WEBVTT

00:00:00.000 --> 00:00:03.210 Funding for Yale Cancer Answers is NOTE Confidence: 0.81277647 00:00:03.210 --> 00:00:06.250 provided by Smilow Cancer Hospital. NOTE Confidence: 0.81277647 00:00:06.250 --> 00:00:08.405 Welcome to Yale Cancer Answers NOTE Confidence: 0.81277647 00:00:08.405 -> 00:00:10.129 with Doctor Anees Chappar. NOTE Confidence: 0.81277647 00:00:10.130 --> 00:00:11.594 Yale Cancer Answers features NOTE Confidence: 0.81277647 00:00:11.594 --> 00:00:13.424 the latest information on cancer NOTE Confidence: 0.81277647 $00:00:13.424 \rightarrow 00:00:15.298$ care by welcoming oncologists and NOTE Confidence: 0.81277647 $00:00:15.298 \rightarrow 00:00:17.464$ specialists who are on the forefront NOTE Confidence: 0.81277647 $00:00:17.523 \longrightarrow 00:00:19.185$ of the battle to fight cancer. NOTE Confidence: 0.81277647 00:00:19.190 --> 00:00:20.960 This week it's a conversation NOTE Confidence: 0.81277647 00:00:20.960 --> 00:00:22.730 about global health and oncology NOTE Confidence: 0.81277647 $00:00:22.792 \rightarrow 00:00:24.790$ with Doctor Donna Spiegelman. Dr. NOTE Confidence: 0.81277647 00:00:24.790 --> 00:00:26.490 Spiegelman is Susan Dwight Bliss, NOTE Confidence: 0.81277647 $00{:}00{:}26.490 \dashrightarrow 00{:}00{:}28.042$ professor of Biostatistics at NOTE Confidence: 0.81277647 00:00:28.042 --> 00:00:29.982 the Yale School of Medicine, NOTE Confidence: 0.81277647

 $00{:}00{:}29{.}990 \dashrightarrow 00{:}00{:}31{.}770$ where Doctor Chagpar is a

NOTE Confidence: 0.81277647

 $00{:}00{:}31.770 \dashrightarrow 00{:}00{:}33.194$ professor of surgical on cology.

NOTE Confidence: 0.915256457727273

 $00:00:34.700 \longrightarrow 00:00:36.684$ Donna, maybe we can start off by you

NOTE Confidence: 0.915256457727273

 $00:00:36.684 \rightarrow 00:00:38.480$ telling us a little bit more about

NOTE Confidence: 0.915256457727273

 $00:00:38.480 \longrightarrow 00:00:40.150$ yourself and what it is you do.

NOTE Confidence: 0.85024446625

00:00:40.220 --> 00:00:43.545 I have a doctorate in

NOTE Confidence: 0.85024446625

 $00:00:43.545 \rightarrow 00:00:45.540$ Biostatistics and epidemiology.

NOTE Confidence: 0.85024446625

 $00:00:45.540 \rightarrow 00:00:47.455$ Epidemiology is formerly the definition

NOTE Confidence: 0.85024446625

 $00{:}00{:}47.455 \dashrightarrow 00{:}00{:}50.254$ is the study of the distribution and

NOTE Confidence: 0.85024446625

 $00{:}00{:}50{.}254 \dashrightarrow 00{:}00{:}52{.}299$ determinants of health and disease

NOTE Confidence: 0.85024446625

 $00{:}00{:}52.299 \dashrightarrow 00{:}00{:}55.277$ and what it does on a practical level.

NOTE Confidence: 0.85024446625

 $00{:}00{:}55{.}280 \dashrightarrow 00{:}00{:}57{.}518$ Many people have heard about epidemiology

NOTE Confidence: 0.85024446625

00:00:57.518 --> 00:01:00.780 now since we've had the COVID-19 epidemic

NOTE Confidence: 0.85024446625

 $00:01:00.780 \longrightarrow 00:01:04.996$ and it traces with infectious diseases

NOTE Confidence: 0.85024446625

00:01:04.996 --> 00:01:08.470 like COVID and flu and RSV and so forth,

NOTE Confidence: 0.85024446625

 $00:01:08.470 \rightarrow 00:01:10.773$ it would trace the patterns of spread

- NOTE Confidence: 0.85024446625
- $00:01:10.773 \longrightarrow 00:01:13.540$ of the disease and who might
- NOTE Confidence: 0.85024446625
- $00:01:13.540 \longrightarrow 00:01:16.158$ be at higher risk, who might be at
- NOTE Confidence: 0.85024446625
- $00:01:16.158 \rightarrow 00:01:18.030$ higher risk for spreading the disease,
- NOTE Confidence: 0.85024446625
- $00{:}01{:}18.030 \dashrightarrow 00{:}01{:}20.210$ how effective vaccines and other
- NOTE Confidence: 0.85024446625
- $00:01:20.210 \dashrightarrow 00:01:22.800$ preventive measures are to stop the
- NOTE Confidence: 0.85024446625
- $00:01:22.800 \rightarrow 00:01:25.124$ spread of the disease and so forth.
- NOTE Confidence: 0.85024446625
- $00{:}01{:}25{.}130 \dashrightarrow 00{:}01{:}26{.}474$ And then on
- NOTE Confidence: 0.85024446625
- $00:01:26.474 \rightarrow 00:01:28.970$ what we call the chronic disease front,
- NOTE Confidence: 0.85024446625
- $00:01:28.970 \dashrightarrow 00:01:31.026$ chronic disease meaning diseases
- NOTE Confidence: 0.85024446625
- $00:01:31.026 \rightarrow 00:01:33.596$ that aren't infectious but occur
- NOTE Confidence: 0.85024446625
- $00:01:33.596 \longrightarrow 00:01:35.658$ over time such as cancer,
- NOTE Confidence: 0.85024446625
- $00:01:35.660 \rightarrow 00:01:37.735$ the topic of today's discussion,
- NOTE Confidence: 0.85024446625
- $00:01:37.735 \longrightarrow 00:01:39.165$ heart disease, diabetes,
- NOTE Confidence: 0.85024446625
- $00:01:39.165 \longrightarrow 00:01:42.140$ mental health, and so forth.
- NOTE Confidence: 0.85024446625
- 00:01:42.140 --> 00:01:44.984 Epidemiologists study the risk
- NOTE Confidence: 0.85024446625

 $00:01:44.984 \longrightarrow 00:01:47.828$ factors for these diseases.

NOTE Confidence: 0.85024446625

 $00{:}01{:}47.830 \dashrightarrow 00{:}01{:}49.670$ And in terms of cancer,

NOTE Confidence: 0.85024446625

 $00{:}01{:}49.670 \dashrightarrow 00{:}01{:}52.288$ there's quite a bit known about the

NOTE Confidence: 0.85024446625

00:01:52.288 --> 00:01:54.354 risk factors for various common

NOTE Confidence: 0.85024446625

00:01:54.354 --> 00:01:56.946 and less common causes of cancer,

NOTE Confidence: 0.85024446625

 $00{:}01{:}56{.}950 \dashrightarrow 00{:}01{:}58{.}320$ and still more to learn

NOTE Confidence: 0.85024446625

 $00:01:58.320 \longrightarrow 00:01:59.690$ about those causes of cancer.

NOTE Confidence: 0.85024446625

 $00:01:59.690 \longrightarrow 00:02:01.130$ And it's epidemiologists

NOTE Confidence: 0.85024446625

 $00{:}02{:}01{.}130 \dashrightarrow 00{:}02{:}03{.}530$ that do that work primarily.

NOTE Confidence: 0.85024446625

 $00:02:03.530 \longrightarrow 00:02:06.926$ Biostatisticians are the people who once

NOTE Confidence: 0.85024446625

 $00:02:06.930 \longrightarrow 00:02:08.337$ data are collected,

NOTE Confidence: 0.85024446625

 $00:02:08.337 \longrightarrow 00:02:11.151$ figure out how to analyze the

NOTE Confidence: 0.85024446625

 $00:02:11.151 \dashrightarrow 00:02:14.149$ data to answer questions such as

NOTE Confidence: 0.85024446625

 $00:02:14.150 \longrightarrow 00:02:16.760$ is high dietary fat intake a

NOTE Confidence: 0.85024446625

 $00:02:16.760 \longrightarrow 00:02:19.170$ risk factor for breast cancer?

NOTE Confidence: 0.85024446625

 $00:02:19.170 \longrightarrow 00:02:21.706$ The answer in general seems to be no.

- NOTE Confidence: 0.85024446625
- $00:02:21.710 \longrightarrow 00:02:25.114$ Or do colonoscopies prevent
- NOTE Confidence: 0.85024446625
- $00:02:25.114 \rightarrow 00:02:27.667$ colorectal cancer incidents?
- NOTE Confidence: 0.85024446625
- $00:02:27.670 \longrightarrow 00:02:29.274$ The answer is yes.
- NOTE Confidence: 0.85024446625
- $00:02:29.274 \rightarrow 00:02:31.680$ Does cigarette smoking cause lung cancer?
- NOTE Confidence: 0.85024446625
- $00{:}02{:}31.680 \dashrightarrow 00{:}02{:}33.792$ The answer is yes.
- NOTE Confidence: 0.85024446625
- $00{:}02{:}33.792 \dashrightarrow 00{:}02{:}35.376$ Biostatisticians and partnership
- NOTE Confidence: 0.85024446625
- $00:02:35.376 \dashrightarrow 00:02:37.358$ with Epidemiologists will take
- NOTE Confidence: 0.85024446625
- $00{:}02{:}37{.}358 \dashrightarrow 00{:}02{:}39{.}332$ often large amounts of data and
- NOTE Confidence: 0.85024446625
- 00:02:39.332 --> 00:02:42.541 kind of crunch them down using
- NOTE Confidence: 0.85024446625
- $00:02:42.541 \longrightarrow 00:02:44.155$ established statistical methods
- NOTE Confidence: 0.85024446625
- $00:02:44.160 \longrightarrow 00:02:46.434$ to answer these kinds of questions
- NOTE Confidence: 0.85024446625
- $00:02:46.434 \rightarrow 00:02:48.811$ and also to quantify the uncertainty
- NOTE Confidence: 0.85024446625
- $00:02:48.811 \dashrightarrow 00:02:51.955$ there is in the data about these answers,
- NOTE Confidence: 0.85024446625
- $00:02:51.960 \longrightarrow 00:02:53.336$ should we go on from there
- NOTE Confidence: 0.85024446625
- $00:02:53.336 \longrightarrow 00:02:54.776$ or should I say a little
- NOTE Confidence: 0.85024446625

 $00:02:54.776 \longrightarrow 00:02:55.928$ bit more about myself?

