WEBVTT

00:00:00.000 --> 00:00:02.225 Welcome to Yale Cancer Answers

NOTE Confidence: 0.724558488888889

00:00:02.225 --> 00:00:04.005 with Doctor Anees Chagpar.

NOTE Confidence: 0.724558488888889

00:00:04.010 --> 00:00:05.825 Yale Cancer Answers features the

NOTE Confidence: 0.724558488888889

00:00:05.825 --> 00:00:07.640 latest information on cancer care

NOTE Confidence: 0.724558488888889

00:00:07.701 --> 00:00:09.133 by welcoming oncologists and

NOTE Confidence: 0.724558488888889

00:00:09.133 --> 00:00:11.281 specialists who are on the forefront

NOTE Confidence: 0.724558488888889

00:00:11.337 --> 00:00:12.987 of the battle to fight cancer.

NOTE Confidence: 0.724558488888889

00:00:12.990 --> 00:00:15.294 This week it's a conversation about

NOTE Confidence: 0.724558488888889

00:00:15.294 --> 00:00:17.570 global oncology with Doctor Saad Omer.

NOTE Confidence: 0.724558488888889

00:00:17.570 --> 00:00:19.382 Doctor Omer is the Harvey and

NOTE Confidence: 0.724558488888889

00:00:19.382 --> 00:00:21.002 Kate Cushing professor of medicine

NOTE Confidence: 0.724558488888889

00:00:21.002 --> 00:00:22.410 and infectious diseases at

NOTE Confidence: 0.724558488888889

00:00:22.410 --> 00:00:24.170 the Yale School of Medicine,

NOTE Confidence: 0.724558488888889

00:00:24.170 --> 00:00:25.955 where Doctor Chagpar is a

NOTE Confidence: 0.724558488888889

00:00:25.955 --> 00:00:27.383 professor of surgical oncology.

NOTE Confidence: 0.90338360173913

00:00:58.680 --> 00:01:00.568 Saad, maybe we can start off by you

NOTE Confidence: 0.90338360173913

00:01:00.568 --> 00:01:02.415 telling us a little bit about

NOTE Confidence: 0.90338360173913

00:01:02.415 --> 00:01:04.309 yourself and what it is you do.

NOTE Confidence: 0.865372886

00:01:04.360 --> 00:01:05.800 I'm the director of the Yale

NOTE Confidence: 0.865372886

00:01:05.800 --> 00:01:06.760 Institute for Global Health.

NOTE Confidence: 0.865372886

00:01:06.760 --> 00:01:08.640 I'm an infectious disease epidemiologist

NOTE Confidence: 0.865372886

00:01:08.640 --> 00:01:11.234 who has had the privilege of working

NOTE Confidence: 0.865372886

00:01:11.234 --> 00:01:13.184 in multiple countries and have done

NOTE Confidence: 0.865372886

00:01:13.184 --> 00:01:15.412 studies in multiple places both in

NOTE Confidence: 0.865372886

00:01:15.412 --> 00:01:18.496 the US and outside the US.

NOTE Confidence: 0.865372886

00:01:18.496 --> 00:01:23.451 My own work is focused on infectious

NOTE Confidence: 0.865372886

00:01:23.451 --> 00:01:26.277 diseases and as you know

NOTE Confidence: 0.865372886

00:01:26.277 --> 00:01:29.080 there are several cancers now

NOTE Confidence: 0.865372886

00:01:29.080 --> 00:01:32.180 that have an association with

NOTE Confidence: 0.865372886

00:01:32.180 --> 00:01:34.742 infectious agents and the

NOTE Confidence: 0.865372886

00:01:34.742 --> 00:01:37.202 most prominent one of them is

NOTE Confidence: 0.865372886

00:01:37.202 --> 00:01:40.846 the HPV or human Papilloma Virus

NOTE Confidence: 0.865372886

00:01:40.846 --> 00:01:43.358 association with cervical cancer.

NOTE Confidence: 0.865372886

00:01:43.360 --> 00:01:46.314 So some of my work has focused

NOTE Confidence: 0.865372886

00:01:46.314 --> 00:01:47.580 on HPV vaccines,

NOTE Confidence: 0.865372886

00:01:47.580 --> 00:01:49.540 but you know I work broadly on

NOTE Confidence: 0.865372886

00:01:49.540 --> 00:01:51.749 all sorts of infectious diseases.

NOTE Confidence: 0.838740921875

00:01:52.180 --> 00:01:54.525 So let's talk a little bit about

NOTE Confidence: 0.838740921875

00:01:54.525 --> 00:01:56.752 the global implications

NOTE Confidence: 0.838740921875

00:01:56.752 --> 00:01:59.036 for cancer. Just recently

NOTE Confidence: 0.838740921875

00:01:59.040 --> 00:02:01.830 we heard in the news that a lot of

NOTE Confidence: 0.838740921875

00:02:01.830 --> 00:02:04.322 the global work that had been done

NOTE Confidence: 0.838740921875

00:02:04.322 --> 00:02:07.009 and a lot of the global strides

NOTE Confidence: 0.838740921875

00:02:07.009 --> 00:02:10.137 that had been made in terms of HIV,

NOTE Confidence: 0.838740921875

00:02:10.137 --> 00:02:12.426 malaria, and TB took a bit of

NOTE Confidence: 0.838740921875

00:02:12.426 --> 00:02:14.850 a hit during the pandemic,

NOTE Confidence: 0.838740921875

00:02:14.850 --> 00:02:18.474 and a number of world leaders are now

NOTE Confidence: 0.838740921875

00:02:18.474 --> 00:02:20.800 really refocusing their efforts on

NOTE Confidence: 0.838740921875

00:02:20.800 --> 00:02:23.498 shoring up those efforts once again.

NOTE Confidence: 0.838740921875

00:02:23.498 --> 00:02:26.724 Can you tell us a little bit

NOTE Confidence: 0.838740921875

00:02:26.724 --> 00:02:29.400 about the impact of the pandemic?

NOTE Confidence: 0.838740921875

00:02:29.400 --> 00:02:31.420 on cancer worldwide?

NOTE Confidence: 0.842162397272727

00:02:32.130 --> 00:02:37.877 One of the things that's

NOTE Confidence: 0.842162397272727

00:02:37.877 --> 00:02:41.173 concerning about cancer is how

NOTE Confidence: 0.842162397272727

00:02:41.173 --> 00:02:43.138 patchy our understanding is with

NOTE Confidence: 0.842162397272727

00:02:43.138 --> 00:02:45.330 the true nature of disruptions

NOTE Confidence: 0.842162397272727

00:02:45.330 --> 00:02:48.070 that happened during the pandemic.

NOTE Confidence: 0.842162397272727

00:02:48.070 --> 00:02:50.394 And it wasn't just due to shelter

NOTE Confidence: 0.842162397272727

00:02:50.394 --> 00:02:52.650 in place or shutdown orders.

NOTE Confidence: 0.842162397272727

00:02:52.650 --> 00:02:54.160 They were very short lived

NOTE Confidence: 0.842162397272727

00:02:54.160 --> 00:02:55.670 in most of the world.

NOTE Confidence: 0.842162397272727

00:02:55.670 --> 00:02:59.432 There has been an ongoing

NOTE Confidence: 0.842162397272727

00:02:59.432 --> 00:03:01.514 disruption in screening

NOTE Confidence: 0.842162397272727

00:03:01.514 --> 00:03:06.458 and treatment of cancer,

NOTE Confidence: 0.842162397272727

00:03:06.460 --> 00:03:08.732 but the data are a bit patchy

NOTE Confidence: 0.842162397272727

00:03:08.732 --> 00:03:11.265 and then that's one of those things

NOTE Confidence: 0.842162397272727

00:03:11.265 --> 00:03:13.626 where whenever you

NOTE Confidence: 0.842162397272727

00:03:13.626 --> 00:03:15.621 are able to measure especially

NOTE Confidence: 0.842162397272727

00:03:15.621 --> 00:03:18.022 in low resource settings you find

NOTE Confidence: 0.842162397272727

00:03:18.022 --> 00:03:20.428 that there has been a disruption

NOTE Confidence: 0.842162397272727

00:03:20.428 --> 00:03:22.291 in essential services disruption

NOTE Confidence: 0.842162397272727

00:03:22.291 --> 00:03:24.741 and screening which was already

NOTE Confidence: 0.842162397272727

00:03:24.741 --> 00:03:28.059 not stellar in a lot of

NOTE Confidence: 0.842162397272727

00:03:28.059 --> 00:03:29.924 low resource settings and we

NOTE Confidence: 0.842162397272727

00:03:29.924 --> 00:03:32.738 do not know the full scale of

NOTE Confidence: 0.842162397272727

00:03:32.740 --> 00:03:34.798 the impact and so you

NOTE Confidence: 0.842162397272727

00:03:34.798 --> 00:03:37.139 know that's one side in terms of

NOTE Confidence: 0.842162397272727

00:03:37.139 --> 00:03:38.874 screening and treatment,

NOTE Confidence: 0.842162397272727

00:03:38.874 --> 00:03:41.060 but on the prevention side

NOTE Confidence: 0.842162397272727

00:03:41.060 --> 00:03:45.390 in terms of the vaccination side,

NOTE Confidence: 0.842162397272727

00:03:45.390 --> 00:03:48.230 HPV vaccine has taken a huge hit in

NOTE Confidence: 0.842162397272727

00:03:48.230 --> 00:03:50.968 terms of the delay and introduction

NOTE Confidence: 0.842162397272727

00:03:50.968 --> 00:03:53.878 in new countries and also decline

NOTE Confidence: 0.842162397272727

00:03:53.958 --> 00:03:56.348 in coverage of the vaccine and

NOTE Confidence: 0.842162397272727

00:03:56.348 --> 00:03:58.652 that is going to have

NOTE Confidence: 0.842162397272727

00:03:58.652 --> 00:04:00.250 long term consequences.

