

## WEBVTT

00:00.000 --> 00:11.400 Support for Yale Cancer Answers comes from AstraZeneca, a biopharmaceutical business that is pushing the boundaries of science to deliver new cancer medicines. More information at [astrazeneca-us.com](http://astrazeneca-us.com).

00:11.400 --> 00:36.500 Welcome to Yale Cancer Answers with doctors Anees Chagpar and Steven Gore. Yale Cancer Answers features the latest information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week, it is a conversation about social and health equity with Max Tiako, a Student at the Yale School of Medicine, where Dr. Chagpar is a Professor of Surgery.

00:36.500 --> 00:46.700 <vChagpar> Max, maybe you can tell us a little bit about yourself, your family background and your journey here at Yale.

00:46.700 --> 02:27.100 <vTiako> I am a third year medical student here and my path to medical school was kind of complicated. I am originally from Cameron and I moved to the US to go to college about 10 years ago and I studied civil and environmental engineering in college. I went to Howard in DC, but I had actually wanted to study medicine but then for one reason or another, I felt like it took too long to become a physician, so I said I am going to study something where I can get a job after college, hence the civil engineering, but my senior year, I started thinking about graduate school and I landed in studying bio-engineering, so I went to Georgia Tech and a lot of my work was around medical devices development, and while in grad school, I was kind of toying with this idea of do I want to do MD/PhD or do I want to do a PhD and my advisor who was an MD/PhD kind of helped me figure that out and I decided that I would want to go to medical school and I started applying while I was finishing my thesis at that time, and so in between graduate school, finishing with my master's and enrolling in medical school, I was working as a research assistant in a lab, another medical devices endeavor. I was working in McKenna Biology Lab at Vanderbilt. So that is how I eventually made my way from civil environmental engineering to medicine, which seem not so connected.

02:27.100 --> 02:36.500 <vChagpar> And you came to Yale. You have been all over the place, you have been to Howard, you have been to Vanderbilt, what attracted you to Yale?

02:36.500 --> 03:09.700 <vTiako> When I was on the interview trail, we all talk about the Yale system and ways in which it kind of allows all of us to tap into whatever our interests are and find necessary resources and the people to talk to and work with, to be able to explore those interests outside of the classroom and that has been really palpable here and I have been very much taking advantage of those opportunities and the flexibility as well.

03:09.700 --> 03:12.400 <vChagpar> So, tell me more about what those interests are.

03:12.400 --> 04:15.200 <vTiako>Like I mentioned earlier, I studied civil environmental engineering and I still have an interest in those things, but I have kind of pivoted, in the sense that I am interested in how infrastructure and health interact with one other, sort of like public infrastructure - roads, highways, housing and such. And all of that ties to social justice in our society. So, I mentioned earlier, I went to Howard for under-grad and I felt like at Howard, all of us, maybe not all, but a lot of us were kind of built into mini social justice, like warriors, like the university has a long history of being involved in social justice matters, especially when it comes to issues that affect the African-American community. So, sitting at the intersection of all those things, it is what I have done with my free time in medical school.

04:15.200 --> 04:55.900 <vChagpar> And so, tell me more about that because it is certainly very interesting when we think about social determinants of health, which in part has to do with poverty or neighborhoods, lack of affordable healthy, nutritious foods, safety of neighborhoods, violence in communities, all of these things ultimately have a bearing on our health and many of them have to do with the public spaces that we inhabit and the infrastructure that is there. So, tell us more about that work.

04:55.900 --> 07:11.300 <vTiako>For me, what I have been doing is looking around at who are the people who do work related to those different arenas of social determinants of health and I had the opportunity to take the student-led elective which was a US health justice course and that kind of helped me further dive into these interests, but also starting the podcast flip the script on where I had a chance to interview professors here and healthcare workers as well who do work at the intersection of social determinants of health and ultimately have outcomes. A good example is the bit that I did on incarceration and health. I interviewed Dr. Wang, she is a general internal medicine attending here and she is part of the leadership of this network of transitions clinic. So, basically they take care of individuals who have a history of incarceration and it has been shown so far that that contributes to one - improving their health after release from jail, but also reducing recidivism rates. So, that is one example. I mean looking at New Haven, the way the city is built that is another way it shows. Right adjacent to the hospital is the entrance to the highway and it kind of divides the city into, I will not say 2 parts but it is kind of stark once you cross the MLK streets and on the other side of the hospital, it is downtown New Haven, it is nice, there are shops that sell expensive clothing, but on the other side, it is the hill, which is one of the poorer neighborhoods in the city and primarily inhabited by communities of color- black people. So, thinking about the way the city is designed and what that means for the people who live around here, that is another aspect of things I have been working on.

