looking at Alzheimer's and for me, like that was a huge thing, because I came from a very biological background, and even though like in my research up to that point that all done in the wet lab, so my first time looking at pi tau, and I really know him and getting this knowledge of no digital health. I like that with eventually drug management, you know, to venture pushing more clinical research, you know, in the future. And I was also able to, you know, to get internship at Princeton and Genentech during that time,

Jennifer Cohen

So fascinating. Now, while you were finishing the bioethics degree, you were also working in Pharma, at Genentech, what type of work were you doing there?

Awele Utomi

Yes. And Genentech, I actually this is my second stint, in my first time I got a summer internship there, and I was in the developmental sciences department. And I worked on the clinical pharmacology and in that specific space, I looked at data sharing platforms, in the sense that of course, a lot like now and in the past few years, we've seen an increase in the pharma industry being more open to sharing information about clinical trials. And before then you would have difficulties, you know, doing the same challenge known within the same firm, but then not knowing about it, because they're all siloed from each other. So now there's a more collaborative approach to doing research and clinical research. And we've seen that, you know, in COVID-19, this year with the opposite a new level of collaboration between pharmaceutical companies sharing information in real time preprints, you know, we're seeing that increase and that's kind of why I looked at it as the industry wide effort, and it was called transliterate. And I worked on the placebo database specifically. So I, my database was comprised of different almost like 20, major pharmaceutical companies, I know we're looking at real world data, trying to get those historical data from clinical trial control arms. And the idea was that if we could get all of these control arms into this database in one central base from different pharmaceutical companies, that will save costs eventually, because like, there'll be no need to conduct actual placebo trials, where you already have that data for whatever indication that you're trying to look for. So it was usually collaborative, I was able to know to like to talk to different kinds of people, you know, to learn the kind of things to you know, get more insight into the biotech world and clinical research.

Jennifer Cohen

Okay, let's turn to your career as a bioethicist. You've spoken already about the struggles you faced and your family faced, when you were growing up in Nigeria to get your parents health care and access to health care. What do you think your Nigerian perspective brings to your study of bioethics here in the US and in New York City, specifically?

Awele Utomi

I think I would start by saying that bioethics only as powerful as the different strands of thoughts that they allows are culturally divergent viewpoint that they allows to be included in this body of work, because again bioethics very much is about the people is about morals, about the ethics of things, but I feel like even beyond that, like it's really about how people interact and you know, and the rules and the regulations and interactions. And for me, I, I really brought my own personal background to this because like, again, the only way to make things very fun to use to make them personal to turn them for like a general to like the specific, like, why is that important to you and for me, I saw bioethics as a way to espouse or specific African ideas and ideals, and even more specifically like to bring to the forefront in terms of medical genius back home, because, of course, it's still very much a nascent field back home and education, you know, going on right now increasing idea and

increasing awareness of the topic. So it was very much into even from that senior seminar class, I took seen that there are not enough people and enough voices like me speaking in the field, and specifically for our issues, because again, you only speak about the issue that you're intimate about. And I think that having that personal connection to that was important to me, you know, for talking about, you know, clinical trials, talking about, you know, paternalism in medicine, informed consent, known, like how important is the family to that because for us, and I'm sure that many other cultures have been like special about that. But, you know, the family is important, as opposed to the idea of personal autonomy, that Western ethics kind of espouses. And, of course, the individual is important but you know, just trying to manage those different ideas and like, express them in a way that I know that to be relevant to my community, my environment was kind of like my stick into all of this. And I was really able to explore this my time at Columbia and my fingers actually on African bioethics. And it was a huge body of work. And I feel like there's a lot of like research to be done. So it is in no way like conclusive or like, definitive, you know, so it was interesting to see I you know, to get involved, you know, from that, you know, side,

Jennifer Cohen

Right, as you say, it's a nascent field in, in Africa in Nigeria, a terrible ethics violation occurred in Nigeria in 1996. It's one we study at Columbia, where a Pfizer clinical trial of an antibiotic used to treat pediatric meningitis resulted in the deaths of a number of children. And there were allegations of falsification of trial results and a failure to obtain informed consent. There were multiple lawsuits. Pfizer ended up paying a \$75 million dollar settlement, and there have been books and a film made based on this scandal. Did that case, start to raise awareness around bioethical issues in Nigeria. Is bioethics, something that's taught in medical schools, if you know, in Nigeria,