NOTE Confidence: 0.860926541904762

00:04:01.120 --> 00:04:04.090 Saad, when we think about the

NOTE Confidence: 0.860926541904762

00:04:04.090 --> 00:04:06.912 HPV vaccine one of the things is that

NOTE Confidence: 0.860926541904762

00:04:06.912 --> 00:04:10.495 even in the US we know that we've

NOTE Confidence: 0.860926541904762

00:04:10.495 --> 00:04:13.060 seen cervical cancer rates decline as

NOTE Confidence: 0.860926541904762

00:04:13.060 --> 00:04:15.756 there has been more of an uptake in

NOTE Confidence: 0.860926541904762

00:04:15.760 --> 00:04:20.105 vaccine here, but it's still not 100%.

NOTE Confidence: 0.860926541904762

00:04:20.105 --> 00:04:23.105 And one can only imagine that

NOTE Confidence: 0.860926541904762

00:04:23.105 --> 00:04:25.978 in low to middle income countries,

NOTE Confidence: 0.860926541904762

00:04:25.980 --> 00:04:28.476 the uptake rate even at baseline,

NOTE Confidence: 0.860926541904762

00:04:28.480 --> 00:04:30.210 forgetting about the impact of

NOTE Confidence: 0.860926541904762

00:04:30.210 --> 00:04:31.940 the pandemic and everything else,

NOTE Confidence: 0.860926541904762

00:04:31.940 --> 00:04:34.166 may have been lower than it has

NOTE Confidence: 0.860926541904762

00:04:34.166 --> 00:04:35.420 been in the US.

NOTE Confidence: 0.860926541904762

00:04:35.420 --> 00:04:38.038 Can you talk a little bit about that

NOTE Confidence: 0.860926541904762

00:04:38.038 --> 00:04:40.186 and about what are the etiologic

NOTE Confidence: 0.860926541904762

00:04:40.186 --> 00:04:41.980 factors that play into that?

NOTE Confidence: 0.860926541904762

00:04:41.980 --> 00:04:44.966 I mean, is cost an issue, cultural issues?

NOTE Confidence: 0.860926541904762

00:04:44.966 --> 00:04:45.992 Access, what?

NOTE Confidence: 0.860926541904762

00:04:45.992 --> 00:04:50.592 What are the issues and what have we

NOTE Confidence: 0.860926541904762

00:04:50.592 --> 00:04:53.924 seen in terms of HPV vaccine worldwide?

NOTE Confidence: 0.875295135454546

00:04:54.790 --> 00:04:59.060 So the situation with the HPV

NOTE Confidence: 0.875295135454546

00:04:59.060 --> 00:05:02.736 vaccine introduction and uptake and

NOTE Confidence: 0.875295135454546

00:05:02.736 --> 00:05:06.054 now what we are calling backsliding,

NOTE Confidence: 0.875295135454546

00:05:06.060 --> 00:05:08.598 is a little bit nuanced.

NOTE Confidence: 0.875295135454546

00:05:08.600 --> 00:05:11.106 So initially you know as usual the

NOTE Confidence: 0.875295135454546

00:05:11.106 --> 00:05:12.593 vaccine was initially introduced

NOTE Confidence: 0.875295135454546

00:05:12.593 --> 00:05:14.663 in high income countries and

NOTE Confidence: 0.875295135454546

00:05:14.663 --> 00:05:17.528 the US was one of the earliest

NOTE Confidence: 0.875295135454546

00:05:17.528 --> 00:05:20.428 countries where it was introduced,

NOTE Confidence: 0.875295135454546

00:05:20.428 --> 00:05:24.250 very quickly entities like GAVI,

NOTE Confidence: 0.875295135454546

00:05:24.250 --> 00:05:27.076 the Vaccine Alliance, and full disclosure,

NOTE Confidence: 0.875295135454546

00:05:27.080 --> 00:05:30.040 I'm on their board.

NOTE Confidence: 0.875295135454546

00:05:30.040 --> 00:05:33.180 Which is an entity that

NOTE Confidence: 0.875295135454546

00:05:33.180 --> 00:05:35.620 brings together governments

NOTE Confidence: 0.875295135454546

00:05:35.620 --> 00:05:38.670 and government funding as well

NOTE Confidence: 0.875295135454546

00:05:38.766 --> 00:05:40.680 as private donations,

NOTE Confidence: 0.875295135454546

00:05:40.680 --> 00:05:43.218 large private donations from entities like

NOTE Confidence: 0.875295135454546

00:05:43.218 --> 00:05:45.781 the Gates Foundation to provide access

NOTE Confidence: 0.875295135454546

00:05:45.781 --> 00:05:48.574 to life saving vaccines around the world.

NOTE Confidence: 0.875295135454546

00:05:48.580 --> 00:05:51.232 So Gavi got involved and prioritized

NOTE Confidence: 0.875295135454546

00:05:51.232 --> 00:05:53.926 as part of their

NOTE Confidence: 0.875295135454546

00:05:53.926 --> 00:05:56.286 current strategy that was supposed to

NOTE Confidence: 0.875295135454546

00:05:56.286 --> 00:05:58.057 be implemented a couple of years ago,

00:06:00.970 --> 00:06:03.700 right before the pandemic to

NOTE Confidence: 0.875295135454546

00:06:03.700 --> 00:06:06.270 increase access to the vaccine,

NOTE Confidence: 0.875295135454546

00:06:06.270 --> 00:06:07.360 a couple of things happened.

NOTE Confidence: 0.875295135454546

00:06:07.360 --> 00:06:10.538 There was a shortage in supply and

NOTE Confidence: 0.875295135454546

00:06:10.538 --> 00:06:13.157 production and so that impacted

NOTE Confidence: 0.875295135454546

00:06:13.157 --> 00:06:15.485 the speed of introduction.

NOTE Confidence: 0.875295135454546

00:06:15.490 --> 00:06:21.350 But also the early pilots in countries

NOTE Confidence: 0.875295135454546

00:06:21.350 --> 00:06:24.583 like India suffered from misinformation

NOTE Confidence: 0.875295135454546

00:06:24.583 --> 00:06:26.795 and disinformation and misunderstanding

NOTE Confidence: 0.875295135454546

00:06:26.795 --> 00:06:30.730 and some kind of intentional

NOTE Confidence: 0.875295135454546

00:06:30.730 --> 00:06:32.946 pushback from some circles.

NOTE Confidence: 0.875295135454546

00:06:32.946 --> 00:06:37.080 And so with that legacy

00:06:38.274 --> 00:06:41.060 we went into as the global community

NOTE Confidence: 0.875295135454546

00:06:41.138 --> 00:06:43.994 into the pandemic where these problems

NOTE Confidence: 0.875295135454546

00:06:43.994 --> 00:06:46.717 were compounded by the fact that

NOTE Confidence: 0.875295135454546

00:06:46.717 --> 00:06:48.582 you can't introduce new vaccines

NOTE Confidence: 0.875295135454546

00:06:48.582 --> 00:06:50.826 in more and more countries during

NOTE Confidence: 0.875295135454546

00:06:50.826 --> 00:06:53.259 the pandemic which are not COVID-19

NOTE Confidence: 0.875295135454546

00:06:53.259 --> 00:06:55.254 because everyone was focusing on

NOTE Confidence: 0.875295135454546

00:06:55.317 --> 00:06:57.897 COVID and just barely maintaining

NOTE Confidence: 0.875295135454546

00:06:57.897 --> 00:06:59.991 routine immunization of existing vaccines,

NOTE Confidence: 0.875295135454546

00:06:59.991 --> 00:07:00.733 but also

NOTE Confidence: 0.875295135454546

00:07:00.733 --> 00:07:02.217 there was a backsliding,

NOTE Confidence: 0.875295135454546

00:07:02.220 --> 00:07:06.186 there was a reduction in

NOTE Confidence: 0.875295135454546

00:07:06.190 --> 00:07:07.965 this vaccination and

NOTE Confidence: 0.875295135454546

00:07:07.965 --> 00:07:09.740 then so for HPV vaccine,

NOTE Confidence: 0.875295135454546

00:07:09.740 --> 00:07:12.072 the vaccination rates declined

NOTE Confidence: 0.875295135454546

00:07:12.072 --> 00:07:15.570 even in the few countries where

NOTE Confidence: 0.875295135454546

00:07:15.671 --> 00:07:17.926 it was available, by 15%

NOTE Confidence: 0.875295135454546

00:07:29.220 --> 00:07:31.398 where these vaccines were already being used.

NOTE Confidence: 0.875295135454546

00:07:31.400 --> 00:07:33.212 But what we need to remember

NOTE Confidence: 0.875295135454546

00:07:33.212 --> 00:07:34.750 that 2/3 of girls,

NOTE Confidence: 0.875295135454546

00:07:34.750 --> 00:07:38.638 if you are just focusing on girls and women,

NOTE Confidence: 0.875295135454546

00:07:38.640 --> 00:07:41.076 live in countries without HPV vaccine.

NOTE Confidence: 0.875295135454546

00:07:41.080 --> 00:07:43.606 And the pandemic has hurt this

NOTE Confidence: 0.875295135454546

00:07:43.606 --> 00:07:45.833 new introduction in these countries

NOTE Confidence: 0.875295135454546

00:07:45.833 --> 00:07:47.219 of HPV vaccine.

