Welcome to Yale Cancer Center Answers with doctors Francine Foss and Anees Chappar. Dr. Foss is a Professor of Medical Oncology and Dermatology, specializing in the treatment of lymphomas. Dr. Chappar is Associate Professor of Surgical Oncology and Director of the Breast Center at Smilow Cancer Hospital at Yale-New Haven. If you would like to join the conversation, you can contact the doctors directly. The address is canceranswers@yale.edu and the phone number is 1-888-234-4YCC. This week, Dr. Chappar welcomes Dr. Elmer Huerta. Dr. Huerta is a Director of the Cancer Preventorium at Washington Cancer Institute, MedStar Washington Hospital Center. Here is Anees Chappar.

Chagpar I want to start off by getting a sense of cancer in the Latino population. Tell us a little bit more about what the demographics are? What the risks are?

Latinos in the United States are now the largest minority group, Huerta there are approximately 51 million Latinos all over the country, but 65% of all these Latinos are living in the Southwest and are of Mexican descent, but Latinos are in every major city in the United States and they are all over the place. Latinos, in general, are young. Demographically speaking the median age is around 30 and they have one of the highest birth rates in the country. They expect that by the year 2030 it will reach 65 or 70 million Latinos in the United States. Latinos in general suffer from the same conditions that all mainstream communities suffer from. The problem is that in general they lack access to healthcare, and they are the group in the United States with the least amount of healthcare insurance, therefore, they suffer from many conditions that are found when they are late stage and advanced. Talking about cancer for example, as you know there are four cancers that are considered the 'big ones'; lung cancer, colorectal cancer, breast cancer, and prostate cancer. When you compare the rates of these four big cancers among Latinos with the other populations in the United States they have less incidences of these cancers. In other words, they are being diagnosed less, but the mortality rates are a little bit higher. So how do you explain that the condition that attacks them less, kills them more? It is because they are found late and that is a problem all over the country because of this lack of access. In addition to this particularity of having advanced condition when they are found, they also tend to suffer from what we call the infectious disease cancers, for example, cervical cancer is much more frequent among Latino woman, a stomach cancer related to Helicobacter Pylori and liver cancer related to hepatitis B, and hepatitis C are much more common among this group.

Chagpar What is being done to improve access? When you talk about lower incidence and higher mortality, the first thing I think of as a breast cancer surgeon is lack of access, lack of screening, because as you say these people are

being found late, so what can be done to improve that access?

Huerta It would be great if this year congress passes the reform of immigration law, that would be great because that means that eleven million people who have no access now to healthcare will be eligible next year to have this new health plan that is starting to be sold at the end of this year. I think that is going to be very positive for this community. In general, the reform of the healthcare system, the affordable care act, is going to benefit all the Latino community, but what I

4:47 into mp3 file http://medicine.yale.edu/cancer/podcasts/2013%200616%20YCC%20Answers%20-%20Dr%20Huerta.mp3have found in my experience in both the Latino community and the African-American community in Washington DC is that having an insurance card in your pocket is not enough, so access by means of having insurance is not enough, you have to have something else to use your insurance card, you have to have education, you have to have the basic knowledge that cancer can be prevented, the basic knowledge that cancer can be detected early. If you do not have that you may have your insurance card, but you can sit on it and let the condition get out of control, which is something that we found in Washington DC and this is very disturbing. In my hospital we have seen hundreds of cases of advanced colorectal cancer in the last year, and 98% of these people do have health insurance, so it is not a matter of insurance or access, it is a matter of education. So when you ask me what can be done I think in addition to providing them access by means of insurance cards, we need to provide them a lot of education.

Chagpar Where does that education start? Is this a fundamental societal issue of better education in the school systems? Is this a public education campaign issue? Where does this start, how does that happen?

Huerta I think it is at all levels, you need to start at home, but in order to start in the home, parents need to be educated and sometimes they come from countries or families where prevention, early detection, and health education in general are not big, so we need to use the media, for example. I asked myself the same question 27 years ago, I used to be in medical oncology, I used to give chemotherapy to patients in Peru, my home country, and I found that most of the patients sent to me for chemotherapy had advanced and incurable conditions, but what really caught my eye was that most of those incurable conditions were cancers that were either preventable or could be detected early, it was sad because chemotherapy would not do anything for these patients. Talking to these people I found that most of these patients were very knowledgeable in soap operas, sports, and entertainment, but they did not know what a Pap smear