NOTE Confidence: 0.926590498333333

 $00{:}02{:}56{.}140 \dashrightarrow 00{:}02{:}58{.}378$ Yeah, I was about to ask,

NOTE Confidence: 0.926590498333333

 $00{:}02{:}58{.}380 \dashrightarrow 00{:}03{:}00{.}441$ tell us a bit more about what you do

NOTE Confidence: 0.926590498333333

 $00:03:00.441 \rightarrow 00:03:02.397$ and in particular you're interested

NOTE Confidence: 0.926590498333333

00:03:02.397 --> 00:03:07.380 in global oncology.

NOTE Confidence: 0.896442360714286

 $00{:}03{:}07{.}380 \dashrightarrow 00{:}03{:}09{.}137$ I had been a professor at the

NOTE Confidence: 0.896442360714286

00:03:09.137 --> 00:03:10.531 Harvard School of Public Health

NOTE Confidence: 0.896442360714286

 $00:03:10.531 \rightarrow 00:03:12.760$ for many years where I worked

NOTE Confidence: 0.896442360714286

 $00:03:12.760 \longrightarrow 00:03:15.339$ on the kinds of chronic disease

NOTE Confidence: 0.896442360714286

 $00{:}03{:}15{.}340 \dashrightarrow 00{:}03{:}17{.}876$ epidemiology questions I've just

NOTE Confidence: 0.896442360714286

 $00{:}03{:}17.876 \dashrightarrow 00{:}03{:}22.308$ described and as my career matured,

NOTE Confidence: 0.896442360714286

00:03:22.310 --> 00:03:25.432 I became more and more interested in

NOTE Confidence: 0.896442360714286

 $00{:}03{:}25{.}432 \dashrightarrow 00{:}03{:}27{.}868$ taking the information that we have

NOTE Confidence: 0.896442360714286

 $00:03:27.868 \rightarrow 00:03:30.030$ about these risk factors and actually

NOTE Confidence: 0.896442360714286

 $00:03:30.030 \dashrightarrow 00:03:31.950$ translating them into practice.

NOTE Confidence: 0.896442360714286

 $00:03:31.950 \longrightarrow 00:03:34.160$ So we could really start

- NOTE Confidence: 0.902370536
- $00:03:34.410 \longrightarrow 00:03:35.898$ preventing some of these
- NOTE Confidence: 0.902370536
- $00:03:35.898 \dashrightarrow 00:03:37.210$ diseases based on the knowledge.
- NOTE Confidence: 0.902370536
- $00:03:37.210 \longrightarrow 00:03:38.827$ And it's not as if that hadn't
- NOTE Confidence: 0.935606511428572
- 00:03:38.840 00:03:39.836 been happening before.
- NOTE Confidence: 0.935606511428572
- 00:03:39.836 --> 00:03:41.164 It certainly had been,
- NOTE Confidence: 0.935606511428572
- $00{:}03{:}41{.}170 \dashrightarrow 00{:}03{:}43{.}420$ but I hadn't been a part of that and
- NOTE Confidence: 0.935606511428572
- $00:03:43.420 \longrightarrow 00:03:45.794$ so I wanted to be a part of it and
- NOTE Confidence: 0.935606511428572
- $00:03:45.800 \longrightarrow 00:03:47.212$ by coming to Yale,
- NOTE Confidence: 0.935606511428572
- $00{:}03{:}47{.}212 \dashrightarrow 00{:}03{:}48{.}977$ where I'm now the director
- NOTE Confidence: 0.935606511428572
- $00:03:48.980 \longrightarrow 00:03:51.431$ of our Center on methods for
- NOTE Confidence: 0.935606511428572
- 00:03:51.431 --> 00:03:53.259 Implementation and prevention Science,
- NOTE Confidence: 0.935606511428572
- $00{:}03{:}53{.}260 \dashrightarrow 00{:}03{:}56{.}599$ I'm actually able to really dig in
- NOTE Confidence: 0.935606511428572
- $00:03:56.599 \rightarrow 00:03:59.400$ very deeply to participate in projects
- NOTE Confidence: 0.935606511428572
- $00{:}03{:}59{.}400 \dashrightarrow 00{:}04{:}01{.}700$ that are working on implementing
- NOTE Confidence: 0.935606511428572
- 00:04:01.700 --> 00:04:03.897 various ways of preventing cancer,
- NOTE Confidence: 0.935606511428572

00:04:03.897 - 00:04:06.411 both here in the United States

NOTE Confidence: 0.935606511428572

 $00{:}04{:}06{.}411 \dashrightarrow 00{:}04{:}09{.}642$ as well as overseas and also in

NOTE Confidence: 0.935606511428572

 $00:04:09.642 \rightarrow 00:04:11.455$ developing statistical methods to

NOTE Confidence: 0.935606511428572

00:04:11.455 --> 00:04:14.028 improve our ability to do this work.

NOTE Confidence: 0.935606511428572

 $00{:}04{:}14.028 \dashrightarrow 00{:}04{:}15.613$ So in terms of global

NOTE Confidence: 0.935606511428572

00:04:15.620 --> 00:04:16.080 Oncology,

NOTE Confidence: 0.935606511428572

 $00:04:16.080 \longrightarrow 00:04:18.840$ I had some experience with this

NOTE Confidence: 0.935606511428572

 $00:04:18.840 \longrightarrow 00:04:21.722$ at Harvard and have quite a bit

NOTE Confidence: 0.935606511428572

 $00{:}04{:}21.722 \dashrightarrow 00{:}04{:}24.292$ more now that I've come to Yale

NOTE Confidence: 0.935606511428572

 $00:04:24.292 \longrightarrow 00:04:26.826$ and the focus that we've had so

NOTE Confidence: 0.935606511428572

 $00{:}04{:}26.826 \dashrightarrow 00{:}04{:}29.878$ far has been on cervical cancer.

NOTE Confidence: 0.935606511428572

 $00{:}04{:}29.878 \dashrightarrow 00{:}04{:}33.960$ Cervical cancer is actually a rare

NOTE Confidence: 0.935606511428572

 $00{:}04{:}33{.}960 \dashrightarrow 00{:}04{:}36{.}816$ cancer in the United States and in

NOTE Confidence: 0.935606511428572

 $00:04:36.816 \rightarrow 00:04:39.637$ other high income countries in Europe,

NOTE Confidence: 0.935606511428572

 $00:04:39.640 \longrightarrow 00:04:40.892$ whereas like for example,

NOTE Confidence: 0.935606511428572

00:04:40.892 --> 00:04:43.907 if I have it right in front of me now,

- NOTE Confidence: 0.935606511428572
- $00{:}04{:}43{.}910 \dashrightarrow 00{:}04{:}46{.}017$ the leading sites of new cancer
- NOTE Confidence: 0.935606511428572
- $00{:}04{:}46{.}020 \dashrightarrow 00{:}04{:}48{.}550$ deaths 2022 from the American
- NOTE Confidence: 0.935606511428572
- 00:04:48.550 --> 00:04:50.574 Cancer Society among women,
- NOTE Confidence: 0.935606511428572
- $00{:}04{:}50{.}580 \dashrightarrow 00{:}04{:}53{.}500$ cervical cancer isn't even on the list.
- NOTE Confidence: 0.935606511428572
- $00:04:53.500 \longrightarrow 00:04:55.156$ Whereas say in Mexico,
- NOTE Confidence: 0.935606511428572
- $00{:}04{:}55{.}156 \dashrightarrow 00{:}04{:}58{.}210$ it's the second leading cause of cancer
- NOTE Confidence: 0.935606511428572
- $00:04:58.210 \rightarrow 00:05:00.655$ incidence and death among women.
- NOTE Confidence: 0.935606511428572
- $00:05:00.660 \rightarrow 00:05:02.998$ And in Nepal it's actually the 1st.
- NOTE Confidence: 0.935606511428572
- 00:05:03.000 --> 00:05:04.092 In India,
- NOTE Confidence: 0.935606511428572
- $00:05:04.092 \longrightarrow 00:05:05.730$ which is about 1/4
- NOTE Confidence: 0.935606511428572
- $00:05:05.796 \longrightarrow 00:05:07.280$ of the world's population,
- NOTE Confidence: 0.935606511428572
- $00:05:07.280 \longrightarrow 00:05:08.180$ if not more,
- NOTE Confidence: 0.935606511428572
- $00{:}05{:}08{.}180 \dashrightarrow 00{:}05{:}09{.}980$ it's also the first or second
- NOTE Confidence: 0.935606511428572
- $00:05:09.980 \longrightarrow 00:05:11.300$ leading cause of cancer.
- NOTE Confidence: 0.935606511428572
- $00:05:11.300 \rightarrow 00:05:14.108$ So we know how to prevent cervical
- NOTE Confidence: 0.935606511428572

 $00:05:14.108 \rightarrow 00:05:16.229$ cancer because it used to be quite

NOTE Confidence: 0.935606511428572

00:05:16.230 --> 00:05:16.886 common here,

NOTE Confidence: 0.935606511428572

00:05:16.886 --> 00:05:20.160 say 50 or 100 years ago, now it's completely

NOTE Confidence: 0.935606511428572

 $00:05:20.160 \rightarrow 00:05:23.020$ prevented by our screening programs.

NOTE Confidence: 0.935606511428572

 $00{:}05{:}23.020 \dashrightarrow 00{:}05{:}25.606$ But this knowledge hasn't quite made

NOTE Confidence: 0.935606511428572

 $00{:}05{:}25{.}606 \dashrightarrow 00{:}05{:}28{.}410$ it over to many other countries

NOTE Confidence: 0.935606511428572

 $00{:}05{:}28{.}410 \dashrightarrow 00{:}05{:}31{.}618$ around the world who could use the

NOTE Confidence: 0.935606511428572

 $00:05:31.618 \longrightarrow 00:05:33.772$ kind of technology that we have

NOTE Confidence: 0.935606511428572

 $00:05:33.772 \rightarrow 00:05:35.620$ for preventing cervical cancer,

NOTE Confidence: 0.935606511428572

 $00:05:35.620 \rightarrow 00:05:38.740$ possibly adapted to their special contexts.

