

Discussing PCD's Collection on Cancer Screening Prevalence and Associated Factors Among US Adults

This program is presented by the Centers for Disease Control and Prevention.

Cancer is the second leading cause of death in the United States, only exceeded by heart disease, with more than 1.7 million new cancer cases reported and nearly 600,000 cancer deaths in 2018. While the age-adjusted cancer incidence rate decreased more than 9% over the last 20 years, the number of people diagnosed with cancer increased by more than 400,000 from 2009 to 2018. About 30 to 50% of cancers diagnosed today could be prevented by reducing exposure to tobacco smoke and other environmental carcinogens, maintaining healthy body weight, and receiving recommended cancer screenings and vaccinations.

Today we're talking with Dr. Marshal Ma from the Division of Community Epidemiology at the Pennsylvania Department of Health and Dr. Lisa Richardson from CDC's Division of Cancer Prevention and Control. They're the guest editors of PCD's April collection entitled "Cancer Screening Prevalence and Associated Factors Among US Adults." They're going to share with us how this collection of papers can help inform health professionals about ways to advance cancer screening and protection and help improve the health of adults in the United States.

To start, tell us a little about yourself. What is your background and how does it relate to this collection? Dr. Richardson, we'll start with you.

Thank you, Melia. I'm Dr. Lisa Richardson. I'm the Division Director of Cancer Prevention and Control at CDC, and I am a medical oncologist. So, coming into working at the CDC I was very interested in preventing cancer. And so almost everything we do we educate, prevent, and the monitor the success of our interventions, so that's how this issue relates to me and why I was really excited to be a coeditor.

Thank you. Dr. Ma.

I'm a Senior Chronic Disease Epidemiologist and Division Director at the Pennsylvania Department of Health, and I'm also Adjunct Assistant Professor at the University of Pittsburgh School of Public Health. I have been working in the county and state health department for about 20 years, mainly on cancer prevention and cancer cluster investigations. Through the years of cancer cluster investigations I realized that many people diagnosed with cancer or have their loved ones diagnosed with cancer and do not really know what cancer is, and they actually do not have a basic knowledge of what cancer prevention is. I think this is a good time for us to educate them and tell them about some prevention issues.

Thank you. What can readers expect to see in this collection and why it is so important right now?

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So, this is Dr. Richardson, I'll start. This collection is really important right now because the population is getting older and older. So what that means is that cancer is really a disease of aging, so we're going to have quite a few people developing cancer in the coming decades. You know, one of the papers in the collection was by Dr. Hannah Weir where we do projections 2050, and there's going to be a huge burden of cancer. So for me, there are preventive measures we can use: finding things early, treating them when they're curable—so that's why I was interested in working on this.

Dr. Ma.

Yeah, I think that we all know that age-adjusted cancer incidence rates decreased in the last 20 years about nine and a half percent, but a number of newly diagnosed cancer cases increased about 33 percent in the last 10 years to 1.7 million new diagnosed cases in 2018. And estimated cancer expenditure increased from 2015 to 2020, about 10 percent. I think 2020 the estimated cancer expenditure was \$209 billion, and at the same time thousands of lives could be saved if we could increase the cancer screening rates. I think that's why we need to do something about it.

What role does cancer screening play in prevention and why is it so important, Dr. Richardson?

Well for two cancers in particular, cervical cancer and colorectal cancer, with the screening we find problems before they become cancer, and if we remove them, we can prevent the cancer, so that's why it's extremely important. And in another way that we prevent cancer, in particular with cervical cancers, is with the vaccine. So, there are many things we can do, screening and vaccination, to prevent cancer from happening in the first place.

Research shows that screening varies between racial and ethnic groups. Can you talk about this and some of the best ways to address screening disparities?

Yes, thank you for that question as well. So, within some of the screening numbers that we've seen, in the paper in particular, that women, let's see Hispanic women have higher screening prevalence than others, but they still tend to die more or get more cancer. So one of the things I think is going on there is trying to change the definition of screening. To try to go from just a test to a process. So, minority women may be getting screened at higher rates but are dying more frequently and this is because follow up may not be happening.

With the aging population in the country, what can be done to reduce cancer risk among this at-risk population?