07:11.300 --> 08:24.700 <vChagpar>So, as you think about these social determinants of health and infrastructure, whether it is incarceration or how a city like New Haven is built, how have you thought about how poverty plays into that? Because when I think about both of those situations, it seems to be a

dominant theme that people who are incarcerated, not ubiquitously, but certainly not uncommonly have a history of poverty and that socioeconomic status tends to have an overlay with other determinants of health - race, etc. But the socioeconomic factors often are a driving mechanism, so when you think about provision of healthcare in incarcerated populations and how that can actually help to reduce recidivism and improve health, maybe it is because those people finally had access to a resource that was not available to them in part because of a lack of resources, a lack of access and poverty as a whole?

08:24.700 --> 09:50.500 <vTiako>Yeah, absolutely I agree. This is something that comes up a lot in communities of activists right. When we think about neighborhoods or parts of cities that are impoverished where there are also high rates of crime and where schools are not particularly doing well, one of the core issues is lack of opportunity, lack of jobs, the businesses in those areas are not necessarily thriving and ultimately there is this anecdote or sort of joke that people say, like we want jobs right, and speaking to the city, a good example is Chicago, they are closing a ton of public schools on the south side, but also the city continues to increase budget for policing every year, and one of the responses that activists in the city there have been sort of vocal about is the need for more opportunities like during the summertime where crime rates kind of skyrocket, people need jobs, there ought to be more things for people to do to use their time so that they are not then driven to engage in other activities that would be nefarious for their health, for their risk of going to jail or staying in school and what not.

09:50.500 --> 11:11.000 <vChagpar> And so, how in terms of practical advice for a city like New Haven whereas you say on one part of the city you have a fairly affluent community and boutique shops and Starbucks and organic grocery stores, and on the other side you have the lack of all of that. In fact, the lack of even grocery stores where you can find fresh produce. How do you provide a city like New Haven or any other city I would argue with practical advice of how you can change that because it seems to me that it is a bit of vicious cycle that you have an impoverished area where businesses may not want to set up shop because there is a higher rate of crime, because the population in that area is of lower affluence and therefore less able to purchase goods to provide that business sustainability and therefore businesses do not go there and therefore there are no jobs, and so you get into this vicious cycle. So, how do you break the cycle?

11:11.000 --> 12:55.900 <vTiako>That is a tough question. As a person who is not an expert in city planning, I mean I think one of the many ways that cities can attempt to address this is creating jobs, investing in creating jobs such that people as you mentioned right, like people in neighborhoods that are otherwise impoverished are then able to purchase items that would be in the store in their neighborhood and then maybe more businesses would be able to set up shop. The only thing that I would like to think about is how, within the context of health, is how city governments can collaborate with big healthcare

institutions to think about those job creations. like healthcare in this county is one-fifth or one-sixth of the GDP and it is a growing industry and it is a space where a lot of jobs can be created. How does the city of New Haven collaborate with Yale New Haven Health to contribute to increasing rates of job creation, especially for people in the city and even for those who are from low income backgrounds. And then when I talk about healthcare jobs, I do not necessarily mean like increasing rates of physicians being higher, but also all types of jobs within the hospital where there could be initiatives and I am sure some exist where the organization ensures that a lot of the people that they hire are also from those communities that are impoverished.

12:55.900 --> 14:08.200 <vChagpar>Yeah. I think your point is a very good one in terms of trying to have programs in communities by business whether they are large healthcare organizations or others, that really try to engage people particularly from lower socio-economic status classes to be involved and to gain employment. It is often a difficult circumstance because people from those neighborhoods as you say tend not to have the educational opportunities that others do. And so, as they do not have that education, they cannot get a job and if they cannot get a job, then all of the other cycles continue. But really I think your point about empowering those in our community who have the ability to offer, for example on-the-job training to give people that education to get people employed certainly can have a very positive impact on communities. We are going to talk about that and a whole lot more after we take a short break for our medical minute.

14:08.200 --> 14:23.900 Medical Minute Support for Yale Cancer Answers comes from AstraZeneca, a proud partner in personalized medicine developing tailored treatments for cancer patients. Learn more at [astrazeneca-us.com](http://astrazeneca-us.com).