was. They did not know that cancer could be prevented or detected early. So, I asked myself why are these people so knowledgeable in sports and entertainment, and it is because of the media. That was 27 years ago, and I asked myself a couple of questions: Will it be possible to use the media to sell health the same way that we use it to sell soap or shoes or cigarettes? And the second question was, would it be possible to have a health facility with a sign at the door that would say, this place is only for people without symptoms. If you want to have a conversation about prevention or early detection and have tests, come in, this is a place for you, and that changed my life and I quit working in medical oncology. I came to this country and went to the National Cancer Institute and got my fellowship in cancer prevention and control, and 20 years ago I started a clinic in Washington DC. By the way, the clinic in Washington DC is called a Cancer Preventorium, and 6 years before the opening of the preventorium I started to do radio shows for the community. I started doing television shows on a daily basis. So after 6 years of bombarding my community in Washington DC with daily messages on smoking, Pap smears, mammograms, on eating well, on exercising, checking blood pressure, I opened my preventorium in 1994 and hundreds of people showed up and so far we

9:19 into mp3 file http://medicine.yale.edu/cancer/podcasts/2013%200616%20YCC%20Answers%20-%20Dr%20Huerta.mp3have seen almost 32,000 in the last 19 years and these people are coming without symptoms because they pay attention to the sign that says "this place is for people without symptoms." So media knows how to reach the communities, it does not matter if they are poor, if they have no heath insurance, they have no formal education, they will listen to you and they will act upon the information you are giving.

Chagpar That is fantastic, and congratulations on getting people to start looking after their health while they are healthy. I mean that is the fundamental premise of prevention and screening is to be proactive about your health.

Huerta Exactly, and consider that these people, my patients, my listeners, they are immigrants, they come from countries where prevention does not exist pretty much, they only listen to the radio and it is the daily message on the radio that makes them change their attitude and then change their behavior. As I said, this is one side of the coin, people without symptoms who are poor, who are disfranchised, and who have no health insurance, going to look for preventative services. The other side is people who have health insurance, people living in nice neighborhoods but because of lack of education they let the condition get out of control and they go to the hospital when they have stage III or stage IV colorectal cancer.

Chagpar Had you noticed, Dr. Huerta, a decline in late stage cancers due to the preventorium?

Huerta It is very difficult to prove that even though we have been in the area for 19 years, and at the preventorium, we have found very few cases of cancer because the median age of my patients is 29, because the Latino community in Washington DC is very young, so I have no time margins to see the effect of these things and to prove the next 20 years until this cohort of people gets older because we do not have many older people in Washington DC. So it would be great if in 20 more years we could demonstrate that there has been a shift of the stage, but at this particular moment it is very difficult because of the age of the community.

Chagpar I would anticipate, as you follow these patients out, that overall not only will you find a lower rate of cancer, but a lower rate of almost everything else because you are trying to prevent chronic disease in total.

Huerta Exactly and for the first 5 years or 8 years my work was dedicated to cancer prevention and cancer early detection. But then my patients would ask me, Dr. Huerta my mother has diabetes, do you think you can run a blood sugar test on me? And then I started to broaden my action and now I do diabetes prevention, I do heart disease prevention, and metabolic syndrome prevention, so I document all these condition and I have found over 500 cases of high blood pressure without any signs, without any symptoms. We found dozens of cases of preclinical diabetes. So the preventorium is a place now where people go and get checked, get screened, and we find early conditions before they have symptoms and then we refer them to proper care.

13:27 into mp3 file http://medicine.yale.edu/cancer/podcasts/2013%200616%20YCC%20Answers%20-%20Dr%20Huerta.mp3Chagpar Let's shift a little bit and talk about prevention. I want to get to the whole concept of the difference between screening and prevention and how those two are married together, but before we do that we have to take a short break for a medical minute. Please stay tuned to learn more information about cancer care in the underserved population with our guest Dr. Elmer Huerta.

Medical

Minute This year over 200,000 Americans will be diagnosed with lung cancer and in Connecticut alone there will be over 2,000 new cases. More than 85% of lung cancer diagnoses are related to smoking and quitting, even after decades of use, can significantly reduce your risk of developing lung cancer. Each day patients with lung cancer are surviving, thanks to increased access to advanced

therapies and specialized care, new treatment options and surgical techniques are giving lung cancer survivors more hope than they ever had before. Clinical trials are currently underway at federally designated comprehensive cancer centers like the one at Yale to test innovative new treatments for lung cancer. An option for lung cancer patients in need of surgery is a video-assisted thoracoscopic surgery also known as VATS procedure, which is a minimally invasive technique. This has been a medical minute. More information is available at yalecancercenter.org. You are listening to the WNPR Health Forum on the Connecticut Public Broadcasting Network.