NOTE Confidence: 0.935606511428572

 $00{:}05{:}38{.}740 \dashrightarrow 00{:}05{:}41{.}106$ So that's an example of the kind

NOTE Confidence: 0.935606511428572

 $00:05:41.106 \rightarrow 00:05:42.798$ of global oncology work that we're

NOTE Confidence: 0.935606511428572

00:05:42.798 --> 00:05:44.390 doing here at Yale right now,

NOTE Confidence: 0.9125475906666667

 $00:05:44.880 \longrightarrow 00:05:46.404$ which brings us to

NOTE Confidence: 0.9125475906666667

 $00{:}05{:}46{.}404 \dashrightarrow 00{:}05{:}49{.}313$ that other piece that you mentioned in

NOTE Confidence: 0.9125475906666667

 $00:05:49.313 \rightarrow 00:05:51.529$ passing about implementation science.

- NOTE Confidence: 0.9125475906666667
- $00{:}05{:}51{.}530 \dashrightarrow 00{:}05{:}53{.}706$ So can you talk a little bit more
- NOTE Confidence: 0.9125475906666667
- $00:05:53.706 \longrightarrow 00:05:55.134$ about how exactly implementation
- NOTE Confidence: 0.9125475906666667
- $00:05:55.134 \rightarrow 00:05:57.570$ science works and how it might
- NOTE Confidence: 0.9125475906666667
- $00{:}05{:}57{.}570 \dashrightarrow 00{:}05{:}59{.}942$ be applied to questions like you
- NOTE Confidence: 0.9125475906666667
- $00{:}05{:}59{.}942 \dashrightarrow 00{:}06{:}02{.}186$ mentioned in terms of cervical cancer
- NOTE Confidence: 0.9125475906666667
- $00:06:02.190 \rightarrow 00:06:04.980$ prevention in the global context?
- NOTE Confidence: 0.70488836
- $00:06:06.420 \longrightarrow 00:06:08.466$ That's a great question.
- NOTE Confidence: 0.70488836
- $00:06:08.470 \rightarrow 00:06:12.550$ So implementation science is say compared
- NOTE Confidence: 0.70488836
- $00{:}06{:}12.550 \dashrightarrow 00{:}06{:}15.270$ to Biostatistics and epidemiology,
- NOTE Confidence: 0.70488836
- $00:06:15.270 \longrightarrow 00:06:16.678$ a relatively new field.
- NOTE Confidence: 0.70488836
- $00{:}06{:}16.678 \dashrightarrow 00{:}06{:}19.157$ It's one that I've really jumped into
- NOTE Confidence: 0.70488836
- $00{:}06{:}19.157 \dashrightarrow 00{:}06{:}21.250$ over the past five or more years,
- NOTE Confidence: 0.70488836
- $00:06:21.250 \rightarrow 00:06:23.861$ especially since I've come to Yale and
- NOTE Confidence: 0.70488836
- $00{:}06{:}23.861 \dashrightarrow 00{:}06{:}27.186$ it being the focus of our center
- NOTE Confidence: 0.70488836
- $00:06:27.186 \rightarrow 00:06:29.311$ here along with many investigators
- NOTE Confidence: 0.70488836

 $00:06:29.385 \longrightarrow 00:06:31.713$ at the medical school and the

NOTE Confidence: 0.70488836

00:06:31.713 --> 00:06:33.688 Yale New Haven Hospital system,

NOTE Confidence: 0.70488836

00:06:33.688 --> 00:06:36.614 the School of Public Health and elsewhere.

NOTE Confidence: 0.70488836

 $00:06:36.620 \longrightarrow 00:06:41.484$ And it's literally the science of

NOTE Confidence: 0.70488836

 $00:06:41.484 \rightarrow 00:06:44.640$ implementing evidence based interventions.

NOTE Confidence: 0.70488836

 $00{:}06{:}44{.}640 \dashrightarrow 00{:}06{:}48{.}176$ So for example, if we want to continue

NOTE Confidence: 0.70488836

00:06:48.176 --> 00:06:51.140 on talking about cervical cancer,

NOTE Confidence: 0.70488836

 $00:06:51.140 \longrightarrow 00:06:54.428$ we know that having regular pap

NOTE Confidence: 0.70488836

 $00{:}06{:}54.428 \dashrightarrow 00{:}06{:}57.200$ smears for women starting

NOTE Confidence: 0.70488836

 $00{:}06{:}57{.}200 \dashrightarrow 00{:}07{:}00{.}720$ say when they're 18 or so and going

NOTE Confidence: 0.70488836

 $00:07:00.720 \longrightarrow 00:07:03.529$ into maybe age 50 or

NOTE Confidence: 0.70488836

 $00{:}07{:}03.529 \dashrightarrow 00{:}07{:}06.085$ 60 and then treating those women

NOTE Confidence: 0.70488836

 $00{:}07{:}06.085 \dashrightarrow 00{:}07{:}07{.}833$ who have precance rous lesions

NOTE Confidence: 0.70488836

00:07:07.840 --> 00:07:11.325 that appear on the PAP smears is

NOTE Confidence: 0.70488836

 $00:07:11.325 \rightarrow 00:07:13.545$ extremely effective in preventing

NOTE Confidence: 0.70488836

 $00:07:13.545 \dashrightarrow 00:07:15.765$ cervical cancer from developing.

- NOTE Confidence: 0.70488836
- $00:07:15.770 \longrightarrow 00:07:17.570$ And so the question is,

 $00:07:17.570 \longrightarrow 00:07:19.646$ say in Mexico or in Nepal,

NOTE Confidence: 0.70488836

00:07:19.650 --> 00:07:21.648 which are two places we're working,

NOTE Confidence: 0.70488836

 $00:07:21.650 \longrightarrow 00:07:23.838$ why isn't this happening?

NOTE Confidence: 0.70488836

 $00:07:23.838 \rightarrow 00:07:27.460$ So implementation science will start out by

NOTE Confidence: 0.871959477

 $00:07:29.780 \longrightarrow 00:07:32.004$ distributing surveys across the

NOTE Confidence: 0.871959477

 $00:07:32.004 \rightarrow 00:07:35.340$ spectrum of what we call stakeholders.

NOTE Confidence: 0.871959477

 $00:07:35.340 \longrightarrow 00:07:37.440$ So stakeholders aren't just

NOTE Confidence: 0.871959477

 $00:07:37.440 \longrightarrow 00:07:39.540$ the clients or patients,

NOTE Confidence: 0.871959477

 $00:07:39.540 \longrightarrow 00:07:40.992$ they're also the providers,

NOTE Confidence: 0.871959477

 $00{:}07{:}40.992 \dashrightarrow 00{:}07{:}43.686$ which could be the providers who are

NOTE Confidence: 0.871959477

 $00{:}07{:}43.686$ --> $00{:}07{:}45.190$ interacting one-on-one with women.

NOTE Confidence: 0.871959477

 $00{:}07{:}45{.}190 \dashrightarrow 00{:}07{:}47{.}640$ They could be with other providers who

NOTE Confidence: 0.871959477

 $00{:}07{:}47.707 \dashrightarrow 00{:}07{:}49.877$ are scheduling women to come in for

NOTE Confidence: 0.871959477

00:07:49.877 --> 00:07:52.087 screening and then come back

 $00:07:52.087 \rightarrow 00:07:54.309$ for those women who have abnormal screens,

NOTE Confidence: 0.871959477

 $00{:}07{:}54.309 \dashrightarrow 00{:}07{:}57.032$ they can be the providers who are

NOTE Confidence: 0.871959477

 $00:07:57.032 \rightarrow 00:07:58.979$ actually treating abnormal screens.

 $00:08:01.450 \longrightarrow 00:08:03.613$ They could be people on the social

NOTE Confidence: 0.871959477

 $00:08:03.613 \rightarrow 00:08:05.970$ networks of women such as their partners,

NOTE Confidence: 0.871959477

 $00:08:05.970 \longrightarrow 00:08:07.275$ their family members,

NOTE Confidence: 0.871959477

 $00{:}08{:}07{.}275 \dashrightarrow 00{:}08{:}09{.}015$ their neighbors and coworkers.

NOTE Confidence: 0.871959477

 $00:08:09.020 \longrightarrow 00:08:10.934$ They could be people who are

NOTE Confidence: 0.871959477

 $00:08:10.934 \rightarrow 00:08:12.740$ in the ministries of health,

NOTE Confidence: 0.871959477

 $00{:}08{:}12.740 \dashrightarrow 00{:}08{:}14.645$ who are actually making decisions

NOTE Confidence: 0.871959477

 $00:08:14.645 \longrightarrow 00:08:16.550$ about policies and budget and

NOTE Confidence: 0.871959477

 $00{:}08{:}16.614 \dashrightarrow 00{:}08{:}18.828$ how much to allocate to different

NOTE Confidence: 0.871959477

 $00{:}08{:}18.828 \dashrightarrow 00{:}08{:}20.790$ aspects of their healthcare system.

NOTE Confidence: 0.871959477

 $00:08:20.790 \dashrightarrow 00:08:23.768$ And it can be politicians and what

NOTE Confidence: 0.871959477

00:08:23.768 --> 00:08:25.682 we find around the world with

NOTE Confidence: 0.871959477

 $00{:}08{:}25.682 \dashrightarrow 00{:}08{:}27.894$ respect to cervical cancer as well

 $00:08:27.894 \longrightarrow 00:08:29.774$ as many other health issues

NOTE Confidence: 0.871959477

 $00{:}08{:}29{.}780 \dashrightarrow 00{:}08{:}31{.}885$ that are preventable and prevented

NOTE Confidence: 0.871959477

 $00{:}08{:}31{.}885 \dashrightarrow 00{:}08{:}34{.}921$ in the United States and other high

NOTE Confidence: 0.871959477

 $00:08:34.921 \rightarrow 00:08:37.061$ income countries is that usually

NOTE Confidence: 0.871959477

 $00{:}08{:}37{.}061 \dashrightarrow 00{:}08{:}39{.}350$ the World Health Organization,

NOTE Confidence: 0.871959477

 $00:08:39.350 \longrightarrow 00:08:42.175$ which is the international body

NOTE Confidence: 0.871959477

 $00{:}08{:}42.175 \dashrightarrow 00{:}08{:}45.000$ that considers global health issues

NOTE Confidence: 0.871959477

 $00:08:45.088 \longrightarrow 00:08:47.446$ a very major role they play,

NOTE Confidence: 0.871959477

 $00:08:47.450 \rightarrow 00:08:50.888$ is also in making policy recommendations.