14:23.900 --> 15:19.700 This is a medical minute about smoking cessation. There are many obstacles to face when quitting smoking as smoking involves the potent drug nicotine, but it is a very important lifestyle change, especially for patients undergoing cancer treatment. Quitting smoking has been shown to positively impact response to treatments, decrease the likelihood that patients will develop second malignancies and increase rates of survival. Tobacco treatment programs are currently being offered at federally designated comprehensive cancer centers and operate on the principles of the US Public Health Service Clinical Practice Guidelines. All treatment components are evidence based and therefore all patients are treated with FDA approved first-line medications for smoking cessation as well as smoking cessation counseling that stresses appropriate coping skills. More information is available at [YaleCancerCenter.org](http://YaleCancerCenter.org). You are listening to Connecticut Public Radio.

15:19.700 --> 15:51.600 <vChagpar>Welcome back to Yale Cancer Answers. This is Dr. Anees Chagpar, and I am joined tonight by my guest, Max Tiako. We are talking about his perspective as a Yale School of Medicine student on social and health justice, particularly given his podcast called Flip The Switch. Before we get into that though Max, how did you start that podcast anyways, I

mean where does that idea come from? I am sure all of us have ideas or things that we are passionate about but not many people start a podcast.

15:51.600 --> 16:40.700 <vTiako> Podcasts are one of the greatest ways of acquiring information now. I am an avid listener of podcasts myself. And I am always listening and I thought I should start one too because I spend a lot of time writing, but writing means you also have to do a lot of research on things where you are not necessarily a subject matter expert and so if there is a lot of things that I want to share with the world that I am not necessarily an expert at, a podcast is a good way to go about it where I interview subject matter experts and the writing piece of my activism remains strictly about things that I feel more I guess an expert on.

16:40.700 --> 17:12.100 <vChagpar> And so, how do you go about starting a podcast? I mean is this something that you did at a home studio, did you engage resources at Yale? If somebody wants to start a podcast, is that an easy thing to do or is that something that takes a bit of networking to figure out and how do you get a podcast out into the ether so that other people can hear it and benefit from all of the interviews that you do?

17:12.100 --> 18:48.300 <vTiako> I am really lucky that I am here at Yale. When I was thinking about this, I talked to a friend and she told me, Yale has a broadcast center and you can go talk to them. And I sort of recorded a draft episode of what my podcast might sound like and I came here, where we are today and I spoke with Ryan here at the Yale Broadcast Center and they told me, you can come here and record or you can record on your own and we will help you with editing as needed and also broadcasting because Yale has the sort of channels on cloud that puts all the podcast out there. So, it is a lot easier for me to record on my own schedule because the med school is not all that flexible despite the Yale system, so what I did is I brought a microphone, I brought a decent microphone and just plugged it in with my computer and I reached out to individuals primarily within the Yale community just because it is easier, I do not have to travel far to reach them and I had met some of them through lectures they had given, some of my previous guests have my academic advisors, and so I just find time and bring my computer and my microphone and usually I either interview them in their office or find like a quiet room in the medical school and do it there. I do a little bit of this on editing myself and then send it to the center and Ryan posts it for me. So, that is kind of my process.

18:48.300 --> 19:01.000 <vChagpar>Wow! I mean it sounds like that is something that people could do and is part of perhaps a burgeoning industry and a new way to get information out.

19:01.000 --> 19:01.100 <vTiako>Yep.

19:01.100 --> 19:39.200 <vChagpar> You know, as we think about burgeoning things, hot topics, one of them is climate change and I know that you have been interested in looking at climate change, particularly as it affects health. Tell us more about that because there seems to be a group of individuals who do not

seem to even believe in climate change and others who really do but may not understand completely the magnitude of its impact not only on the temperature but also on people's health.

19:39.200 --> 22:41.600 <vTiako> Yeah, I was lucky enough to interview two Yale faculty that have been involved in efforts related to disaster relief. My advisor, Marcela Nunez-Smith, she is originally from the Virgin Islands and she does a lot of work in the eastern Caribbean and I also talked to Dr. Marietta Vazquez who worked on disaster relief in Puerto Rico. So, when I think about climate change, one of the things that comes up for me at least is the increasing number of disasters we have been seeing in the past few years and what that means for the health of people who live in regions that are more prone to sort of post-disaster effects. And in many ways, not only the damage on infrastructure or the sort of rates of infectious diseases that accrue after a disaster, but also ways in which people then face barrier to recover from the disaster and how that impacts their health. A good example, thinking about Houston right, Houston just went through a really bad hurricane, I think it was last year and I was listening to NPR I think last week, the podcast Code Switch, they did this episode where they compared the experience of 2 families in Houston after the hurricane and one family is low income and the other family is wealthy and sort of thinking about how did they bounce back and what they find is it is a lot easier for families of high income to bounce back from hurricane. The federal government provides a lot more aid for them, not always intentionally, but if you are a home owner, FEMA is more likely to give you a loan and there are programs in place for families like that whereas low-income families really lose everything after disasters like that and we mentioned earlier how much of the social ultimately impacts health. So, that is how I think about it, not even about the clinical things that do happen in the middle after a disaster like people lose limbs and people get cholera, those more clinical things but thinking about the impact on infrastructure and then the loss that comes after that and sort of inability to recover from the loss and then chronic stress which increases the likelihood of these individuals to develop worse chronic diseases or just the worsening rates of already existing chronic diseases. That is kind of how I think about this worsening state of climate.