Chagpar Welcome back to Yale Cancer Center Answers. This is Dr. Anees Chagpar and I am joined today by my guest Dr. Elmer Huerta and we are having a vibrant conversation about cancer care in the underserved population. Right before the break, Dr. Huerta, we started to unpack the differences between prevention and early detection and I want to start to give our audience a sense of what they can do today in order to prevent cancers, because as you said before the break, one of the things is education and knowing that cancer can be prevented. Tell us what cancer prevention is?

Huerta Great question, thank you very much. There is a difference between prevention and early detection. Epidemiologists call it primary prevention and secondary prevention. What is that? For example, prevention means that you do not come into contact with causes of cancer. A very classic example is cigarette smoking. If you do not smoke or you do not let people smoke in front of you, then your chances of getting conditions due to the smoke are going to decrease. That is called primary prevention, which means that because I have avoided being in contact with the smoke, I am decreasing my risks of getting the condition. Another example is UV light, ultraviolet light. If I do not receive exposure from the sun at certain times etc., I am going to decrease my risks of getting skin cancer, that is prevention. So, prevention means that I do not get in touch with substances or factors that can cause cancer. Early detection is different, very different. In early detection, the condition, the cancer already started, but it has these characteristic that are growing so slowly that there is time to find it and if you find it right on time, you can do an intervention and you can cure the condition. A typical example, cervical cancer, you do the Pap smear, and you find that the cells are different, they have an abnormality or they may have we call cancer in situ, in the site, then I can cure that. That is early detection. Early detection works very well in breast

17:53 into mp3 file http://medicine.yale.edu/cancer/podcasts/2013%200616%20YCC%20Answers%20-%20Dr%20Huerta.mp3cancer too. You do a mammogram, and you will find clusters of cells with calcifications that are of a certain size. Another example is for colorectal cancer, if you are 50 or older, and you get your fecal occult blood test or you get your colonoscopy, you may find polyps, which are the

deformations that can lead to cancer. So that is early detection. One thing is prevention and another thing is early detection, and people should be knowledgeable about these two things, because in our daily lives we can do this. If you eat well, if you are healthy, it means you eat everything, but you eat small portions, servings, and you prefer vegetables to animal food. If you exercise everyday, then you will maintain a healthy weight. If you do not smoke and if you see your doctor before you get a symptom, then you really are doing prevention and early detection at the same time.

Chagpar What excellent advice, so in terms of prevention, it is all of the things that not only can prevent cancer, but also living a better lifestyle, maintaining a healthy body weight and exercising not only reduces your risk of a number of cancers, but also your risks of diabetes and heart disease, and everything else.

Huerta And that is the nice thing, what we call risk factors, obesity, cigarette smoking and a sedentary life, all these risk factors are the same for these three chronic conditions of cancer, heart disease, and diabetes.

Chagpar Some of our listeners may be wondering about alcohol, on the one hand we hear that too much alcohol is bad, on the other hand we hear a glass of red wine once in a while may be good. What is the answer?

Huerta Well, the answer is that alcohol is a drug that has what we call a very narrow therapeutic range. Let me explain this to you. You as a doctor know that a very old medication for a heart condition was digoxin. Digoxin is a wonderful medication. I remember when I was in medical school in Peru we did not have all these fancy machines that nowadays can measure the exact amount of digoxin in your system, so we use to do trial and error, we used to give this medication to patients until they started to vomit and they started to feel very sick, and we said, this is too much, that is good and we gave it in half until we found the right dosage of this medication. So if we give too much, they got toxic. If we give them too little, there was no effect of the medication, that is called narrow therapeutic range. Alcohol is the same thing. If you drink alcohol, for men two drinks a day, that is the maximum amount that your body can tolerate in the a healthy way. If you pass that into three or four, which is not much, you are now in the area of toxicity due to alcohol. For women, it is only one drink a day. So alcohol is a substance that has these very narrow therapeutic ranges in which for men is only two drinks a day and for women is only one a day. Whatever goes beyond those numbers is going to be bad for vou.