NOTE Confidence: 0.871959477

 $00{:}08{:}50{.}890 \dashrightarrow 00{:}08{:}53{.}500$ So the World Health Organization has

NOTE Confidence: 0.871959477

 $00:08:53.500 \rightarrow 00:08:56.030$ policy recommendations for the prevention,

NOTE Confidence: 0.871959477

 $00:08:56.030 \dashrightarrow 00:08:58.038$ screening, and treatment of

NOTE Confidence: 0.871959477

 $00{:}08{:}58{.}038 \dashrightarrow 00{:}09{:}00{.}046$ cervical cancer and most

NOTE Confidence: 0.871959477

 $00{:}09{:}00{.}050 \dashrightarrow 00{:}09{:}02{.}756$ countries around the world adopt those

NOTE Confidence: 0.871959477

 $00{:}09{:}02.756 \dashrightarrow 00{:}09{:}04.980$ recommendations so that we find,

NOTE Confidence: 0.871959477

00:09:04.980 --> 00:09:08.274 let's say, in our work in Mexico and Nepal,

- NOTE Confidence: 0.871959477
- $00{:}09{:}08.280 \dashrightarrow 00{:}09{:}09{.}717$ in the books,
- NOTE Confidence: 0.871959477
- $00{:}09{:}09{.}717 \dashrightarrow 00{:}09{:}13.420$ the policies are exactly what they should be.
- NOTE Confidence: 0.871959477
- $00:09:13.420 \longrightarrow 00:09:15.862$ So the problem is not necessarily
- NOTE Confidence: 0.871959477
- $00:09:15.862 \rightarrow 00:09:18.873$ that we need to convince policymakers
- NOTE Confidence: 0.871959477
- $00:09:18.873 \longrightarrow 00:09:20.817$ to change policy.
- NOTE Confidence: 0.871959477
- $00{:}09{:}20.820 \dashrightarrow 00{:}09{:}22.640$ That might not be true for every
- NOTE Confidence: 0.871959477
- 00:09:22.640 --> 00:09:25.008 health issue, but it's quite common,
- NOTE Confidence: 0.871959477
- $00:09:25.008 \dashrightarrow 00:09:27.780$ so it's further downstream from policy.
- NOTE Confidence: 0.871959477
- $00:09:27.780 \longrightarrow 00:09:30.279$ So then we have to figure out
- NOTE Confidence: 0.871959477
- $00:09:30.280 \longrightarrow 00:09:33.549$ we can start maybe from the bottom
- NOTE Confidence: 0.871959477
- $00:09:33.549 \longrightarrow 00:09:36.320$ up and speak to
- NOTE Confidence: 0.871959477
- $00{:}09{:}36{.}320 \dashrightarrow 00{:}09{:}38{.}518$ women who are coming into clinics who
- NOTE Confidence: 0.871959477
- $00:09:38.518 \rightarrow 00:09:40.607$ are eligible for screening find out
- NOTE Confidence: 0.871959477
- $00:09:40.607 \rightarrow 00:09:42.779$ what they know about cervical cancer,
- NOTE Confidence: 0.871959477
- $00:09:42.780 \longrightarrow 00:09:45.320$ what their barriers might be
- NOTE Confidence: 0.871959477

 $00:09:45.320 \rightarrow 00:09:47.352$ to seeking out screening,

NOTE Confidence: 0.871959477

 $00{:}09{:}47.360 \dashrightarrow 00{:}09{:}49.754$ and then for those who have

NOTE Confidence: 0.871959477

00:09:49.754 -> 00:09:51.350 received an abnormal screen,

NOTE Confidence: 0.871959477

 $00:09:51.350 \rightarrow 00:09:53.898$ their barriers to following up with that.

NOTE Confidence: 0.871959477

 $00:09:53.900 \dashrightarrow 00:09:56.469$ And then we can talk to providers

NOTE Confidence: 0.871959477

 $00{:}09{:}56{.}469 \dashrightarrow 00{:}09{:}59{.}520$ at the different levels to find out

NOTE Confidence: 0.871959477

 $00{:}09{:}59{.}520 \dashrightarrow 00{:}10{:}01{.}865$ why they're not following national

NOTE Confidence: 0.871959477

 $00{:}10{:}01.865 \dashrightarrow 00{:}10{:}03.807$ guidelines and reasons can be

NOTE Confidence: 0.871959477

 $00{:}10{:}03{.}810$ --> $00{:}10{:}05{.}861$ things like they don't have the time NOTE Confidence: 0.871959477

 $00:10:05.861 \rightarrow 00:10:08.129$ with all their other responsibilities,

NOTE Confidence: 0.871959477

 $00{:}10{:}08{.}130 \dashrightarrow 00{:}10{:}10{.}530$ they don't have the supplies that

NOTE Confidence: 0.871959477

 $00:10:10.530 \longrightarrow 00:10:13.153$ are needed to actually do the

NOTE Confidence: 0.871959477

 $00:10:13.153 \rightarrow 00:10:14.569$ screenings and treatments,

NOTE Confidence: 0.871959477

 $00{:}10{:}14.570 \dashrightarrow 00{:}10{:}17.050$ they haven't properly been trained

NOTE Confidence: 0.871959477

 $00:10:17.050 \rightarrow 00:10:19.957$ and they don't feel comfortable doing

NOTE Confidence: 0.871959477

 $00:10:19.957 \rightarrow 00:10:22.725$ them or their stigma is also a big

 $00:10:22.725 \rightarrow 00:10:25.625$ issue in cancer for both men and women.

NOTE Confidence: 0.871959477

 $00{:}10{:}25.630 \dashrightarrow 00{:}10{:}28.759$ And both clients and patients as well

NOTE Confidence: 0.871959477

 $00:10:28.759 \rightarrow 00:10:31.593$ as providers can have stigma where

NOTE Confidence: 0.871959477

 $00:10:31.593 \rightarrow 00:10:34.407$ they want to avoid talking about

NOTE Confidence: 0.871959477

00:10:34.410 --> 00:10:38.268 cancer and screening, screening,

NOTE Confidence: 0.871959477

 $00:10:38.268 \rightarrow 00:10:40.420$ preventing and treating cancer.

NOTE Confidence: 0.871959477

 $00:10:40.420 \longrightarrow 00:10:42.028$ So implementation scientists will

NOTE Confidence: 0.871959477

 $00:10:42.028 \longrightarrow 00:10:45.120$ try to figure out what are the

NOTE Confidence: 0.871959477

 $00:10:45.120 \longrightarrow 00:10:47.563$ primary barriers at

NOTE Confidence: 0.871959477

 $00:10:47.563 \rightarrow 00:10:49.739$ these different levels?

NOTE Confidence: 0.871959477

 $00:10:49.740 \longrightarrow 00:10:52.308$ And then also what are the

NOTE Confidence: 0.871959477

00:10:52.308 --> 00:10:53.592 facilitators because oftentimes,

NOTE Confidence: 0.871959477

 $00:10:53.600 \rightarrow 00:10:55.550$ say in the clinics we're working

NOTE Confidence: 0.871959477

 $00{:}10{:}55{.}550 \dashrightarrow 00{:}10{:}57{.}380$ with in Nepal and Mexico,

NOTE Confidence: 0.871959477

 $00{:}10{:}57{.}380 \dashrightarrow 00{:}10{:}59{.}956$ it's not like there's no screening going on.

 $00:10:59.960 \rightarrow 00:11:01.700$ There is some screening going on,

NOTE Confidence: 0.8499701

 $00{:}11{:}01{.}700 \dashrightarrow 00{:}11{:}03{.}584$ but it's not adequate.

NOTE Confidence: 0.8499701

00:11:03.584 --> 00:11:05.468 It's below the ideal

NOTE Confidence: 0.8499701

 $00{:}11{:}05{.}470 \dashrightarrow 00{:}11{:}07{.}762$ percentages, which may be is something

NOTE Confidence: 0.8499701

 $00{:}11{:}07.762 \dashrightarrow 00{:}11{:}10.726$ like 80% of women who are within the

NOTE Confidence: 0.8499701

00:11:10.726 --> 00:11:13.036 eligible age range should be screened

NOTE Confidence: 0.8499701

 $00:11:13.036 \rightarrow 00:11:15.724$ who have had a previous normal screen,

NOTE Confidence: 0.8499701

 $00:11:15.730 \longrightarrow 00:11:18.130$ say every three years,

NOTE Confidence: 0.8499701

 $00{:}11{:}18{.}130 \dashrightarrow 00{:}11{:}21{.}330$ and maybe 50% of women are

NOTE Confidence: 0.8499701

 $00:11:21.330 \rightarrow 00:11:23.330$ being screened rather than say,

NOTE Confidence: 0.8499701

 $00{:}11{:}23{.}330 \dashrightarrow 00{:}11{:}24{.}350$ the goal might be

NOTE Confidence: 0.8499701

 $00:11:24.350 \longrightarrow 00:11:25.698$ of course we'd like 100%,

NOTE Confidence: 0.8499701

 $00:11:25.698 \rightarrow 00:11:28.650$ but maybe a more realistic goal might be 90.