NOTE Confidence: 0.875295135454546

00:07:47.220 --> 00:07:49.986 And so therefore the coverage of

NOTE Confidence: 0.875295135454546

00:07:49.986 --> 00:07:51.830 this cancer preventing vaccine

NOTE Confidence: 0.875295135454546

00:07:51.908 --> 00:07:53.796 is barely 12% around the world.

NOTE Confidence: 0.875295135454546

00:07:53.796 --> 00:07:55.356 And so this is concerning.

NOTE Confidence: 0.925914789

00:07:56.660 --> 00:07:58.460 One of the things

NOTE Confidence: 0.925914789

00:07:58.460 --> 00:07:59.660 that you mentioned is

NOTE Confidence: 0.925914789

00:07:59.660 --> 00:08:02.229 really a touch point and that

NOTE Confidence: 0.925914789

00:08:02.229 --> 00:08:05.085 is that when the HPV vaccine

NOTE Confidence: 0.925914789

00:08:05.085 --> 00:08:06.756 was initially introduced,

NOTE Confidence: 0.925914789

00:08:06.760 --> 00:08:08.182 particularly in India,

NOTE Confidence: 0.925914789

00:08:08.182 --> 00:08:11.026 there was a lot of misinformation

NOTE Confidence: 0.925914789

00:08:11.026 --> 00:08:13.297 around that and that was due to

NOTE Confidence: 0.925914789

00:08:13.297 --> 00:08:15.800 a number of things,

NOTE Confidence: 0.925914789

00:08:15.800 --> 00:08:18.705 but you know a lot of these

NOTE Confidence: 0.911009594

00:08:20.850 --> 00:08:23.580 are scary stories and

NOTE Confidence: 0.911009594

00:08:23.580 --> 00:08:25.213 cultural issues and disinformation

NOTE Confidence: 0.911009594

00:08:25.213 --> 00:08:27.894 kind of made it out into the

NOTE Confidence: 0.911009594

00:08:27.894 --> 00:08:30.472 media and it was thought that

NOTE Confidence: 0.911009594

00:08:30.472 --> 00:08:33.274 really played a role in terms of

NOTE Confidence: 0.911009594

00:08:33.274 --> 00:08:36.466 reducing the uptake of that vaccine.

NOTE Confidence: 0.911009594

00:08:36.470 --> 00:08:39.235 I wonder now that we've seen kind

NOTE Confidence: 0.911009594

00:08:39.235 --> 00:08:41.458 of the same misinformation with

NOTE Confidence: 0.911009594

00:08:41.458 --> 00:08:45.250 COVID and I'm hoping that a lot of

NOTE Confidence: 0.911009594

00:08:45.340 --> 00:08:48.556 that has been dispelled whether you

NOTE Confidence: 0.911009594

00:08:48.556 --> 00:08:51.100 anticipate that now HPV vaccine

NOTE Confidence: 0.911009594

00:08:51.100 --> 00:08:54.355 might be able to gain hold again,

NOTE Confidence: 0.911009594

00:08:54.360 --> 00:08:56.327 after we've kind of dispelled a

NOTE Confidence: 0.911009594

00:08:56.327 --> 00:08:58.657 lot of the myths around vaccines or

NOTE Confidence: 0.911009594

00:08:58.657 --> 00:09:00.787 whether you think the HPV vaccine

NOTE Confidence: 0.911009594

00:09:00.848 --> 00:09:03.050 holds a special place because part

NOTE Confidence: 0.911009594

00:09:03.050 --> 00:09:05.552 of the misinformation had to do with

NOTE Confidence: 0.911009594

00:09:05.552 --> 00:09:07.960 how the clinical trials were run and

NOTE Confidence: 0.911009594

00:09:08.040 --> 00:09:11.120 part of the misinformation had to do with

NOTE Confidence: 0.911009594

00:09:11.120 --> 00:09:13.395 sexual practices and so on.

NOTE Confidence: 0.911009594

00:09:13.400 --> 00:09:15.280 So what do you think is going to

NOTE Confidence: 0.911009594

00:09:15.280 --> 00:09:17.726 be the state of affairs for the

NOTE Confidence: 0.911009594

00:09:17.726 --> 00:09:19.254 vaccination rates going forward?

NOTE Confidence: 0.911009594

00:09:19.260 --> 00:09:21.757 Do you think that our

NOTE Confidence: 0.911009594

00:09:21.757 --> 00:09:24.442 experience now with COVID vaccine

NOTE Confidence: 0.911009594

00:09:24.442 --> 00:09:27.749 and seeing how effective it was

NOTE Confidence: 0.911009594

00:09:27.749 --> 00:09:30.255 will help HPV vaccines or do you

NOTE Confidence: 0.911009594

00:09:30.340 --> 00:09:32.846 think that HPV is still going to

NOTE Confidence: 0.911009594

00:09:32.846 --> 00:09:35.612 to be hit pretty hard in terms

NOTE Confidence: 0.911009594

00:09:35.612 --> 00:09:37.304 of getting public uptake?

NOTE Confidence: 0.7682907025

00:09:37.860 --> 00:09:42.232 There was a bit of a naivety on

NOTE Confidence: 0.7682907025

00:09:42.232 --> 00:09:44.934 the part of global public health community

NOTE Confidence: 0.7682907025

00:09:44.934 --> 00:09:48.168 when this vaccine was initially introduced.

NOTE Confidence: 0.7682907025

00:09:48.170 --> 00:09:50.492 So it was introduced in pilots

NOTE Confidence: 0.7682907025

00:09:50.500 --> 00:09:52.516 starting in India and other places.

NOTE Confidence: 0.7682907025

00:09:52.520 --> 00:09:55.504 And there was the assumption

NOTE Confidence: 0.7682907025

00:09:55.504 --> 00:09:58.844 that if you just brought the vaccine closer

NOTE Confidence: 0.7682907025

00:09:58.844 --> 00:10:01.739 to people than they will vaccinate,

NOTE Confidence: 0.7682907025

00:10:01.740 --> 00:10:04.765 it wasn't proactively paired with

NOTE Confidence: 0.7682907025

00:10:04.765 --> 00:10:07.185 an educational and informational

NOTE Confidence: 0.7682907025

00:10:07.185 --> 00:10:10.190 component of that introduction program

NOTE Confidence: 0.7682907025

00:10:10.190 --> 00:10:13.220 of the public health authorities and

NOTE Confidence: 0.7682907025

00:10:13.220 --> 00:10:16.029 entities that were introducing this vaccine

NOTE Confidence: 0.7682907025

00:10:16.029 --> 00:10:19.395 and many parts of the world did not pair

NOTE Confidence: 0.7682907025

00:10:19.395 --> 00:10:22.470 that with a behavioral response to this,

NOTE Confidence: 0.7682907025

00:10:22.470 --> 00:10:24.900 and they did not anticipate proactively

NOTE Confidence: 0.7682907025

00:10:24.900 --> 00:10:26.936 that there will be misunderstandings

NOTE Confidence: 0.7682907025

00:10:26.936 --> 00:10:29.640 and misinformation and disinformation.

NOTE Confidence: 0.7682907025

00:10:29.640 --> 00:10:31.060 And so first of all,

NOTE Confidence: 0.7682907025

00:10:31.060 --> 00:10:32.518 there is a legacy of that.

NOTE Confidence: 0.7682907025

00:10:32.520 --> 00:10:33.777 But going forward,

NOTE Confidence: 0.7682907025

00:10:33.777 --> 00:10:37.240 I think you would be incredibly naive again,

NOTE Confidence: 0.7682907025

00:10:37.240 --> 00:10:40.750 if we don't move forward with a sort of

NOTE Confidence: 0.7682907025

00:10:40.750 --> 00:10:43.348 comprehensive behavioral response.

NOTE Confidence: 0.7682907025

00:10:43.348 --> 00:10:47.793 If we do that and we do that with

NOTE Confidence: 0.7682907025

00:10:47.793 --> 00:10:50.973 respect to communities that have

NOTE Confidence: 0.7682907025

00:10:50.973 --> 00:10:55.516 questions and answer them and make an

NOTE Confidence: 0.7682907025

00:10:55.516 --> 00:10:57.728 effort to make sure that people are

NOTE Confidence: 0.7682907025

00:10:57.728 --> 00:10:59.680 empowered with information but also

NOTE Confidence: 0.7682907025

00:10:59.680 --> 00:11:01.645 proactively use behavioral science to

NOTE Confidence: 0.7682907025

00:11:01.645 --> 00:11:04.385 make sure that the vaccines are promoted

NOTE Confidence: 0.7682907025

00:11:04.385 --> 00:11:06.515 appropriately and so and so forth,

NOTE Confidence: 0.7682907025

00:11:06.520 --> 00:11:09.678 I think we can make a dent in

NOTE Confidence: 0.7682907025

00:11:09.678 --> 00:11:11.652 preventing this disease,

NOTE Confidence: 0.7682907025

00:11:11.652 --> 00:11:15.800 this horrible disease, through vaccination,

NOTE Confidence: 0.7682907025

00:11:15.800 --> 00:11:17.666 but it's not going to happen

NOTE Confidence: 0.7682907025

00:11:17.666 --> 00:11:18.599 on cruise control.