Awele Utomi

So to my knowledge it is definitely something that is taught. And I do think that in my research so far, that just based on the size of the country, specifically, it has like a little bit more awareness of it, compared to other places where we're seeing, you know, a lot of grants from here to support people that stay there, and I cannot let you enable and learn more about bioethics. And I was definitely taught in medical schools, because I have friends in medical schools that, you know, that told me about this thing. But again, like, we still like an ongoing body of work to come up with our own frameworks, you know, to make it more personal towards the way that we've seen bioethics publications, you know, in Asia, you know, kind of really dive deep into topic, I know, to merge those two, I guess, ideas and ideals and to make it relevant to us, I feel like there's still a challenge in trying to understand how relevant it is to the region, and even how to govern, you know, like clinical trials and all of that, you know, so to talk about some, like Nigeria, when it comes to clinical trials, we have a number of bodies that are responsible for not really unlike IRBs in the US. We have like a number of boards that do that. But again, there's still a lot of gaps in between. I know how binding the recommendations are, how strict they are, you know, like and there's no really concise step. So I do think that there is more awareness of it in Nigeria than everywhere else. I think South Africa other places like that where clinical trials is usually done. But it's still very much a field that is as new in that sense.

JC

Jennifer Cohen

Okay. Let's turn to your commitment to social justice movements. As you've already discussed, you were aware of health disparities and social disparities growing up, and how this affected people's health. There's been some

tragic news from Nigeria recently, a number of young protesters were shot and killed in the streets of Lagos while protesting police brutality. And these protests have been going on for years against a division of the police called the Special Anti-Robbery Squad or SARS, which is a bizarre coincidence, given the name of the pandemic, but this police division has been accused of torture and abuse and I believe, as a result of the protest, it's just been disbanded. And there's now an official inquiry into the division. Can you give us some more detail about the nature and the goals of the protests and were you in contact or aware of any of the protesters who were injured or tragically died?

Awele Utomi

Yeah, like that. That entire happening is still very raw to me as it's only been a couple of weeks since that D day when the Nigerian government you know, unleashed the military on innocent protestors. You know the number of videos of that on Twitter now, for me, I think that I can only speak from experience specifically because like, I was here in the US when this was all happening, not in the background, but everyone else. And again, world and the diaspora, you know, connected, you know, on social media to this happens. And we saw, you know, we saw the videos, nobody saw the live cast of this whole, you know, issue I mean, so how we played out, I know, all of the lies, I know, the different ways that the media, even though he painted it initially before, you know, starting to, you know, put pressure on the government, and we still very much a very sad and raw issue, for me personally, because I like almost everyone else that has family there, you know, we were scared for them. We were hoping that it wouldn't get volatile, because, you know, it was all centrally located, specifically in Lagos, with protests happening all across the nation. And for us, like it was, and I'm not mistaken the biggest protest movement, we had put this in almost every state, and we've never had that level of recognition. And for me, despite all the negatives, I also know of, you know, people from high school, and we're missing up at the protest, and we couldn't, you know, really reach out to them or know what it was because we didn't know which houses they took them to I mean, there was so much uncertainty in that time, everyone was scared. You had people that were at home, you know, there were still you know, getting harrassed, you know, and people took advantage of that volatility to like to cause panic to loot. So like, there's a lot, a lot of sadness, I, you know, anger just going on at the time. But a different side of the process was that I feel like, right now, I've seen just the resilience that they have shown in that time, you know, something that I never thought was possible growing up, there's much more awareness. I know right now, like the initial goals were they had, you know, a list of demands that they had for the federal government, including them, the dissolution of SARS, education of the officers, a citizens kind of body to investigate all the abuses. And those like insurance do soldiers that committed crimes like the specific ones that you had named for that you knew that they were brought to justice. So there were there were a number of things the protests were aim at. And initially it was so that that kind of again, it's not the first time this issue has been going on for a minute, it's been going on for the past three, four years, and is only reached a zenith now. Because with Nigerian government's entering something 2018 that, you know, they would cancel SARS. And, you know, they had this announcement that they were not really able to, you know, to make certain things. So as is right now, we're seeing that there will be probably more protests, but we're seeing now that we can do that, that we can organize and hold our elected leaders, you know, to account but there's still a lot of, you know, work to be doing this organization in those supports. And that's why I believe that even for our magazine Voices in Bioethics we have, I know that there was a number of articles on our website about that. And that's why I'm sharing that the links on how to support the protests, because it's still very much an issue that affects everyone, you know, despite the fact that it's already, you know, we're not really stimulated politically, it affects the entire world. So is that interest anyways, you know, it's something that we all should be concerned about. And it's terrible to see the impunity that the government has kind of meted out on innocent protestors. So we won't see how that goes. But I'm very