NOTE Confidence: 0.8499701

 $00:11:28.650 \longrightarrow 00:11:30.330$ So we have a long way to

NOTE Confidence: 0.8499701

 $00:11:30.330 \longrightarrow 00:11:32.347$ go to get that other 40%,

NOTE Confidence: 0.8499701

 $00:11:32.347 \longrightarrow 00:11:35.449$ but we can still learn about

- NOTE Confidence: 0.8499701
- $00:11:35.450 \longrightarrow 00:11:38.095$ What's facilitating the 50% and
- NOTE Confidence: 0.8499701
- 00:11:38.095 --> 00:11:41.500 then how can we leverage those
- NOTE Confidence: 0.8499701
- $00:11:41.500 \rightarrow 00:11:44.805$ facilitators to improve the program.
- NOTE Confidence: 0.8499701
- $00:11:44.810 \rightarrow 00:11:47.120$ Then once we collect all this information,
- NOTE Confidence: 0.8499701
- $00:11:47.120 \longrightarrow 00:11:49.538$ we might design a multi level,
- NOTE Confidence: 0.8499701
- $00{:}11{:}49{.}538 \dashrightarrow 00{:}11{:}52{.}554$ meaning that we might want to be
- NOTE Confidence: 0.8499701
- 00:11:52.554 --> 00:11:54.888 doing things with providers,
- NOTE Confidence: 0.8499701
- $00:11:54.888 \rightarrow 00:11:57.160$ with the facility administrators,
- NOTE Confidence: 0.8499701
- $00{:}11{:}57{.}160 \dashrightarrow 00{:}12{:}00{.}016$ with the clients and even possibly people
- NOTE Confidence: 0.8499701
- $00{:}12{:}00{.}016 \dashrightarrow 00{:}12{:}02{.}464$ in their social networks to address
- NOTE Confidence: 0.8499701
- $00:12:02.464 \longrightarrow 00:12:05.686$ the issues that have come up and then
- NOTE Confidence: 0.8499701
- $00{:}12{:}05{.}686 \dashrightarrow 00{:}12{:}08{.}927$ design an intervention and test
- NOTE Confidence: 0.8499701
- $00{:}12{:}08{.}927 \dashrightarrow 00{:}12{:}12{.}805$ it in the facilities to see if it worked.
- NOTE Confidence: 0.8499701
- 00:12:12.810 --> 00:12:14.890 Did it improve screening rates?
- NOTE Confidence: 0.8499701
- 00:12:14.890 --> 00:12:16.850 Did it improve follow-up rates?
- NOTE Confidence: 0.8499701

- $00:12:16.850 \longrightarrow 00:12:18.590$ Was it cost effective,
- NOTE Confidence: 0.8499701
- $00:12:18.590 \longrightarrow 00:12:20.330$ but is it sustainable?
- NOTE Confidence: 0.8499701
- $00:12:20.330 \longrightarrow 00:12:22.088$ And then go on from there.
- NOTE Confidence: 0.8499701
- $00{:}12{:}22.090 \dashrightarrow 00{:}12{:}24.505$ So these are the kinds of things
- NOTE Confidence: 0.8499701
- 00:12:24.505 --> 00:12:25.540 implementation scientists do.
- NOTE Confidence: 0.8499701
- $00{:}12{:}25{.}540 \dashrightarrow 00{:}12{:}27{.}946$ We're not coming up with new
- NOTE Confidence: 0.8499701
- $00{:}12{:}27.946 \dashrightarrow 00{:}12{:}29.550$ treatments or new cures.
- NOTE Confidence: 0.8499701
- $00:12:29.550 \rightarrow 00:12:31.884$ There's many causes of cancer where
- NOTE Confidence: 0.8499701
- $00{:}12{:}31{.}884 \dashrightarrow 00{:}12{:}34{.}450$ all the materials are there to
- NOTE Confidence: 0.8499701
- $00:12:34.450 \longrightarrow 00:12:36.318$ drastically reduce cancer rates.
- NOTE Confidence: 0.8499701
- $00:12:36.320 \longrightarrow 00:12:38.728$ And the challenge for us
- NOTE Confidence: 0.8499701
- $00:12:38.728 \longrightarrow 00:12:40.792$ as public health professionals is
- NOTE Confidence: 0.8499701
- $00:12:40.792 \longrightarrow 00:12:43.197$ to get those interventions out,
- NOTE Confidence: 0.8499701
- $00{:}12{:}43.200 \dashrightarrow 00{:}12{:}46.434$ to adapt them appropriately to different
- NOTE Confidence: 0.8499701
- $00{:}12{:}46{.}434 \dashrightarrow 00{:}12{:}48{.}590$ cultural contexts and different
- NOTE Confidence: 0.8499701
- $00:12:48.665 \rightarrow 00:12:51.360$ health systems and get them out.

- NOTE Confidence: 0.8499701
- $00:12:51.360 \longrightarrow 00:12:53.538$ So that's what implementation science is.

00:12:53.540 - 00:12:55.150 Does that make sense to you anyways?

NOTE Confidence: 0.84569501

00:12:55.240 --> 00:12:58.096 Yeah, the question though,

NOTE Confidence: 0.84569501

 $00:12:58.100 \longrightarrow 00:13:00.150$ I think, Donna, is that

NOTE Confidence: 0.84569501

 $00:13:00.150 \longrightarrow 00:13:01.869$ in many cases,

NOTE Confidence: 0.84569501

00:13:01.869 --> 00:13:03.981 this is multifactorial, right?

NOTE Confidence: 0.84569501

 $00:13:03.981 \longrightarrow 00:13:06.327$ There's an element of stigma,

NOTE Confidence: 0.84569501

 $00:13:06.330 \longrightarrow 00:13:07.710$ there's an element of cost,

NOTE Confidence: 0.84569501

 $00{:}13{:}07{.}710 \dashrightarrow 00{:}13{:}09{.}630$ there's an element of time.

NOTE Confidence: 0.84569501

 $00{:}13{:}09{.}630 \dashrightarrow 00{:}13{:}12{.}462$ There's multiple factors that go into

NOTE Confidence: 0.84569501

 $00:13:12.462 \longrightarrow 00:13:15.942$ this and kind of putting that together

NOTE Confidence: 0.84569501

 $00{:}13{:}15{.}942 \dashrightarrow 00{:}13{:}19{.}435$ in a cultural context to really try

NOTE Confidence: 0.84569501

 $00:13:19.522 \rightarrow 00:13:23.140$ to design interventions that would be

NOTE Confidence: 0.84569501

 $00:13:23.140 \longrightarrow 00:13:25.874$ effective in increasing

NOTE Confidence: 0.84569501

 $00:13:25.874 \rightarrow 00:13:28.184$ screening or other preventative measures.

- 00:13:28.190 --> 00:13:29.219 So, for example,
- NOTE Confidence: 0.84569501
- $00{:}13{:}29{.}219 \dashrightarrow 00{:}13{:}31{.}277$ when we talk about cervical cancer.
- NOTE Confidence: 0.84569501
- $00:13:31.280 \longrightarrow 00:13:33.842$ Another one that is often missing
- NOTE Confidence: 0.84569501
- $00:13:33.842 \dashrightarrow 00:13:36.560$ in the global context is vaccines.
- NOTE Confidence: 0.84569501
- $00:13:36.560 \longrightarrow 00:13:38.745$ It's something that often is
- NOTE Confidence: 0.84569501
- 00:13:38.745 --> 00:13:40.493 a little bit challenging,
- NOTE Confidence: 0.84569501
- $00:13:40.500 \longrightarrow 00:13:42.420$ So what I'd like to do is pick
- NOTE Confidence: 0.84569501
- $00:13:42.420 \longrightarrow 00:13:44.199$ up the conversation there.
- NOTE Confidence: 0.84569501
- $00{:}13{:}44{.}200 \dashrightarrow 00{:}13{:}46{.}408$ But first we need to take a short
- NOTE Confidence: 0.84569501
- $00{:}13{:}46{.}408 \dashrightarrow 00{:}13{:}48{.}120$ break for a medical minute.
- NOTE Confidence: 0.84569501
- $00:13:48.120 \rightarrow 00:13:50.115$ So please stay tuned to learn more
- NOTE Confidence: 0.84569501
- $00{:}13{:}50{.}115$ --> $00{:}13{:}52{.}042$ about global health and oncology with
- NOTE Confidence: 0.84569501
- 00:13:52.042 --> 00:13:53.727 my guest doctor Donna Spiegelman.
- NOTE Confidence: 0.787939498
- $00:13:54.430 \longrightarrow 00:13:56.440$ Funding for Yale Cancer Answers
- NOTE Confidence: 0.787939498
- 00:13:56.440 --> 00:13:58.450 comes from Smilow Cancer Hospital,
- NOTE Confidence: 0.787939498
- $00:13:58.450 \longrightarrow 00:14:00.106$ where their one-of-a-kind

- NOTE Confidence: 0.787939498
- 00:14:00.106 --> 00:14:01.210 Sexuality, intimacy,
- NOTE Confidence: 0.787939498
- $00{:}14{:}01{.}210 \dashrightarrow 00{:}14{:}03{.}610$ and menopause program combines medical
- NOTE Confidence: 0.787939498
- $00:14:03.610 \rightarrow 00:14:05.050$ and psychological interventions
- NOTE Confidence: 0.787939498
- $00{:}14{:}05{.}050 \dashrightarrow 00{:}14{:}07{.}480$ for women who experience sexual
- NOTE Confidence: 0.787939498
- $00:14:07.480 \longrightarrow 00:14:08.890$ dys function after cancer.
- NOTE Confidence: 0.787939498
- 00:14:08.890 --> 00:14:12.970 Smilowcancerhospital.org.
- NOTE Confidence: 0.787939498
- $00{:}14{:}12{.}970 \dashrightarrow 00{:}14{:}15{.}455$ There are over 16.9 million
- NOTE Confidence: 0.787939498
- $00:14:15.455 \longrightarrow 00:14:18.401$ cancer survivors in the US and
- NOTE Confidence: 0.787939498
- $00:14:18.401 \longrightarrow 00:14:20.322$ over 240,000 here in Connecticut.
- NOTE Confidence: 0.787939498
- 00:14:20.322 --> 00:14:21.874 Completing treatment for cancer
- NOTE Confidence: 0.787939498
- $00:14:21.874 \longrightarrow 00:14:24.149$ is a very exciting milestone,
- NOTE Confidence: 0.787939498
- 00:14:24.150 --> 00:14:26.118 but cancer and its treatment can
- NOTE Confidence: 0.787939498
- $00:14:26.118 \longrightarrow 00:14:28.210$ be a life changing experience.
- NOTE Confidence: 0.787939498
- $00{:}14{:}28{.}210 \dashrightarrow 00{:}14{:}30{.}230$ The return to normal activities
- NOTE Confidence: 0.787939498
- $00{:}14{:}30{.}230 \dashrightarrow 00{:}14{:}32{.}250$ and relationships may be difficult
- NOTE Confidence: 0.787939498

 $00:14:32.313 \rightarrow 00:14:34.088$ and cancer survivors may face

NOTE Confidence: 0.787939498

00:14:34.088 --> 00:14:36.355 other long term side effects of

NOTE Confidence: 0.787939498

00:14:36.355 --> 00:14:38.067 cancer including heart problems,

NOTE Confidence: 0.787939498

 $00:14:38.070 \rightarrow 00:14:39.762$ osteoporosis, fertility issues,

NOTE Confidence: 0.787939498

 $00{:}14{:}39{.}762 \dashrightarrow 00{:}14{:}43{.}710$ and an increased risk of second cancers.