NOTE Confidence: 0.7682907025

00:11:18.600 --> 00:11:20.760 It will require efforts from various

NOTE Confidence: 0.7682907025

00:11:20.760 --> 00:11:23.168 partners and it will require thoughtfulness

NOTE Confidence: 0.7682907025

00:11:23.168 --> 00:11:25.867 and it will require, frankly,

NOTE Confidence: 0.7682907025

00:11:25.867 --> 00:11:32.076 activism from groups that are impacted by

NOTE Confidence: 0.7682907025

00:11:32.080 --> 00:11:35.020 HPV and most importantly,

NOTE Confidence: 0.7682907025

00:11:35.020 --> 00:11:35.672 cervical cancer.

NOTE Confidence: 0.7682907025

00:11:35.672 --> 00:11:36.324 And so,

NOTE Confidence: 0.7682907025

00:11:36.324 --> 00:11:39.467 so that kind of an approach

NOTE Confidence: 0.7682907025

00:11:39.467 --> 00:11:42.050 where you are not just deploying it

NOTE Confidence: 0.7682907025

00:11:42.126 --> 00:11:44.660 from a technical side but also you

NOTE Confidence: 0.7682907025

00:11:44.660 --> 00:11:46.406 have a community engagement component,

NOTE Confidence: 0.7682907025

00:11:46.406 --> 00:11:48.046 you have a behavioral science

NOTE Confidence: 0.7682907025

00:11:48.046 --> 00:11:49.030 component to it,

NOTE Confidence: 0.7682907025

00:11:49.030 --> 00:11:52.355 but also activism from communities

NOTE Confidence: 0.7682907025

00:11:52.355 --> 00:11:56.282 who should be an interest

NOTE Confidence: 0.7682907025

00:11:56.282 --> 00:11:59.180 group who want to prevent cancer.

NOTE Confidence: 0.7682907025

00:11:59.180 --> 00:12:02.341 And so I think it will take an all hands

00:12:04.646 --> 00:12:06.866 on deck situation as we expand

NOTE Confidence: 0.7682907025

00:12:06.870 --> 00:12:08.598 vaccination against HPV.

NOTE Confidence: 0.701185172

00:12:12.380 --> 00:12:15.386 And that especially will play where

NOTE Confidence: 0.701185172

00:12:15.386 --> 00:12:19.160 the HPV vaccine is already available.

NOTE Confidence: 0.701185172

00:12:19.160 --> 00:12:20.564 What about the communities

NOTE Confidence: 0.701185172

00:12:20.564 --> 00:12:21.968 where it's not available?

NOTE Confidence: 0.701185172

00:12:21.970 --> 00:12:23.322 Why isn't it available?

NOTE Confidence: 0.701185172

00:12:23.322 --> 00:12:26.242 Why is it that 2/3 of women are

NOTE Confidence: 0.701185172

00:12:26.242 --> 00:12:28.272 living in countries where the

NOTE Confidence: 0.701185172

00:12:28.272 --> 00:12:30.619 HPV vaccine is not available?

NOTE Confidence: 0.701185172

00:12:30.620 --> 00:12:32.752 Is cost an issue?

NOTE Confidence: 0.701185172

00:12:32.752 --> 00:12:34.987 Is Gavi not providing it?

NOTE Confidence: 0.701185172

00:12:34.987 --> 00:12:37.321 Tell us more about what we

NOTE Confidence: 0.701185172

00:12:37.321 --> 00:12:39.739 can do to expand the access

NOTE Confidence: 0.701185172

00:12:39.740 --> 00:12:41.576 to this vaccine worldwide,

NOTE Confidence: 0.701185172

00:12:41.576 --> 00:12:43.871 because it seems that it's

NOTE Confidence: 0.701185172

00:12:43.871 --> 00:12:45.741 incredibly effective against a

NOTE Confidence: 0.701185172

00:12:45.741 --> 00:12:48.417 malignancy that nobody wants to get.

NOTE Confidence: 0.701185172

00:12:48.420 --> 00:12:50.574 We should be able to

NOTE Confidence: 0.701185172

00:12:50.574 --> 00:12:52.010 get the world's people,

NOTE Confidence: 0.701185172

00:12:52.010 --> 00:12:55.489 not just women, but boys and girls

NOTE Confidence: 0.701185172

00:12:55.490 --> 00:12:58.400 vaccinated.

NOTE Confidence: 0.80176834875

00:12:58.850 --> 00:12:59.758 Yeah, that's

NOTE Confidence: 0.80176834875

00:12:59.758 --> 00:13:00.666 a really good question.

NOTE Confidence: 0.80176834875

00:13:00.670 --> 00:13:05.980 So it was an issue, cost was an issue.

NOTE Confidence: 0.80176834875

00:13:05.980 --> 00:13:07.204 But not anymore.

NOTE Confidence: 0.80176834875

00:13:07.204 --> 00:13:10.060 So GAVI has decided and had decided

NOTE Confidence: 0.80176834875

00:13:10.146 --> 00:13:12.438 before the pandemic to introduce

NOTE Confidence: 0.80176834875

00:13:12.438 --> 00:13:14.433 this vaccine and help countries

NOTE Confidence: 0.80176834875

00:13:14.433 --> 00:13:16.458 introduce and no external entity

NOTE Confidence: 0.80176834875

00:13:16.458 --> 00:13:18.720 can introduce it on their own.

NOTE Confidence: 0.80176834875

00:13:18.720 --> 00:13:22.024 It's a country level decision and it's the

NOTE Confidence: 0.80176834875

00:13:22.024 --> 00:13:24.896 communities that have to want it to do this.

NOTE Confidence: 0.80176834875

00:13:24.900 --> 00:13:29.430 But Gavi came in and said that it will be

NOTE Confidence: 0.80176834875

00:13:29.545 --> 00:13:34.075 a priority for introduction in countries,

NOTE Confidence: 0.80176834875

00:13:34.080 --> 00:13:37.264 but around that time there was a shortage

NOTE Confidence: 0.80176834875

00:13:37.270 --> 00:13:41.126 of this vaccine globally that has since been eased.

NOTE Confidence: 0.80176834875

00:13:42.330 --> 00:13:45.487 Now the ball is in the court of those who

NOTE Confidence: 0.80176834875

00:13:45.487 --> 00:13:47.632 are responsible for implementing rather

NOTE Confidence: 0.80176834875

00:13:47.632 --> 00:13:50.338 than those who are responsible for

NOTE Confidence: 0.80176834875

00:13:50.338 --> 00:13:52.996 supplying and providing resources for it.

NOTE Confidence: 0.878225114444444

00:13:53.550 --> 00:13:55.290 Yeah, it sounds like we've

NOTE Confidence: 0.878225114444444

00:13:55.290 --> 00:13:57.282 heard the story of

NOTE Confidence: 0.878225114444444

00:13:57.282 --> 00:13:59.354 first there was a shortage and then

NOTE Confidence: 0.878225114444444

00:13:59.354 --> 00:14:01.608 it's getting it into the communities.

NOTE Confidence: 0.878225114444444

00:14:01.610 --> 00:14:03.850 It sounds like this is a repeat

NOTE Confidence: 0.878225114444444

00:14:03.850 --> 00:14:05.568 of something that we've seen

NOTE Confidence: 0.878225114444444

00:14:05.568 --> 00:14:07.626 with the COVID vaccine as well.

NOTE Confidence: 0.878225114444444

00:14:07.630 --> 00:14:09.298 We're going to pick up this

NOTE Confidence: 0.878225114444444

00:14:09.298 --> 00:14:10.742 story learning more about global

NOTE Confidence: 0.878225114444444

00:14:10.742 --> 00:14:12.410 oncology right after we take a

NOTE Confidence: 0.878225114444444

00:14:12.410 --> 00:14:14.189 short break for a medical minute.

NOTE Confidence: 0.878225114444444

00:14:14.190 --> 00:14:15.870 Please stay tuned to learn more

NOTE Confidence: 0.878225114444444

00:14:15.870 --> 00:14:17.820 with my guest, Doctor Saad Omer.

NOTE Confidence: 0.798708097

00:14:18.370 --> 00:14:20.380 Funding for Yale Cancer Answers

NOTE Confidence: 0.798708097

00:14:20.380 --> 00:14:22.390 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.798708097

00:14:22.390 --> 00:14:24.305 where their liver cancer program

NOTE Confidence: 0.798708097

00:14:24.305 --> 00:14:26.220 brings together a dedicated group

NOTE Confidence: 0.798708097

00:14:26.287 --> 00:14:28.407 of specialists whose focus is

NOTE Confidence: 0.798708097

00:14:28.407 --> 00:14:30.103 determining the best personalized

NOTE Confidence: 0.798708097

00:14:30.103 --> 00:14:31.870 treatment plan for each patient.

NOTE Confidence: 0.798708097

00:14:31.870 --> 00:14:34.930 Learn more at smilowcancerhospital.org.

NOTE Confidence: 0.937662276363637

00:14:37.030 --> 00:14:38.806 Breast cancer is one of the

NOTE Confidence: 0.937662276363637

00:14:38.806 --> 00:14:40.410 most common cancers in women.

NOTE Confidence: 0.937662276363637

00:14:40.410 --> 00:14:41.727 In Connecticut alone,

NOTE Confidence: 0.937662276363637

00:14:41.727 --> 00:14:43.922 approximately 3500 women will be

NOTE Confidence: 0.937662276363637

00:14:43.922 --> 00:14:46.387 diagnosed with breast cancer this year,

NOTE Confidence: 0.937662276363637

00:14:46.390 --> 00:14:48.749 but there is hope thanks to earlier

NOTE Confidence: 0.937662276363637

00:14:48.749 --> 00:14:49.890 detection, noninvasive treatments,

NOTE Confidence: 0.937662276363637

00:14:49.890 --> 00:14:52.290 and the development of novel therapies

NOTE Confidence: 0.937662276363637

00:14:52.290 --> 00:14:53.910 to fight breast cancer.