22:41.600--> 24:32.500 <vChagpar> Yeah. No, for sure, I think that as we think about climate changing, not only does it predispose to a number of natural disasters and we have seen a number of those, whether it is tornadoes or blizzards in Arizona, which for the first time we saw this past year, we know that this can seriously effect many people in terms of their daily lives and on top of that, when we think about climate change, we think about how that will affect our rivers and streams and oceans, much of our wildlife, our food supply and so on, and also in terms of arable land what are we going to be eating in the next century. So, as we think about that and you can make the argument that a responsible way to improve health is also to think about protecting the environment. And as we had talked about, we know that socioeconomic status is a key determinant of health and so some have argued that things like the Green New Deal may

produce more clean energy jobs, but on the other hand, some would argue that it will actually take jobs often from people who are the low socioeconomic status, the people who are working in the coal mines and that may be their only source of income because they simply do not have the education to tap in to the more technologically advanced jobs that we would foresee that are going in the clean energy sector. So, how do you address that kind of debate?

24:32.500 --> 26:07.200 <vTiako>Right. This has come up a lot recently and I am going to tap into what a congress woman Alexandria Ocasio-Cortez has been talking about is that when we think about automation and increase in green jobs that ultimately reduce the other not so green jobs, we often think about from a mindset that you gain these jobs and you lose these, but that is in part because they are not necessarily policies in place to address or bridge the gap that exists between these 2 types of economies, so a good example is countries where everyone gets a basic income if you do not have a job right? So, if you lose your coal job and the government has enough of a safety net to hold you up while you are engaging in a sort of on-the-job training program, then that can contribute to addressing that sort of gap. And I think part of the proposals that are embedded in the Green New Deal include those things - addressing what is the current nature of this country's safety net, especially for the communities that are more low income.

26:07.200 --> 27:39.200 <vChagpar>Well, you know certainly as we are in a year that is pre-election, many of the candidates are talking about where they come down on providing a living wage. So, a basic income that every American should be expected to have in order to live on. Now, the proponents of that argue very much like you do that, that is going to help raise all boats so that people can really have a standard of living that would enable them to access good healthcare, good nutrition, things that we know are important to health. On the other hand, there are arguments that say the provision of a living wage has to come from somewhere, money does not fall from the sky. I mean, so where does that come from, does it come from higher taxation or does it come from taking money out of the healthcare system? As you mentioned, you know, we spend 18% of our GDP on healthcare and truthfully do not have necessarily the outcomes that many other industrialized countries have that spend far less of their GDP on healthcare. So, how do you feel about that? I know that you like the idea of a living wage, but how would you pay for it?

27:39.200 --> 28:57.100 <vTiako>This is something that I have had to think about a lot. When I think about healthcare spending in the United States, it is kind of infuriating right. We spend a lot of money, and in comparison to sort of peer countries, I will use France as an example, and as a caveat, France does spend a lot of money on healthcare but not as much as the United States, it still is a high percentage of their GDP, but when we compare the 2 healthcare systems, one of the things I would learn is their healthcare system is "more effective, more efficient, but they also have as a society the higher safety net. They spend more on social services." And there is a chart out there, I think it

may be from the WHO that sort of compares the healthcare spending and social spending among countries that are known to be developed and what we see is, countries that spend more on social services, end up spending less on healthcare because if you fix the social, people do not get sick as much or people do not require as much.

28:57.100 -->29:18.600 Max Tiako is a student at the Yale School of Medicine. If you have questions, the address is [canceranswers@yale.edu](mailto:canceranswers@yale.edu) and past editions of the program are available in audio and written form at [YaleCancerCenter.org](http://YaleCancerCenter.org). We hope you will join us next week to learn more about the fight against cancer here on Connecticut Public Radio.