NOTE Confidence: 0.787939498

 $00{:}14{:}43.710 \dashrightarrow 00{:}14{:}46.160$ Resources for cancer survivors are

NOTE Confidence: 0.787939498

 $00:14:46.160 \longrightarrow 00:14:48.120$ available at federally designated

NOTE Confidence: 0.787939498

 $00:14:48.120 \rightarrow 00:14:49.569$ Comprehensive cancer centers,

NOTE Confidence: 0.787939498

00:14:49.570 --> 00:14:51.646 such as Yale Cancer Center

NOTE Confidence: 0.787939498

00:14:51.646 --> 00:14:53.730 and Smilow Cancer Hospital

NOTE Confidence: 0.787939498

 $00:14:53.730 \rightarrow 00:14:55.730$ to keep cancer survivors well

NOTE Confidence: 0.787939498

 $00:14:55.730 \longrightarrow 00:14:57.730$ and focused on healthy living.

NOTE Confidence: 0.787939498

00:14:57.730 --> 00:15:00.040 The Smilow Cancer Hospital Survivorship

NOTE Confidence: 0.787939498

00:15:00.040 --> 00:15:02.350 Clinic focuses on providing guidance

NOTE Confidence: 0.787939498

 $00:15:02.411 \longrightarrow 00:15:04.595$ and direction to empower survivors to

NOTE Confidence: 0.787939498

 $00:15:04.595 \rightarrow 00:15:06.910$ take steps to maximize their health,

- NOTE Confidence: 0.787939498
- $00{:}15{:}06{.}910 \dashrightarrow 00{:}15{:}08{.}314$ quality of life,
- NOTE Confidence: 0.787939498
- $00:15:08.314 \rightarrow 00:15:09.250$ and longevity.
- NOTE Confidence: 0.787939498
- $00{:}15{:}09{.}250 \dashrightarrow 00{:}15{:}12{.}170$ More information is available at
- NOTE Confidence: 0.787939498
- 00:15:12.170 --> 00:15:13.986 yalecancercenter.org. You're listening to
- NOTE Confidence: 0.787939498
- 00:15:13.986 --> 00:15:15.348 Connecticut public radio.
- NOTE Confidence: 0.8355871966666667
- $00{:}15{:}16.030 \dashrightarrow 00{:}15{:}18.178$ Welcome back to Yale Cancer Answers.
- NOTE Confidence: 0.8355871966666667
- $00:15:18.180 \rightarrow 00:15:20.082$ This is doctor Anees Chagpar and
- NOTE Confidence: 0.8355871966666667
- 00:15:20.082 --> 00:15:21.939 I'm joined tonight by my guest,
- NOTE Confidence: 0.8355871966666667
- 00:15:21.940 --> 00:15:23.371 Doctor Donna Spiegelman.
- NOTE Confidence: 0.8355871966666667
- $00:15:23.371 \rightarrow 00:15:26.233$ We're talking about global oncology care.
- NOTE Confidence: 0.8355871966666667
- $00:15:26.240 \rightarrow 00:15:27.580$ And right before the break,
- NOTE Confidence: 0.8355871966666667
- $00{:}15{:}27{.}580 \dashrightarrow 00{:}15{:}30{.}124$ Donna was telling us about an
- NOTE Confidence: 0.8355871966666667
- $00:15:30.124 \rightarrow 00:15:31.820$ example of cervical cancer,
- NOTE Confidence: 0.8355871966666667
- $00{:}15{:}31.820 \dashrightarrow 00{:}15{:}34.292$ which while relatively rare here in
- NOTE Confidence: 0.8355871966666667
- $00{:}15{:}34{.}292 \dashrightarrow 00{:}15{:}37{.}271$ the US is relatively common in many
- NOTE Confidence: 0.8355871966666667

 $00:15:37.271 \rightarrow 00:15:39.785$ low to middle income countries like

NOTE Confidence: 0.8355871966666667

 $00:15:39.785 \rightarrow 00:15:42.706$ Mexico and Nepal where she has projects.

NOTE Confidence: 0.8355871966666667

 $00:15:42.710 \longrightarrow 00:15:44.972$ She was also talking to us

NOTE Confidence: 0.8355871966666667

 $00:15:44.972 \rightarrow 00:15:46.103$ about implementation science.

NOTE Confidence: 0.8355871966666667

 $00:15:46.110 \longrightarrow 00:15:49.757$ This idea that we can translate knowledge,

NOTE Confidence: 0.8355871966666667

 $00:15:49.760 \rightarrow 00:15:52.756$ so we know for example that implementation

NOTE Confidence: 0.8355871966666667

 $00:15:52.756 \longrightarrow 00:15:55.248$ of vaccines and pap smears has

NOTE Confidence: 0.8355871966666667

 $00:15:55.248 \rightarrow 00:15:57.504$ been pretty effective here in the

NOTE Confidence: 0.8355871966666667

00:15:57.504 --> 00:16:00.179 US in preventing cervical cancer.

NOTE Confidence: 0.8355871966666667

 $00:16:00.180 \rightarrow 00:16:02.777$ So why isn't that happening in other

NOTE Confidence: 0.8355871966666667

 $00:16:02.777 \rightarrow 00:16:05.229$ low to middle income countries?

NOTE Confidence: 0.8355871966666667

00:16:05.230 --> 00:16:06.680 And Donna before the break,

NOTE Confidence: 0.8355871966666667

00:16:06.680 --> 00:16:08.766 as I was saying, it's really sounds

NOTE Confidence: 0.8355871966666667

 $00:16:08.766 \longrightarrow 00:16:10.660$ like this is multifactorial.

NOTE Confidence: 0.8355871966666667

 $00:16:10.660 \rightarrow 00:16:13.940$ So there are issues with regards to time,

NOTE Confidence: 0.8355871966666667

 $00:16:13.940 \rightarrow 00:16:16.544$ there are issues with regards to cost.

- NOTE Confidence: 0.8355871966666667
- $00:16:16.550 \longrightarrow 00:16:19.280$ There are issues with regards to
- NOTE Confidence: 0.8355871966666667
- $00:16:19.280 \longrightarrow 00:16:20.190$ cultural barriers.
- NOTE Confidence: 0.8355871966666667
- $00:16:20.190 \longrightarrow 00:16:21.710$ There may be stigma,
- NOTE Confidence: 0.8355871966666667
- $00{:}16{:}21.710 \dashrightarrow 00{:}16{:}24.074$ there may be
- NOTE Confidence: 0.8355871966666667
- $00{:}16{:}24.074 \dashrightarrow 00{:}16{:}26.034$ health care workforce issues,
- NOTE Confidence: 0.8355871966666667
- $00:16:26.034 \longrightarrow 00:16:28.962$ all of which play into this
- NOTE Confidence: 0.8355871966666667
- $00:16:28.962 \rightarrow 00:16:31.229$ very complicated puzzle.
- NOTE Confidence: 0.8355871966666667
- $00{:}16{:}31{.}230 \dashrightarrow 00{:}16{:}34{.}362$ So can you tell us a little bit more
- NOTE Confidence: 0.8355871966666667
- $00{:}16{:}34{.}362 \dashrightarrow 00{:}16{:}37{.}279$ about some of your projects in Mexico
- NOTE Confidence: 0.8355871966666667
- $00:16:37.279 \rightarrow 00:16:40.927$ and Nepal and what your results have been?
- NOTE Confidence: 0.8355871966666667
- $00:16:40.930 \longrightarrow 00:16:43.830$ What strategies you've
- NOTE Confidence: 0.8355871966666667
- 00:16:43.830 --> 00:16:46.730 tried to reduce cervical cancer?
- NOTE Confidence: 0.8355871966666667
- $00:16:46.730 \longrightarrow 00:16:48.026$ What's worked, what hasn't,
- NOTE Confidence: 0.8355871966666667
- $00:16:48.026 \rightarrow 00:16:49.970$ and what are your next steps?
- NOTE Confidence: 0.90948606
- $00:16:51.600 \rightarrow 00:16:53.500$ Thank you, Anees and I'd be
- NOTE Confidence: 0.90948606

- $00:16:53.500 \longrightarrow 00:16:55.400$ happy to share.
- NOTE Confidence: 0.6801824
- $00:16:55.400 \rightarrow 00:16:59.740$ So in Nepal where we're the furthest along,
- NOTE Confidence: 0.6801824
- $00:16:59.740 \longrightarrow 00:17:02.550$ we've been looking at barriers

 $00:17:02.550 \dashrightarrow 00:17:04.798$ and facilitators to screening.

NOTE Confidence: 0.6801824

 $00:17:04.800 \longrightarrow 00:17:07.068$ It turns out in many low

NOTE Confidence: 0.6801824

00:17:07.068 --> 00:17:08.580 and middle income countries,

NOTE Confidence: 0.6801824

 $00{:}17{:}08.580 \dashrightarrow 00{:}17{:}10.746$ Pap smears doesn't appear to be

NOTE Confidence: 0.6801824

 $00:17:10.746 \longrightarrow 00:17:12.980$ feasible as the way to screen.

NOTE Confidence: 0.6801824

00:17:12.980 --> 00:17:15.620 And there are some other methods for

NOTE Confidence: 0.6801824

00:17:15.620 --> 00:17:19.633 screening, including something called

NOTE Confidence: 0.6801824

 $00{:}17{:}19.633 \dashrightarrow 00{:}17{:}22.298$ visual inspection by acetic acid.