NOTE Confidence: 0.937662276363637

00:14:53.910 --> 00:14:55.935 Women should schedule a baseline

NOTE Confidence: 0.937662276363637

00:14:55.935 --> 00:14:57.877 mammogram beginning at age 40 or

NOTE Confidence: 0.937662276363637

00:14:57.877 --> 00:14:59.860 earlier if they have risk factors

NOTE Confidence: 0.937662276363637

00:14:59.860 --> 00:15:01.628 associated with the disease.

NOTE Confidence: 0.937662276363637

00:15:01.630 --> 00:15:03.338 With screening, early detection,

NOTE Confidence: 0.937662276363637

00:15:03.338 --> 00:15:05.046 and a healthy lifestyle,

NOTE Confidence: 0.937662276363637

00:15:05.050 --> 00:15:07.220 breast cancer can be defeated.

NOTE Confidence: 0.937662276363637

00:15:07.220 --> 00:15:09.176 Clinical trials are currently

NOTE Confidence: 0.937662276363637

00:15:09.176 --> 00:15:11.132 underway at federally designated

NOTE Confidence: 0.937662276363637

00:15:11.132 --> 00:15:12.814 Comprehensive cancer centers such

NOTE Confidence: 0.937662276363637

00:15:12.814 --> 00:15:15.040 as Yale Cancer Center and Smilow

NOTE Confidence: 0.937662276363637

00:15:15.040 --> 00:15:17.128 Cancer Hospital to make innovative

NOTE Confidence: 0.937662276363637

00:15:17.128 --> 00:15:19.258 new treatments available to patients.

NOTE Confidence: 0.937662276363637

00:15:19.260 --> 00:15:20.970 Digital breast tomosynthesis,

NOTE Confidence: 0.937662276363637

00:15:20.970 --> 00:15:22.680 or 3D mammography,

NOTE Confidence: 0.937662276363637

00:15:22.680 --> 00:15:24.820 is also transforming breast

NOTE Confidence: 0.937662276363637

00:15:24.820 --> 00:15:26.960 cancer screening by significantly

NOTE Confidence: 0.937662276363637

00:15:26.960 --> 00:15:28.548 reducing unnecessary procedures

NOTE Confidence: 0.937662276363637

00:15:28.548 --> 00:15:30.778 while picking up more cancers.

NOTE Confidence: 0.937662276363637

00:15:30.780 --> 00:15:33.116 More information is available

NOTE Confidence: 0.937662276363637

00:15:33.116 --> 00:15:34.137 at yalecancercenter.org.

NOTE Confidence: 0.937662276363637

00:15:34.137 --> 00:15:36.759 You're listening to Connecticut public radio.

NOTE Confidence: 0.830555016666667

00:15:37.730 --> 00:15:39.950 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.830555016666667

00:15:39.950 --> 00:15:41.470 This is doctor Anees Chagpar

NOTE Confidence: 0.830555016666667

00:15:41.470 --> 00:15:43.549 and I'm joined tonight by my guest,

NOTE Confidence: 0.830555016666667

00:15:43.550 --> 00:15:44.264 Doctor Saad Omer.

NOTE Confidence: 0.830555016666667

00:15:44.264 --> 00:15:46.049 We're talking about his work

NOTE Confidence: 0.830555016666667

00:15:46.049 --> 00:15:47.909 in global health and oncology.

NOTE Confidence: 0.830555016666667

00:15:47.910 --> 00:15:49.050 And right before the break,

NOTE Confidence: 0.830555016666667

00:15:49.050 --> 00:15:52.627 we were talking about the HPV vaccine,

NOTE Confidence: 0.830555016666667

00:15:52.630 --> 00:15:54.950 which is incredibly effective not

NOTE Confidence: 0.830555016666667

00:15:54.950 --> 00:15:57.270 only in preventing cervical cancer,

NOTE Confidence: 0.830555016666667

00:15:57.270 --> 00:15:59.069 but a whole host of other cancers,

NOTE Confidence: 0.830555016666667

00:15:59.070 --> 00:16:01.670 anal cancer, head neck cancer.

NOTE Confidence: 0.830555016666667

00:16:01.670 --> 00:16:05.387 And the issues that that vaccine has

NOTE Confidence: 0.830555016666667

00:16:05.387 --> 00:16:09.481 faced in terms of global uptake and how

NOTE Confidence: 0.830555016666667

00:16:09.481 --> 00:16:13.440 so many women and men quite frankly,

NOTE Confidence: 0.830555016666667

00:16:13.440 --> 00:16:16.038 who get these types of cancers

NOTE Confidence: 0.830555016666667

00:16:16.038 --> 00:16:18.362 reside in countries where this

NOTE Confidence: 0.830555016666667

00:16:18.362 --> 00:16:20.937 vaccine is currently not available.

00:16:23.692 --> 00:16:26.852 Another viral etiologic agent

NOTE Confidence: 0.830555016666667

00:16:26.852 --> 00:16:32.855 to which we have a vaccine that also is

NOTE Confidence: 0.830555016666667

00:16:32.855 --> 00:16:38.210 related to cancers is hepatitis and HBV.

NOTE Confidence: 0.830555016666667

00:16:38.210 --> 00:16:39.954 Tell us a little bit more about that,

NOTE Confidence: 0.830555016666667

00:16:39.960 --> 00:16:42.846 what is the vaccination status

NOTE Confidence: 0.830555016666667

00:16:42.846 --> 00:16:45.286 worldwide with hepatitis B vaccines

NOTE Confidence: 0.830555016666667

00:16:45.286 --> 00:16:47.854 and is that making an impact?

NOTE Confidence: 0.924713451428571

00:16:48.910 --> 00:16:51.763 Yeah, it is making an impact.

NOTE Confidence: 0.924713451428571

00:16:51.763 --> 00:16:55.760 We have had observational studies that have

NOTE Confidence: 0.924713451428571

00:16:55.760 --> 00:16:59.365 shown the impact of hepatitis B vaccine.

NOTE Confidence: 0.924713451428571

00:16:59.370 --> 00:17:04.000 Several countries have introduced this

NOTE Confidence: 0.867639511428571

00:17:06.200 --> 00:17:09.255 vaccine in their routine immunization

NOTE Confidence: 0.867639511428571

00:17:09.255 --> 00:17:12.288 schedules often and that's really

NOTE Confidence: 0.867639511428571

00:17:12.288 --> 00:17:15.000 helpful often as a multivalent vaccine,

NOTE Confidence: 0.867639511428571

00:17:15.000 --> 00:17:16.660 often as a combination vaccine.

NOTE Confidence: 0.867639511428571

00:17:16.660 --> 00:17:19.719 So it's easier to deliver these vaccines

NOTE Confidence: 0.867639511428571

00:17:19.720 --> 00:17:22.456 the fewer shots you

NOTE Confidence: 0.867639511428571

00:17:22.456 --> 00:17:25.256 have to deliver the less cumbersome it

NOTE Confidence: 0.867639511428571

00:17:25.256 --> 00:17:27.720 is in terms of what we call cold chain,

NOTE Confidence: 0.867639511428571

00:17:27.720 --> 00:17:29.200 meaning keeping the vaccines

NOTE Confidence: 0.867639511428571

00:17:29.200 --> 00:17:30.680 at the right temperature,

NOTE Confidence: 0.867639511428571

00:17:30.680 --> 00:17:32.794 delivery access and all of that stuff.

NOTE Confidence: 0.867639511428571

00:17:32.800 --> 00:17:34.485 So with that inclusion and

NOTE Confidence: 0.867639511428571

00:17:34.485 --> 00:17:36.690 with that kind of a focus

NOTE Confidence: 0.867639511428571

00:17:36.690 --> 00:17:42.356 in several countries we have had an impact

NOTE Confidence: 0.867639511428571

00:17:42.356 --> 00:17:47.990 on getting this vaccine into kids arms,

NOTE Confidence: 0.867639511428571

00:17:47.990 --> 00:17:50.125 at a very early stage.

NOTE Confidence: 0.867639511428571

00:17:50.130 --> 00:17:51.795 However, there are a few

NOTE Confidence: 0.867639511428571

00:17:51.795 --> 00:17:53.882 things in several countries

NOTE Confidence: 0.867639511428571

00:17:53.882 --> 00:17:57.386 it's a relatively recent development in

NOTE Confidence: 0.867639511428571

00:17:57.386 --> 00:18:01.120 terms of getting high immunization rates.

NOTE Confidence: 0.867639511428571

00:18:01.120 --> 00:18:03.472 But early indications from early adopters

NOTE Confidence: 0.867639511428571

00:18:03.472 --> 00:18:05.538 are countries where there's vaccine

NOTE Confidence: 0.867639511428571

00:18:05.538 --> 00:18:08.366 was introduced a while ago,

NOTE Confidence: 0.867639511428571

00:18:08.370 --> 00:18:10.986 we have seen an impact on

NOTE Confidence: 0.867639511428571

00:18:10.990 --> 00:18:12.541 cancer incidence, etc.

NOTE Confidence: 0.867639511428571

00:18:12.541 --> 00:18:14.609 And so that's encouraging,

NOTE Confidence: 0.867639511428571

00:18:14.610 --> 00:18:15.350 not surprising.

NOTE Confidence: 0.867639511428571

00:18:15.350 --> 00:18:16.830 But you still measure,

NOTE Confidence: 0.867639511428571

00:18:16.830 --> 00:18:19.427 you still sort of assess the impact.