optimistic that this is like, you know, a new dawn. For us, Nigeria, to very much a youth country is most 60% young people. So it's very much a time for that, yes, we're being represented by very old leaders that led, you know, in our military regime, like years ago. So it's, it's very much a time that we're saying that we need to take our country into our own hands. And like, I'm very, very proud of my peers, you know, back home I now supports in different ways, and like sharing awareness, and because everyone is very, very committed about is very passionate about it, you know, so they definitely positives to take despite the negativity and attention that is happening.

Jennifer Cohen

Thank you for that perspective. So let me turn now to the pandemic and its effects in Nigeria, there have been a little over 1000 deaths in Nigeria as a result of COVID. And Nigeria is a country with a population of nearly 200 million people. So that seems like the country has done a good job containing the virus. How would you say the pandemic has affected Nigeria?

Awele Utomi

I would say very much like the rest of the world severely, I do think that yes, from a numbers standpoint, we have done a good job of that. And I think the entire West African region, just based from the Ebola epidemic, a few years ago, you know, they have the systems in place, and, you know, coming from that at the time, so I do think that they were a little more prepared than many news reports, I you know, and maybe myself, you know, give them credit for taking the lessons from that epidemic. But I would say that in terms of like, the economic situation that you know, it's terrible. And we can say that literally in a number of ways. And of course, along with the protest is increased prices. We've seen people later because they can go to work and not everyone can work from home. There's a number of issues we've seen even like with children and school closures and like not being able to have the support like I would have here and maybe going to Columbia or anywhere else to be able to attend school from home like only based on your kind of school like you know, and the money that has the class size. It's actually like a huge class gap and how is it affected you I kind of like pushed people closer to the brink. But in terms of numbers, I do think that there has been a good job of that. But then again, that can be explained by maybe not as much testing as us or other countries has done but like, I don't think that we can take that away because like if it was bad in terms of numbers for that, we would know that but it definitely not been too bad. We've seen now the number of things speaking about re-opening, that don't like churches reopen genome, you have markets opened and of course, in schools or is that to reopen? There's definitely a bit of rosy news on that point compared to the rest of the world. I'm at this time.

Jennifer Cohen

And my last question Awele, where do you see yourself making the biggest impact as a bioethicist?

Awele Utomi

I think where I can make the biggest impact as it bioethics is exploring that space between medicine and bioethics, and, of course, social justice. And I mean, in the sense that, like, even beyond raising awareness of bioethics and social issues, I mean, essentially, of empowering our people to get more involved in the field and more involved, you know, in speaking up and in documenting these things, and increasing the ways of thought, you know, the paradigms and new balance, ways of thinking and to really support and, you know, to bring it to close, but for me, I think I can make the biggest impact as bioethics by exploring that space between clinical research, medicine and bioethics, but especially in the local context, like I've said, and of course, right now, at Genentech, we're looking at issues of last mile problems, trying to figure out how COVID has impacted cases



and also affected, you know, people's availability to vaccines and drugs, you know, and of course, image ratio has been increasing the manufacturing output of the facilities in the region. So like, for me, that's kind of where I see myself making a huge impact in merging my own background, you know, you know, the computational and digital healthcare, which I think is one of the major trends in personalized medicine, and bring that whole way of thinking, you know, to the region, because I do think that there is the opportunity to grow my awareness which creates moral initiatives, you know, and kind of solidify what it means for us and how to affect the different procedures that we do. So there's definitely a lot of space, I think, for that. And I guess defined by doing that in bioethics would be a huge part of whatever I do in terms of trying to alleviate and reduce that gap in healthcare.

Jennifer Cohen

Awele Utomi, Thank you for sharing your fascinating background with us and best of luck in the future.

Awele Utomi

Thank you. Thanks. Thanks for having me.