Chagpar Let's talk a little about early detection, and you mentioned a few key tests that people should be thinking about in terms of early detection, mammograms for breast cancer, Pap smears for cervical

22:09 into mp3 file http://medicine.yale.edu/cancer/podcasts/2013%200616%20YCC%20Answers%20-%20Dr%20Huerta.mp3cancer, colonoscopies or fecal occult blood for colon cancer, but recently there has been lot of controversy and a lot of hoopla in the media about changes in guidelines for these regular screening tests. Give our audience a sense of what your views are on guidelines, particularly with regards to PSA for prostate cancer and even with regards to mammograms for breast cancer. How often should these be happening and for whom? If this is something that we should be doing for our health, how early is too early, how late is too late, and how often is too often?

Huerta That is a big, big question, but very important when to an-We have to understand that nothing iin medicine is absolutely known, swer. no task is perfect, everything we do in medicine is imperfect. We have to start understanding that. Every single test, even a cholesterol measurement, a urine test, an x-ray, a CT scan, a mammogram, a Pap smear, or a colonoscopy, everything has either false positives, meaning that the tests are saying that there is something there and the person gets scared, or false negatives in which the tests says do not worry, there is nothing there, when the reality is that there is something there. All tests are like that. Mammograms, they have 15% false positives and 10% to 15% false negatives. Colonoscopies are much less than that but they do have them, and PSAs too, all tests are imperfect and that being said, there are very few tests, there is one for cervical cancer, which is the Pap smear, for breast cancer the mammogram, for colorectal cancer it is the fecal occult blood on the colonoscopy and for prostate cancer is the PSA and the rectal examination, that is it. Those four tests are the only ones that have been studied pretty much that demonstrate that they have an affect on early detection, the rest of cancers have no tests. We have no tests for pancreatic cancer, we have no tests for ovarian cancer, we have no tests for stomach cancer, or any other kind of cancer. That is why it is important to pay attention to your body, visit a professional at least once a year to talk, to see how you are doing, tell them that you are doing fine, or maybe there are some signs that something may be wrong, so the doctor can intervene early. But the reality is that we only have these four tests, Pap smears, mammograms, fecal occult blood, colonoscopies, and PSAs. We have no problem with the first three Pap smears, they have demonstrated all over the place that they do work in detecting early cervical cancer, same thing with mammograms and same thing with colonoscopies and fecal occult blood. With PSAs and rectal examinations we have had problems. Just last week The American Urological Association released their new guidelines, in which they say that PSA should not be done in men younger than 55 or in men older than 70, and between 55 and 70 the test only should be done after the doctor explains to the patient the benefits and the risks of having the tests. Why is that, because study after study has shown that the use of PSA and rectal examination can find early cancers, that can be done, cancer can be found, but that does not decrease the number of men who die of prostate cancer over time and because treatments are very drastic, either a prostatectomy operation or radiation therapy, men are left with severe side effects for many years to come, and that is why this group of organizations, The American Cancer Society, The National Cancer Institute, The US Preventive Task Force and now The American Urological Association, are saying, you have to explain this to your patient before you do the exam.

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Chagpar Yes.

Huerta This leads the conversation maybe to the future, because these tests are very rudimentary. Last week we also had a great study come out that showed, for example, breast cancers and ovarian cancers, they share a lot of commonalities in the study of the genomes of the tumor, the basic is structures of the tumor mutations. I would say philosophically this is very important to think about. If you think that in order to diagnose cancer nowadays, in the year 2013, we are using an instrument that was invented 400 years ago and that in the middle of the 1800s when tumors started to be studied under the microscope this is what we kept doing, and nowadays at Yale, anywhere in the country, in order to diagnose cancer you need to take a sample, a biopsy and put it under the microscope and then we classify that cancer according to the organ that it came from and we say this is breast cancer, this is pancreatic cancer, this is a stomach cancer, a skin cancer, so in other words we define a cancer as the organ where the cancer started, but these new studies are showing us that there underneath in the genetic composition of these cancers, there are commonalities and this is important because now we treat organs and I think the future is that we are going to treat genetic abnormalities, so it is very exciting what is coming in the future.

Dr. Elmer Huerta is Director of the Cancer Preventorium at Washington Cancer Institute, MedStar Washington Hospital Center. If you have questions or would like to add your comments, visit yalecancercenter.org where you can also get the podcast and find written transcripts of past programs. You are listening to the WNPR Health Forum on the Connecticut Public Broadcasting Network.