NOTE Confidence: 0.867639511428571

00:18:19.430 --> 00:18:22.405 So because it takes time from infection

NOTE Confidence: 0.867639511428571

00:18:22.405 --> 00:18:25.688 to cancer for these kinds of pathways,

NOTE Confidence: 0.867639511428571

00:18:25.690 --> 00:18:27.786 it it takes time to show the impact,

NOTE Confidence: 0.867639511428571

00:18:27.790 --> 00:18:31.370 but there's still a big chunk

NOTE Confidence: 0.867639511428571

00:18:31.370 --> 00:18:33.014 who are unvaccinated,

NOTE Confidence: 0.867639511428571

00:18:33.014 --> 00:18:36.370 so we will unfortunately see for a few years,

00:18:37.014 --> 00:18:38.946 that cohort go through the

NOTE Confidence: 0.867639511428571

00:18:38.946 --> 00:18:40.950 system and that is unfortunate.

NOTE Confidence: 0.867639511428571

00:18:40.950 --> 00:18:41.760 Obviously

NOTE Confidence: 0.860284275

00:18:42.130 --> 00:18:45.406 if hepatitis B vaccination is successful,

NOTE Confidence: 0.860284275

00:18:45.410 --> 00:18:47.540 one wonders about the

NOTE Confidence: 0.860284275

00:18:47.540 --> 00:18:50.090 concept of pairing it with HPV,

NOTE Confidence: 0.860284275

00:18:50.090 --> 00:18:52.046 which has been to my understanding,

NOTE Confidence: 0.860284275

00:18:52.050 --> 00:18:54.948 less successful in terms of getting uptake.

NOTE Confidence: 0.860284275

00:18:54.950 --> 00:18:56.462 What do you think about that concept

NOTE Confidence: 0.860284275

00:18:56.462 --> 00:18:58.094 of just saying, you know what,

NOTE Confidence: 0.860284275

00:18:58.094 --> 00:19:00.062 this is a package of vaccinations

NOTE Confidence: 0.860284275

00:19:00.062 --> 00:19:02.009 that your kids get at schools?

NOTE Confidence: 0.860284275

00:19:02.010 --> 00:19:03.702 Or when they reach a certain

NOTE Confidence: 0.860284275

00:19:03.702 --> 00:19:05.060 certain age and this is,

NOTE Confidence: 0.860284275

00:19:05.060 --> 00:19:06.866 you know, a community effort.

00:19:09.400 --> 00:19:11.290 Yeah, I think that's a good idea.

NOTE Confidence: 0.81012029

00:19:11.290 --> 00:19:14.368 We already packaged, it's hep B

NOTE Confidence: 0.81012029

00:19:14.368 --> 00:19:16.420 vaccine with childhood vaccines

NOTE Confidence: 0.81012029

00:19:16.507 --> 00:19:19.237 and we vaccinate earlier for HEB,

NOTE Confidence: 0.81012029

00:19:19.240 --> 00:19:23.900 whereas for hepatitis, for HPV,

NOTE Confidence: 0.81012029

00:19:23.900 --> 00:19:28.010 human papilloma virus vaccine, we vaccinate.

NOTE Confidence: 0.842851442857143

00:19:31.410 --> 00:19:34.910 These people are pre teens

NOTE Confidence: 0.842851442857143

00:19:34.910 --> 00:19:37.710 at that age before

NOTE Confidence: 0.842851442857143

00:19:37.710 --> 00:19:39.190 puberty in certain countries,

NOTE Confidence: 0.842851442857143

00:19:39.190 --> 00:19:42.029 a lot of countries during teen years.

00:19:43.870 --> 00:19:46.444 But most importantly

NOTE Confidence: 0.842851442857143

00:19:46.444 --> 00:19:48.637 you could have catch up campaigns that

NOTE Confidence: 0.842851442857143

00:19:48.637 --> 00:19:51.067 are combined for those two vaccines.

NOTE Confidence: 0.842851442857143

00:19:51.070 --> 00:19:53.410 But I think the current strategy

NOTE Confidence: 0.842851442857143

00:19:53.410 --> 00:19:55.366 of vaccinating kids earlier in

NOTE Confidence: 0.842851442857143

00:19:55.366 --> 00:19:57.641 life for habits so that they are

NOTE Confidence: 0.842851442857143

00:19:57.641 --> 00:20:01.082 protected from the whole scope

NOTE Confidence: 0.842851442857143

00:20:01.082 --> 00:20:03.696 of this illness because

NOTE Confidence: 0.842851442857143

00:20:03.696 --> 00:20:04.920 the earlier it happens,

NOTE Confidence: 0.842851442857143

00:20:04.920 --> 00:20:07.290 earlier hepatitis B infection happens,

NOTE Confidence: 0.842851442857143

00:20:07.290 --> 00:20:09.397 the more likely it is for people

NOTE Confidence: 0.842851442857143

00:20:09.397 --> 00:20:11.209 to develop cancer later in life.

00:20:12.060 --> 00:20:13.817 A little bit of a hybrid strategy

NOTE Confidence: 0.842851442857143

00:20:13.817 --> 00:20:14.570 would be helpful,

NOTE Confidence: 0.842851442857143

00:20:14.570 --> 00:20:16.810 but pairing it with other routine vaccines,

NOTE Confidence: 0.842851442857143

00:20:16.810 --> 00:20:19.708 what it does for HEP B is makes

NOTE Confidence: 0.842851442857143

00:20:19.708 --> 00:20:21.410 it routine. For HPV,

NOTE Confidence: 0.842851442857143

00:20:21.410 --> 00:20:24.285 I think as the adolescent

NOTE Confidence: 0.842851442857143

00:20:24.285 --> 00:20:26.585 vaccine platform picks up,

NOTE Confidence: 0.842851442857143

00:20:26.590 --> 00:20:29.642 we will have to and we should

NOTE Confidence: 0.842851442857143

00:20:29.642 --> 00:20:31.920 pair it with other vaccines.

NOTE Confidence: 0.842851442857143

00:20:31.920 --> 00:20:32.920 With meningitis vaccine,

NOTE Confidence: 0.842851442857143

00:20:32.920 --> 00:20:34.921 which is done in the US and with

NOTE Confidence: 0.842851442857143

00:20:34.921 --> 00:20:36.253 some success that if you pair

NOTE Confidence: 0.842851442857143

00:20:36.253 --> 00:20:37.708 it with other vaccines.

NOTE Confidence: 0.842851442857143

00:20:37.710 --> 00:20:39.230 Unfortunately in other countries,

NOTE Confidence: 0.842851442857143

00:20:39.230 --> 00:20:40.370 in many countries,

NOTE Confidence: 0.842851442857143

00:20:40.370 --> 00:20:42.110 especially in low and middle

NOTE Confidence: 0.842851442857143

00:20:42.110 --> 00:20:44.210 income countries where by the way

NOTE Confidence: 0.842851442857143

00:20:44.210 --> 00:20:46.010 the biggest burden of cancer is

NOTE Confidence: 0.842851442857143

00:20:46.010 --> 00:20:49.856 that there are no vaccines that

NOTE Confidence: 0.842851442857143

00:20:49.856 --> 00:20:52.870 are given during teenage years.

NOTE Confidence: 0.842851442857143

00:20:52.870 --> 00:20:55.595 So as that portfolio expands,

NOTE Confidence: 0.842851442857143

00:20:55.600 --> 00:20:57.581 I think it will be helpful to pair

NOTE Confidence: 0.842851442857143

00:20:57.581 --> 00:20:59.579 the HPV vaccine with that as well.

NOTE Confidence: 0.733626814

00:20:59.970 --> 00:21:02.230 And it brings

NOTE Confidence: 0.733626814

00:21:02.230 --> 00:21:03.849 up a good point,

NOTE Confidence: 0.733626814

00:21:03.849 --> 00:21:06.572 which is that the largest burden of

NOTE Confidence: 0.733626814

00:21:06.572 --> 00:21:09.281 of cancer these days is occurring

NOTE Confidence: 0.733626814

00:21:09.281 --> 00:21:12.047 in low to middle income countries.

NOTE Confidence: 0.733626814

00:21:12.050 --> 00:21:15.794 And when we look at future forecasts

NOTE Confidence: 0.733626814

00:21:15.800 --> 00:21:18.908 it's thought that that's where the most

NOTE Confidence: 0.733626814

00:21:18.908 --> 00:21:22.336 increase in the burden of cancer will be.

NOTE Confidence: 0.733626814

00:21:22.340 --> 00:21:24.044 And there are some

NOTE Confidence: 0.733626814

00:21:24.044 --> 00:21:25.180 statistics that say

NOTE Confidence: 0.733626814

00:21:25.180 --> 00:21:28.378 in terms of mortality

NOTE Confidence: 0.733626814

00:21:28.378 --> 00:21:31.090 cancer claims more lives than

NOTE Confidence: 0.733626814

00:21:31.090 --> 00:21:38.076 HIV, TB and other issues.

NOTE Confidence: 0.733626814

00:21:38.080 --> 00:21:42.352 Sorry. And and other issues,

NOTE Confidence: 0.733626814

00:21:42.352 --> 00:21:44.542 infectious issues in low to

NOTE Confidence: 0.733626814

00:21:44.542 --> 00:21:47.098 middle income countries combined.