NOTE Confidence: 0.6801824

 $00:17:22.300 \longrightarrow 00:17:25.436$ IA where it's a very low tech

NOTE Confidence: 0.6801824

00:17:25.436 --> 00:17:28.514 way to screen where the women's

NOTE Confidence: 0.6801824

 $00{:}17{:}28.514 \dashrightarrow 00{:}17{:}31.949$ cervix is painted with a solution

NOTE Confidence: 0.6801824

 $00{:}17{:}31{.}950 \dashrightarrow 00{:}17{:}35{.}009$ of vinegar and then if there are

NOTE Confidence: 0.6801824

 $00:17:35.009 \rightarrow 00:17:37.340$ abnormal cells they turn white.

- NOTE Confidence: 0.6801824
- $00:17:37.340 \longrightarrow 00:17:39.748$ And then if those cells turn white,

 $00:17:39.750 \longrightarrow 00:17:41.712$ those cells can be removed right

NOTE Confidence: 0.6801824

 $00{:}17{:}41.712 \dashrightarrow 00{:}17{:}44.556$ then and there through either a heat

NOTE Confidence: 0.6801824

 $00{:}17{:}44.556 \dashrightarrow 00{:}17{:}46.666$ treatment or a freezing treatment.

NOTE Confidence: 0.6801824

 $00{:}17{:}46.670 \dashrightarrow 00{:}17{:}49.544$ And so that's called the test and

NOTE Confidence: 0.6801824

 $00{:}17{:}49{.}544 \dashrightarrow 00{:}17{:}52{.}310$ and treat and it's a very appealing

NOTE Confidence: 0.6801824

 $00{:}17{:}52{.}310 \dashrightarrow 00{:}17{:}56{.}065$ option because it doesn't involve

NOTE Confidence: 0.6801824

 $00{:}17{:}56.065 \dashrightarrow 00{:}17{:}59.315$ this series of appointments and

NOTE Confidence: 0.6801824

 $00{:}17{:}59{.}315 \dashrightarrow 00{:}18{:}03{.}099$ visits that happen to have to take place,

NOTE Confidence: 0.6801824

 $00:18:03.100 \rightarrow 00:18:04.368$ say with Pap smears.

NOTE Confidence: 0.908186979285714

 $00{:}18{:}04{.}380 \dashrightarrow 00{:}18{:}06{.}858$ And then there's another method that's

NOTE Confidence: 0.908186979285714

 $00{:}18{:}06.858 \dashrightarrow 00{:}18{:}09.580$ being promoted now that has to do with,

NOTE Confidence: 0.908186979285714

00:18:09.580 --> 00:18:12.196 as you've mentioned,

NOTE Confidence: 0.908186979285714

00:18:12.200 --> 00:18:13.958 I haven't quite gotten into it,

NOTE Confidence: 0.908186979285714

 $00{:}18{:}13{.}960 \dashrightarrow 00{:}18{:}17{.}020$ that a necessary cause of cervical cancer

- $00:18:17.020 \longrightarrow 00:18:20.258$ is infection with HPV,
- NOTE Confidence: 0.908186979285714
- $00:18:20.258 \rightarrow 00:18:22.330$ the human papilloma virus.
- $00:18:25.146 \longrightarrow 00:18:27.960$ And there's a vaccine that will
- NOTE Confidence: 0.908186979285714
- $00{:}18{:}28.050 \dashrightarrow 00{:}18{:}31.020$ eliminate infection to the HPV virus
- NOTE Confidence: 0.908186979285714
- $00{:}18{:}31{.}020 \dashrightarrow 00{:}18{:}34{.}706$ that's been found now to be effective
- NOTE Confidence: 0.908186979285714
- $00{:}18{:}34.706 \dashrightarrow 00{:}18{:}37.070$ in preventing cervical cancer.
- NOTE Confidence: 0.908186979285714
- 00:18:37.070 --> 00:18:39.296 And again, this is available widely
- NOTE Confidence: 0.908186979285714
- 00:18:39.296 --> 00:18:41.495 in the United States and barely
- NOTE Confidence: 0.908186979285714
- $00:18:41.495 \longrightarrow 00:18:43.439$ available at all in many other
- NOTE Confidence: 0.908186979285714
- $00:18:43.439 \longrightarrow 00:18:45.750$ low and middle income countries,
- NOTE Confidence: 0.908186979285714
- $00:18:45.750 \rightarrow 00:18:48.674$ including Nepal and Mexico.
- NOTE Confidence: 0.908186979285714
- $00{:}18{:}48.674 \dashrightarrow 00{:}18{:}52.329$ So back to the
- NOTE Confidence: 0.908186979285714
- 00:18:52.330 --> 00:18:53.334 HPV virus,
- NOTE Confidence: 0.908186979285714
- 00:18:53.334 --> 00:18:56.346 because it's a persistent
- NOTE Confidence: 0.908186979285714
- 00:18:56.346 --> 00:18:59.382 infection with this virus is necessary
- NOTE Confidence: 0.908186979285714
- $00{:}18{:}59{.}382 \dashrightarrow 00{:}19{:}01{.}817$ for cervical cancer to develop.
- NOTE Confidence: 0.908186979285714

 $00:19:01.820 \rightarrow 00:19:04.670$ Another approach that's been suggested is

NOTE Confidence: 0.908186979285714

 $00{:}19{:}04.670 \dashrightarrow 00{:}19{:}08.190$ first to test women gynecologically for

NOTE Confidence: 0.908186979285714

 $00:19:08.190 \rightarrow 00:19:11.256$ infection with certain subtypes of HPV,

NOTE Confidence: 0.908186979285714

 $00:19:11.260 \longrightarrow 00:19:13.720$ the 16 and 18 subtypes.

NOTE Confidence: 0.908186979285714

 $00{:}19{:}13.720 \dashrightarrow 00{:}19{:}15.750$ We're kind of used to these subtypes

NOTE Confidence: 0.908186979285714

 $00{:}19{:}15.750 \dashrightarrow 00{:}19{:}17.708$ of viruses now that we know about

NOTE Confidence: 0.908186979285714

 $00:19:17.710 \longrightarrow 00:19:22.350$ COVID-19 subtypes and if women have that

NOTE Confidence: 0.908186979285714

 $00:19:22.350 \longrightarrow 00:19:25.626$ viral infection then they can go

NOTE Confidence: 0.908186979285714

 $00{:}19{:}25.626 \dashrightarrow 00{:}19{:}29.465$ on to these further steps such as VIA

NOTE Confidence: 0.908186979285714

 $00{:}19{:}29{.}465 \dashrightarrow 00{:}19{:}32{.}977$ and that way it eliminates this

NOTE Confidence: 0.908186979285714

 $00{:}19{:}32{.}977 \dashrightarrow 00{:}19{:}35{.}112$ more invasive procedure and seems

NOTE Confidence: 0.908186979285714

 $00{:}19{:}35{.}112 \dashrightarrow 00{:}19{:}37{.}609$ to be more acceptable for women.

NOTE Confidence: 0.908186979285714

00:19:37.610 --> 00:19:38.987 So in Nepal,

NOTE Confidence: 0.908186979285714

 $00:19:38.987 \longrightarrow 00:19:41.741$ what we're doing right now is

NOTE Confidence: 0.908186979285714

 $00:19:41.741 \longrightarrow 00:19:44.170$ looking at the acceptability,

NOTE Confidence: 0.908186979285714

 $00:19:44.170 \longrightarrow 00:19:46.150$ appropriateness and feasibility

- NOTE Confidence: 0.908186979285714
- 00:19:46.150 --> 00:19:50.214 of an HPV approach to screening
- NOTE Confidence: 0.908186979285714
- 00:19:50.214 --> 00:19:52.657 versus the straight VIA
- NOTE Confidence: 0.908186979285714
- $00:19:52.657 \longrightarrow 00:19:54.892$ for every body and we don't
- NOTE Confidence: 0.908186979285714
- $00:19:54.892 \rightarrow 00:19:56.680$ have our results yet,
- NOTE Confidence: 0.908186979285714
- $00:19:56.680 \rightarrow 00:19:58.696$ but things are going very well and
- NOTE Confidence: 0.908186979285714
- $00:19:58.696 \rightarrow 00:20:00.920$ we'll soon see what our findings are.
- NOTE Confidence: 0.908186979285714
- $00:20:00.920 \longrightarrow 00:20:03.557$ And then from there we might go on and
- NOTE Confidence: 0.908186979285714
- $00:20:03.557 \rightarrow 00:20:05.582$ develop an intervention using one or
- NOTE Confidence: 0.908186979285714
- $00:20:05.582 \rightarrow 00:20:08.519$ the others of these and addressing further,
- NOTE Confidence: 0.908186979285714
- $00:20:08.520 \rightarrow 00:20:11.365$ it may be a more systems level which
- NOTE Confidence: 0.908186979285714
- $00:20:11.365 \rightarrow 00:20:13.915$ might be more acceptable and sustainable.
- NOTE Confidence: 0.908186979285714
- $00{:}20{:}13{.}920 \dashrightarrow 00{:}20{:}15{.}084$ At the same time,
- NOTE Confidence: 0.908186979285714
- $00{:}20{:}15.084 \dashrightarrow 00{:}20{:}16.539$ we're also looking at stigma.
- NOTE Confidence: 0.908186979285714
- $00{:}20{:}16{.}540 \dashrightarrow 00{:}20{:}20{.}380$ So we've interviewed women and providers
- NOTE Confidence: 0.908186979285714
- $00{:}20{:}20{:}380 \dashrightarrow 00{:}20{:}23.710$ about their feelings about cancer.
- NOTE Confidence: 0.908186979285714

 $00:20:23.710 \longrightarrow 00:20:26.883$ And the extent to which they have

NOTE Confidence: 0.908186979285714

 $00{:}20{:}26{.}883 \dashrightarrow 00{:}20{:}29{.}348$ fear associated with it,

NOTE Confidence: 0.908186979285714

00:20:29.350 - 00:20:31.674 how they may or may not stigmatize

NOTE Confidence: 0.908186979285714

 $00:20:31.674 \rightarrow 00:20:33.650$ other people who might have it,

NOTE Confidence: 0.908186979285714

 $00:20:33.650 \longrightarrow 00:20:35.882$ how they feel their life

NOTE Confidence: 0.908186979285714

 $00:20:35.882 \rightarrow 00:20:38.009$ might change should they have it.

NOTE Confidence: 0.908186979285714

 $00{:}20{:}38.010 \dashrightarrow 00{:}20{:}41.244$ And we've found fairly high levels of

NOTE Confidence: 0.908186979285714

 $00:20:41.244 \rightarrow 00:20:45.790$ stigma both among providers and and women.