Well, there are currently more than 46 million adults 65 years and older living in this country, and it is projected that it is going to double to 90 million by 2050. It is great to say we live longer, but at the same time when we live longer our immune function decreases and sometimes malfunctions and we also accumulate more harmful exposures from the environment. This will increase the cancer risk. Unfortunately, aging is the highest risk factor for developing the

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majority of cancers, with only a few exceptions. But we need to know that some things that we can do to help ourselves by practicing healthy life habits and to slow down the process; therefore, to reduce the risk of cancer. This is including, you know, healthy diet, exercises, quit smoking, consume less or no alcohol, consume antioxidants, and treating chronic inflammations. Besides those primary prevention measures, we really need to follow the recommendations about cancer screening. So, lots of cancers, I think 60 percent of them, were diagnosed at 65 and older. So, for breast cancer the median diagnoses age is 61, for colorectal cancer it's 68, and for lung cancer it was 70. So, before we have any symptoms, at the time we could do cancer screenings so we can find those cancers at the early stage so it's curable and we can also find those precancerous lesions so they can be removed and they do not develop cancer.

How can providers help to increase screening among patients?

Well, healthcare providers play a very important role in promoting and prescribing screening tests. They can help improve cancer screening practice through a series of steps, including knowledge, attitude, ability, and reinforcement. A likely reason for the fear of many Americans to obtain screening for colorectal cancer is unfamiliarity with the disease. Some evidence suggests that physicians are not going to provide patients with information they need to facilitate screening. We want the physicians and healthcare providers to be familiar with the cancer screening line and have adequate knowledge about current cancer screening guidelines, so they can basically promote and perform the screening tests to the patients they care for.

What role do state and local health departments play in improving population health as it relates to cancer screening and prevention?

Well, we know as the screening rates differ substantially by state, age groups, race, ethnicity, access to care, insurance status, and also income levels and education levels. There are lots of heterogeneities within a state, even within a county or a community. So, the state and local health department knows much better than anybody else about their community. They can use their own data, localized data, to select appropriate target populations. They can provide communication and community outreaches to encourage screening and work with community health systems to support navigators and community health workers, so they can help to remove the barriers to assessing cancer inflammation, service, and treatment. And they also can work with local health systems to improve the quality of service. They know their community much better than anybody else. They can provide those cancer education and promote cancer screening.

Dr. Richardson, what role does CDC's National Comprehensive Cancer Control Program play in the prevention and control of cancers in the US?

I want to build upon what Dr. Ma just said about communities. One of our largest programs is the National Comprehensive Cancer Control Program, that brings together everyone in a state or other jurisdiction together who cares about cancer. They create a plan that will guide actions in the community and actually work with community members to implement their plan. And what

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they do is use things that work, things from the Community Guide for Preventive Services—that's administered or produced by the CDC—and like I said, strategies that work, people call those evidence-based interventions. And so for one example that we had where communities are working together after identifying a need was in Wichita County, Texas, where they noted they had a high rate of colorectal cancer deaths and a moderately reasonable rate of colorectal cancer screening at about 60 to 65 percent. And so they worked with the Moncrief Cancer Institute there and gave out FIT tests where you could do your screening at home, and so even during the pandemic people were able to continue to be screened. And Moncrief also provided the follow up colonoscopies. And so what they noted their was that they were able to distribute 500 vouchers through all types of places that people trust: the pharmacy, not-for-profits, and everyone that had an abnormal result was followed up. So, this is a perfect example of bringing people together from different areas like the health department and a hospital or a health system to bring services to people who are need of being screened. And that was a total success out in rural Texas where, you know, services as been mentioned a couple of times in our interview here are not as robust in rural areas as they are in urban areas.

What is the best combination of actions to make sure Americans are on track to reducing cancer rates? Dr. Ma, please take the lead.

Yeah, I think the best combination is, first of all, we have to do primary preventions then get the secondary prevention. Primary prevention is basically we have to do the changing our personal behaviors, they're not smoking, not being exposed to some environmental exposures, try to lose weight and do exercises, then on top of that the secondary prevention is detect the cancers before they even develop. So, basically, it's cancer screening.

Dr. Richardson.

So what I would add to that, as Dr. Ma said, you know, teaching people what the healthy behaviors are that we would like them to participate in. But also to provide places for them to go to exercise, places to go to buy, you know, healthy food, promote healthy behaviors, and vaccinations. But also in this time of the pandemic, another thing that we need to remember is a lot of people weren't screened during the pandemic in all other services not just cancer screening, and that we have to be exceptionally vigilant to make sure that those who are the least served aren't at the back of the line and will have poorer and poorer outcomes 5 or 6 years down the road to see exactly what's happened. And just letting people know that there are many options available for their health and to help get the information in a way that they can understand and empower them to take action to stay healthy.

Thank you all for joining me today. You can read this collection of papers on the PCD collections page online at [c-d-c-dot-gov-slash-p-c-d](https://www.cdc.gov/p-c-d).

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