NOTE Confidence: 0.733626814

00:21:47.100 --> 00:21:48.324 And so you know,

NOTE Confidence: 0.733626814

00:21:48.324 --> 00:21:50.676 one wonders as we put more resources

NOTE Confidence: 0.733626814

00:21:50.676 --> 00:21:52.851 into the infectious elements in

NOTE Confidence: 0.733626814

00:21:52.851 --> 00:21:55.879 these low to middle income countries,

NOTE Confidence: 0.733626814

00:21:55.880 --> 00:21:58.400 what do you think should be

NOTE Confidence: 0.733626814

00:21:58.400 --> 00:22:00.080 the case for cancer?

NOTE Confidence: 0.733626814

00:22:00.080 --> 00:22:04.969 How do we increase the awareness of NGO's,

NOTE Confidence: 0.733626814

00:22:04.969 --> 00:22:05.787 of governments,

NOTE Confidence: 0.733626814

00:22:05.787 --> 00:22:08.650 of others about the growing cancer burden

NOTE Confidence: 0.733626814

00:22:08.716 --> 00:22:10.888 in low to middle income countries?

NOTE Confidence: 0.733626814

00:22:10.890 --> 00:22:13.494 So that really rises to

NOTE Confidence: 0.733626814

00:22:13.494 --> 00:22:16.420 the same level as HIV and TB.

NOTE Confidence: 0.840413611904762

00:22:17.070 --> 00:22:19.604 Yeah, I think as someone who primarily

NOTE Confidence: 0.840413611904762

00:22:19.604 --> 00:22:21.184 works on infectious diseases

NOTE Confidence: 0.840413611904762

00:22:21.184 --> 00:22:23.734 including overlaps with

NOTE Confidence: 0.840413611904762

00:22:23.734 --> 00:22:25.876 infectious causes for cancer,

NOTE Confidence: 0.840413611904762

00:22:25.876 --> 00:22:29.170 I am a big believer of focus on things

NOTE Confidence: 0.840413611904762

00:22:29.261 --> 00:22:31.841 like cancer and cardiovascular diseases

NOTE Confidence: 0.840413611904762

00:22:31.841 --> 00:22:36.141 in terms of our global investments in

NOTE Confidence: 0.840413611904762

00:22:36.141 --> 00:22:40.407 global public health and and treatment.

NOTE Confidence: 0.840413611904762

00:22:40.410 --> 00:22:43.623 I think the world can walk and chew gum.

NOTE Confidence: 0.840413611904762

00:22:43.630 --> 00:22:45.610 It doesn't have to

NOTE Confidence: 0.840413611904762

00:22:45.610 --> 00:22:47.826 be an either or situation.

00:22:49.560 --> 00:22:54.968 It doesn't have to be a situation where

NOTE Confidence: 0.840413611904762

00:22:54.970 --> 00:22:58.096 you either have to

NOTE Confidence: 0.840413611904762

00:22:58.096 --> 00:23:00.180 prevent mortality through malaria,

NOTE Confidence: 0.840413611904762

00:23:00.180 --> 00:23:01.790 which is horrible for a lot of

NOTE Confidence: 0.840413611904762

00:23:01.790 --> 00:23:03.000 communities and in the world,

NOTE Confidence: 0.840413611904762

00:23:03.000 --> 00:23:06.280 or HIV or tuberculosis, etc,

NOTE Confidence: 0.840413611904762

00:23:06.280 --> 00:23:08.380 and sort of ignore cancer

NOTE Confidence: 0.840413611904762

00:23:08.380 --> 00:23:09.640 and cardiovascular disease.

NOTE Confidence: 0.840413611904762

00:23:09.640 --> 00:23:11.075 I think we can and we must

NOTE Confidence: 0.840413611904762

00:23:11.075 --> 00:23:12.159 and we should do that.

NOTE Confidence: 0.840413611904762

00:23:12.160 --> 00:23:16.324 And I believe entities such

NOTE Confidence: 0.840413611904762

00:23:16.324 --> 00:23:18.440 as the Global Fund for TB,

NOTE Confidence: 0.840413611904762

00:23:18.440 --> 00:23:22.376 malaria and HIV that provides resources

NOTE Confidence: 0.840413611904762

00:23:22.380 --> 00:23:25.260 to low income countries through funding

NOTE Confidence: 0.840413611904762

00:23:25.260 --> 00:23:26.836 from the US government,

NOTE Confidence: 0.840413611904762

00:23:26.836 --> 00:23:28.412 other developed and developing

NOTE Confidence: 0.840413611904762

00:23:28.412 --> 00:23:29.200 country governments,

NOTE Confidence: 0.840413611904762

00:23:29.200 --> 00:23:32.022 they pool their resources and provide

NOTE Confidence: 0.840413611904762

00:23:32.022 --> 00:23:33.990 treatment for these diseases.

NOTE Confidence: 0.840413611904762

00:23:33.990 --> 00:23:37.609 And the GAVI, the Global Vaccine Alliance,

NOTE Confidence: 0.840413611904762

00:23:37.610 --> 00:23:39.962 which focuses on vaccines,

NOTE Confidence: 0.840413611904762

00:23:39.962 --> 00:23:43.490 a similar model are templates

NOTE Confidence: 0.840413611904762

00:23:43.589 --> 00:23:46.529 for a global cancer moon shot,

NOTE Confidence: 0.840413611904762

00:23:46.530 --> 00:23:48.427 both in terms of not just technology,

NOTE Confidence: 0.840413611904762

00:23:48.430 --> 00:23:50.782 but in terms of actually getting

NOTE Confidence: 0.840413611904762

00:23:50.782 --> 00:23:52.350 treatments and screening and

NOTE Confidence: 0.840413611904762

00:23:52.422 --> 00:23:55.450 diagnostics to low and middle income

NOTE Confidence: 0.840413611904762

00:23:55.450 --> 00:23:57.760 countries.

NOTE Confidence: 0.840413611904762

00:23:57.760 --> 00:24:01.043 A majority of the deaths due to the

NOTE Confidence: 0.840413611904762

00:24:01.043 --> 00:24:03.212 10 million cancer deaths were in

NOTE Confidence: 0.840413611904762

00:24:03.212 --> 00:24:05.138 low and middle income countries in

NOTE Confidence: 0.840413611904762

00:24:05.138 --> 00:24:07.297 2020 and the trend has remained.

NOTE Confidence: 0.840413611904762

00:24:07.300 --> 00:24:09.564 And in fact there will be a higher

NOTE Confidence: 0.840413611904762

00:24:09.564 --> 00:24:11.674 proportion in low and middle income

NOTE Confidence: 0.840413611904762

00:24:11.674 --> 00:24:13.158 countries because the population

NOTE Confidence: 0.840413611904762

00:24:13.158 --> 00:24:15.424 there is increasing and there was

NOTE Confidence: 0.840413611904762

00:24:15.424 --> 00:24:17.249 a bigger disruption in prevention

NOTE Confidence: 0.840413611904762

00:24:17.249 --> 00:24:18.646 and treatment services.

NOTE Confidence: 0.840413611904762

00:24:18.646 --> 00:24:21.772 And so I think there should be and

NOTE Confidence: 0.840413611904762

00:24:21.772 --> 00:24:24.037 there has to be a call for action

NOTE Confidence: 0.840413611904762

00:24:24.037 --> 00:24:26.945 to say that, you know, communities

NOTE Confidence: 0.840413611904762

00:24:26.945 --> 00:24:30.734 impacted by mortality due to

NOTE Confidence: 0.840413611904762

00:24:30.734 --> 00:24:31.818 preventable,

NOTE Confidence: 0.840413611904762

00:24:31.818 --> 00:24:33.444 increasingly preventable mortality

NOTE Confidence: 0.840413611904762

00:24:33.444 --> 00:24:35.070 due to cancer.

NOTE Confidence: 0.840413611904762

00:24:35.070 --> 00:24:38.490 And so I think we need to have that kind

NOTE Confidence: 0.840413611904762

00:24:38.578 --> 00:24:41.998 of an approach that we can and must end.

NOTE Confidence: 0.840413611904762

00:24:42.000 --> 00:24:44.166 We must address all of these

NOTE Confidence: 0.840413611904762

00:24:44.166 --> 00:24:46.429 issues that are major causes of

NOTE Confidence: 0.840413611904762

00:24:46.429 --> 00:24:48.284 death and disease.

NOTE Confidence: 0.904643035555555

00:24:49.000 --> 00:24:51.457 Yeah. One of the issues that I think is

NOTE Confidence: 0.904643035555555

00:24:51.460 --> 00:24:54.589 really difficult when it comes to

NOTE Confidence: 0.904643035555555

00:24:54.589 --> 00:24:57.269 cancer as opposed to HIV or malaria

NOTE Confidence: 0.904643035555555

00:24:57.269 --> 00:25:00.399 or TB is is the fact that

NOTE Confidence: 0.904643035555555

00:25:00.400 --> 00:25:02.760 cancer is so complex, right.

NOTE Confidence: 0.904643035555555

00:25:02.760 --> 00:25:06.780 And in terms of screening,

NOTE Confidence: 0.904643035555555

00:25:06.780 --> 00:25:08.677 we have good screening for some things,

NOTE Confidence: 0.904643035555555

00:25:08.680 --> 00:25:10.500 not so good screening for other things,

NOTE Confidence: 0.904643035555555

00:25:10.500 --> 00:25:13.276 but even if you were to screen and

NOTE Confidence: 0.904643035555555

00:25:13.276 --> 00:25:16.117 then you know the treatments algorithms

NOTE Confidence: 0.904643035555555

00:25:16.117 --> 00:25:18.835 do require you know, surgery

NOTE Confidence: 0.904643035555555

00:25:18.835 --> 00:25:22.110 and radiation and chemotherapy and

NOTE Confidence: 0.904643035555555

00:25:22.110 --> 00:25:25.197 immunotherapy and various biologics and

NOTE Confidence: 0.904643035555555

00:25:25.197 --> 00:25:28.245 all of the diagnostics that go with it

NOTE Confidence: 0.904643035555555

00:25:28.245 --> 00:25:31.363 and it's not as easy.

NOTE Confidence: 0.904643035555555

00:25:31.370 --> 00:25:34.574 And that requires a lot of

NOTE Confidence: 0.904643035555555

00:25:34.574 --> 00:25:38.180 infrastructure and a lot of resources.

NOTE Confidence: 0.904643035555555

00:25:38.180 --> 00:25:41.498 So where do you start?

NOTE Confidence: 0.904643035555555

00:25:41.500 --> 00:25:43.948 Because this is a very complex

NOTE Confidence: 0.904643035555555

00:25:43.948 --> 00:25:47.459 onion to peel with so many layers of

NOTE Confidence: 0.904643035555555

00:25:47.459 --> 00:25:50.153 issues from poverty to education to,

NOTE Confidence: 0.904643035555555

00:25:50.160 --> 00:25:52.296 you know, other factors,

NOTE Confidence: 0.904643035555555

00:25:52.296 --> 00:25:55.500 that makes it very difficult for

NOTE Confidence: 0.904643035555555

00:25:55.599 --> 00:25:58.030 people really to make an impact

NOTE Confidence: 0.904643035555555

00:25:58.030 --> 00:25:59.890 in terms of cancer care globally.

NOTE Confidence: 0.9001435945

00:26:01.070 --> 00:26:03.860 Absolutely correct. But global health

NOTE Confidence: 0.9001435945

00:26:03.860 --> 00:26:08.577 is the art of the possible is to look

NOTE Confidence: 0.9001435945

00:26:08.577 --> 00:26:12.402 at a problem and say that this is

NOTE Confidence: 0.9001435945

00:26:12.402 --> 00:26:16.189 unacceptable and to have that

NOTE Confidence: 0.9001435945

00:26:16.190 --> 00:26:18.340 somewhat Pollyannaish way of

NOTE Confidence: 0.9001435945

00:26:18.340 --> 00:26:21.549 thinking that all lives are created equal,

NOTE Confidence: 0.9001435945

00:26:21.550 --> 00:26:24.777 that inequity in access to care and

NOTE Confidence: 0.9001435945

00:26:24.777 --> 00:26:27.649 treatment and screening is not acceptable.

NOTE Confidence: 0.9001435945

00:26:27.650 --> 00:26:29.066 And that view is not Pollyannaish.

NOTE Confidence: 0.9001435945

00:26:29.070 --> 00:26:30.660 It's a way of looking at

NOTE Confidence: 0.9001435945

00:26:30.702 --> 00:26:33.100 the world. And saying that, you know,

NOTE Confidence: 0.9001435945

00:26:33.100 --> 00:26:35.879 there are certain things

NOTE Confidence: 0.9001435945

00:26:35.880 --> 00:26:37.840 not everyone has to have the latest

NOTE Confidence: 0.9001435945

00:26:37.840 --> 00:26:39.560 Tesla or the latest iPhone,

NOTE Confidence: 0.9001435945

00:26:39.560 --> 00:26:42.755 but health is a basic human right and this

NOTE Confidence: 0.9001435945

00:26:42.755 --> 00:26:45.498 cannot continue to happen on our watch,

NOTE Confidence: 0.9001435945

00:26:45.500 --> 00:26:46.980 at least without an effort.

NOTE Confidence: 0.9001435945

00:26:46.980 --> 00:26:50.884 And so when we start with that position,

NOTE Confidence: 0.9001435945

00:26:50.890 --> 00:26:54.340 we look for examples of similar

NOTE Confidence: 0.9001435945

00:26:54.340 --> 00:26:56.640 seemingly unsurmountable problems and

NOTE Confidence: 0.9001435945

00:26:56.725 --> 00:26:59.710 one of the seemingly unsurmountable

NOTE Confidence: 0.9001435945

00:26:59.710 --> 00:27:02.238 problem is and was HIV.

NOTE Confidence: 0.9001435945

00:27:02.238 --> 00:27:05.540 I remember starting work in the late 90s

NOTE Confidence: 0.9001435945

00:27:05.540 --> 00:27:09.004 and HIV in early 2000s and going

NOTE Confidence: 0.9001435945

00:27:09.004 --> 00:27:12.127 to countries like Uganda and Ethiopia

NOTE Confidence: 0.9001435945

00:27:12.130 --> 00:27:15.474 and parts of India as well.

NOTE Confidence: 0.9001435945

00:27:15.480 --> 00:27:19.855 And seeing that especially in

NOTE Confidence: 0.9001435945

00:27:19.855 --> 00:27:22.840 Uganda and Ethiopia that treatment

NOTE Confidence: 0.9001435945

00:27:22.840 --> 00:27:25.540 was nowhere to be found.

NOTE Confidence: 0.9001435945

00:27:25.540 --> 00:27:28.018 By the mid 90s some very good

NOTE Confidence: 0.9001435945

00:27:28.018 --> 00:27:29.930 treatment options were available in

NOTE Confidence: 0.9001435945

00:27:29.930 --> 00:27:32.276 the US and high income countries.

NOTE Confidence: 0.9001435945

00:27:32.280 --> 00:27:34.611 And even when we were doing studies

NOTE Confidence: 0.9001435945

00:27:34.611 --> 00:27:37.019 for a lot of these patients,

NOTE Confidence: 0.9001435945

00:27:37.020 --> 00:27:39.813 we were able to provide some treatment

NOTE Confidence: 0.9001435945

00:27:39.813 --> 00:27:43.054 to them in the context of studies with

NOTE Confidence: 0.9001435945

00:27:43.054 --> 00:27:46.320 the hope and the aim to bring those

NOTE Confidence: 0.9001435945

00:27:46.320 --> 00:27:46.857 treatments

NOTE Confidence: 0.9001435945

00:27:46.857 --> 00:27:49.542 through collective action to the

NOTE Confidence: 0.9001435945

00:27:49.542 --> 00:27:52.140 communities we were working with,

NOTE Confidence: 0.9001435945

00:27:52.140 --> 00:27:54.672 to the people we were working

NOTE Confidence: 0.9001435945

00:27:54.672 --> 00:27:57.632 with and now

NOTE Confidence: 0.9001435945

00:27:57.632 --> 00:28:00.170 started a recent phenomenon starting in

NOTE Confidence: 0.893431610909091

00:28:02.180 --> 00:28:03.794 2005, 2004, 2005.

NOTE Confidence: 0.893431610909091

00:28:03.794 --> 00:28:07.560 The world has made major progress not

NOTE Confidence: 0.893431610909091

00:28:07.657 --> 00:28:11.353 only in providing treatment but also

NOTE Confidence: 0.893431610909091

00:28:11.353 --> 00:28:14.699 managing a complex disease like HIV

NOTE Confidence: 0.893431610909091

00:28:14.700 --> 00:28:18.088 and so therefore I think

NOTE Confidence: 0.893431610909091

00:28:18.090 --> 00:28:20.314 this is a model that can be a

NOTE Confidence: 0.893431610909091

00:28:20.314 --> 00:28:22.139 template for cancer prevention,

NOTE Confidence: 0.893431610909091

00:28:22.140 --> 00:28:24.388 screening, treatment, control, etc.

NOTE Confidence: 0.843061111666667

00:28:24.840 --> 00:28:26.922 Doctor Saad Omer is the Harvey

NOTE Confidence: 0.843061111666667

00:28:26.922 --> 00:28:28.775 and Kate Cushing professor of

NOTE Confidence: 0.843061111666667

00:28:28.775 --> 00:28:30.379 medicine in infectious diseases

NOTE Confidence: 0.843061111666667

00:28:30.379 --> 00:28:32.384 and professor of Epidemiology of

NOTE Confidence: 0.843061111666667

00:28:32.447 --> 00:28:34.302 microbial diseases at the Yale

NOTE Confidence: 0.843061111666667

00:28:34.302 --> 00:28:36.517 School of Medicine and director of

NOTE Confidence: 0.843061111666667

00:28:36.517 --> 00:28:38.659 the Yale Institute for Global Health.

NOTE Confidence: 0.843061111666667

00:28:38.660 --> 00:28:40.704 If you have questions,

NOTE Confidence: 0.843061111666667

00:28:40.704 --> 00:28:42.605 the address is canceranswers@yale.edu,

NOTE Confidence: 0.843061111666667

00:28:42.605 --> 00:28:44.795 and past editions of the program

NOTE Confidence: 0.843061111666667

00:28:44.795 --> 00:28:46.789 are available in audio and written

NOTE Confidence: 0.843061111666667

00:28:46.789 --> 00:28:48.194 form at Yale Cancer Center.

NOTE Confidence: 0.843061111666667

00:28:48.200 --> 00:28:50.387 Dot org we hope you'll join us next week

NOTE Confidence: 0.843061111666667

00:28:50.387 --> 00:28:52.772 to learn more about the fight against

NOTE Confidence: 0.843061111666667

00:28:52.772 --> 00:28:54.949 cancer here on Connecticut Public Radio.

NOTE Confidence: 0.843061111666667

00:28:54.950 --> 00:28:57.542 Funding for Yale Cancer Answers is

NOTE Confidence: 0.843061111666667

00:28:57.542 --> 00:29:00.000 provided by Smilow Cancer Hospital.