NOTE Confidence: 0.908186979285714

 $00:20:45.790 \rightarrow 00:20:50.030$ So what what we're now thinking about is

NOTE Confidence: 0.908186979285714

 $00:20:50.030 \rightarrow 00:20:53.376$ addressing stigma and its impact on health.

NOTE Confidence: 0.908186979285714

 $00{:}20{:}53.380 \dashrightarrow 00{:}20{:}55.448$ This is quite advanced

NOTE Confidence: 0.908186979285714

 $00:20:55.448 \rightarrow 00:20:58.033$ among the HIV AIDS world,

NOTE Confidence: 0.908186979285714

 $00{:}20{:}58.040 \dashrightarrow 00{:}20{:}59.700$ where it's a major issue,

NOTE Confidence: 0.908186979285714

 $00:20:59.700 \longrightarrow 00:21:03.696$ but it's just really addressing cancer

NOTE Confidence: 0.908186979285714

 $00{:}21{:}03.696 \dashrightarrow 00{:}21{:}07.148$ stigma and its impact on preventing

NOTE Confidence: 0.908186979285714

 $00:21:07.148 \longrightarrow 00:21:09.388$ screening and treatment among people

 $00:21:09.388 \longrightarrow 00:21:12.737$ who are at risk for cancer or have

NOTE Confidence: 0.908186979285714

 $00:21:12.737 \rightarrow 00:21:14.957$ cancer is a relatively new field.

NOTE Confidence: 0.908186979285714

 $00:21:14.960 \longrightarrow 00:21:17.158$ And so what we're working on as

NOTE Confidence: 0.908186979285714

 $00:21:17.158 \longrightarrow 00:21:19.874$ well as others is how to adapt

NOTE Confidence: 0.908186979285714

00:21:19.874 --> 00:21:21.994 what are called stigma reduction

NOTE Confidence: 0.908186979285714

 $00{:}21{:}21{.}994 \dashrightarrow 00{:}21{:}23{.}859$ interventions that have been used

NOTE Confidence: 0.908186979285714

 $00:21:23.860 \rightarrow 00:21:26.820$ successfully among people living with

NOTE Confidence: 0.908186979285714

 $00:21:26.820 \rightarrow 00:21:30.801$ HIV and providers working with them to

NOTE Confidence: 0.908186979285714

 $00:21:30.801 \rightarrow 00:21:33.603$ women who may have cervical cancer.

NOTE Confidence: 0.908186979285714

 $00:21:33.610 \longrightarrow 00:21:35.563$ So that's where we are in Nepal

NOTE Confidence: 0.908186979285714

00:21:35.563 --> 00:21:36.880 and actually in Mexico,

NOTE Confidence: 0.908186979285714

 $00:21:36.880 \longrightarrow 00:21:38.746$ we're in a very similar place,

NOTE Confidence: 0.908186979285714

 $00{:}21{:}38.750 \dashrightarrow 00{:}21{:}40.802$ doing very similar things.

NOTE Confidence: 0.908186979285714

 $00{:}21{:}40.802 \dashrightarrow 00{:}21{:}43.367$ And even though cervical cancer,

NOTE Confidence: 0.908186979285714

 $00:21:43.370 \rightarrow 00:21:46.529$ as I mentioned, is rare in the United States,

- $00:21:46.530 \longrightarrow 00:21:48.605$ we still have health disparities
- NOTE Confidence: 0.908186979285714
- 00:21:48.605 --> 00:21:49.850 based on race,
- NOTE Confidence: 0.966149748571429
- $00:21:49.850 \rightarrow 00:21:52.210$ ethnicity, and socioeconomic status.
- NOTE Confidence: 0.966149748571429
- $00:21:52.210 \longrightarrow 00:21:53.980$ So for example,
- NOTE Confidence: 0.966149748571429
- $00:21:53.980 \longrightarrow 00:21:55.680$ here in the United States,
- NOTE Confidence: 0.966149748571429
- 00:21:55.680 --> 00:21:57.260 including here in New Haven,
- NOTE Confidence: 0.966149748571429
- $00{:}21{:}57{.}260 \dashrightarrow 00{:}21{:}59{.}540$ Black and Hispanic women have around
- NOTE Confidence: 0.966149748571429
- $00{:}21{:}59{.}540 \dashrightarrow 00{:}22{:}02{.}320$ a 30 to 40% higher incidence of
- NOTE Confidence: 0.966149748571429
- $00{:}22{:}02{.}320 \dashrightarrow 00{:}22{:}05{.}140$ cervical cancer than do white and non
- NOTE Confidence: 0.966149748571429
- $00:22:05.140 \rightarrow 00:22:07.688$ Hispanic women and black women have the
- NOTE Confidence: 0.966149748571429
- 00:22:07.688 --> 00:22:10.120 highest age adjusted mortality rates,
- NOTE Confidence: 0.966149748571429
- $00:22:10.120 \longrightarrow 00:22:12.540$ still much lower than those that
- NOTE Confidence: 0.966149748571429
- $00:22:12.540 \longrightarrow 00:22:14.213$ we see in Nepal, Mexico,
- NOTE Confidence: 0.966149748571429
- $00:22:14.213 \longrightarrow 00:22:15.632$ India and elsewhere,
- NOTE Confidence: 0.966149748571429
- $00:22:15.632 \longrightarrow 00:22:18.470$ but still unacceptably high given the
- NOTE Confidence: 0.966149748571429
- $00:22:18.542 \rightarrow 00:22:21.475$ disparity we have within our own country.

- NOTE Confidence: 0.843118263571428
- $00{:}22{:}21{.}520 \dashrightarrow 00{:}22{:}23{.}620$ It's so interesting that you
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}23.620 \dashrightarrow 00{:}22{:}25.557$ mentioned the work here in New Haven.
- NOTE Confidence: 0.843118263571428
- 00:22:25.560 --> 00:22:27.908 But I wonder,
- NOTE Confidence: 0.843118263571428
- $00:22:27.908 \longrightarrow 00:22:30.860$ it would seem to me that many of
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}30{.}949 \dashrightarrow 00{:}22{:}33{.}857$ the factors that go into why people
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}33.857 \dashrightarrow 00{:}22{:}36.092$ are suffering with cervical cancer
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}36.092 \dashrightarrow 00{:}22{:}39.051$ in New Haven versus in other parts
- NOTE Confidence: 0.843118263571428
- $00:22:39.051 \longrightarrow 00:22:41.247$ of the world may be different.
- NOTE Confidence: 0.843118263571428
- $00:22:41.250 \longrightarrow 00:22:42.432$ So for example,
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}42{.}432 \dashrightarrow 00{:}22{:}45{.}190$ we know that the HPV vaccines are
- NOTE Confidence: 0.843118263571428
- 00:22:45.276 --> 00:22:47.640 widely available here in the US
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}47.640 \dashrightarrow 00{:}22{:}50.250$ whereas in low to middle income
- NOTE Confidence: 0.843118263571428
- $00:22:50.250 \longrightarrow 00:22:53.568$ countries they may not be as available.
- NOTE Confidence: 0.843118263571428
- 00:22:53.570 --> 00:22:55.750 So have you looked into
- NOTE Confidence: 0.843118263571428
- $00{:}22{:}55{.}750 \dashrightarrow 00{:}22{:}57{.}120$ these various factors that may
- NOTE Confidence: 0.843118263571428

 $00:22:57.120 \longrightarrow 00:22:59.144$ be playing in and can you tell

NOTE Confidence: 0.843118263571428

 $00{:}22{:}59{.}144 \dashrightarrow 00{:}23{:}00{.}649$ us about how they're different.

NOTE Confidence: 0.8967860466666667

 $00{:}23{:}00{.}660 \dashrightarrow 00{:}23{:}04{.}860$ So the HPV vaccine is targeted to

NOTE Confidence: 0.8967860466666667

 $00:23:04.860 \rightarrow 00:23:07.440$ younger women, even teenage girls,

NOTE Confidence: 0.8967860466666667

 $00{:}23{:}07{.}440 \dashrightarrow 00{:}23{:}11{.}149$ 12 and 13 year old girls up to

NOTE Confidence: 0.8967860466666667

00:23:11.149 --> 00:23:14.803 women who are previously have not

NOTE Confidence: 0.8967860466666667

 $00{:}23{:}14.803 \dashrightarrow 00{:}23{:}17.600$ initiated sexual relations with men.

NOTE Confidence: 0.8967860466666667

 $00:23:17.600 \rightarrow 00:23:22.556$ And what we've seen is maybe 20 or

NOTE Confidence: 0.8967860466666667

 $00:23:22.556 \rightarrow 00:23:26.207$ 30 years later when cervical cancer develops,

NOTE Confidence: 0.8967860466666667

 $00:23:26.210 \rightarrow 00:23:30.207$ the rates are much lower among girls who

NOTE Confidence: 0.8967860466666667

 $00:23:30.207 \rightarrow 00:23:33.266$ have been vaccinated at that early time.

NOTE Confidence: 0.8967860466666667

 $00{:}23{:}33{.}270 \dashrightarrow 00{:}23{:}37{.}099$ So vaccinating girls is very important for

NOTE Confidence: 0.8967860466666667

 $00:23:37.099 \rightarrow 00:23:39.930$ preventing cervical cancer in the future.

NOTE Confidence: 0.8967860466666667

 $00:23:39.930 \longrightarrow 00:23:42.058$ But in terms of those of us women

NOTE Confidence: 0.8967860466666667

 $00{:}23{:}42.058 \dashrightarrow 00{:}23{:}44.130$ who are around now

NOTE Confidence: 0.8967860466666667

 $00:23:44.130 \longrightarrow 00:23:46.790$ 30 plus, the vaccine is not likely,

- NOTE Confidence: 0.8967860466666667
- $00:23:46.790 \longrightarrow 00:23:48.030$ is not believed to help us.
- $00:23:50.770 \rightarrow 00:23:52.630$ And these other sorts of screenings,
- NOTE Confidence: 0.8967860466666667
- 00:23:52.630 --> 00:23:56.308 PAP, the VIA, HPV followed by
- NOTE Confidence: 0.8967860466666667
- $00{:}23{:}56{.}310 \dashrightarrow 00{:}24{:}00{.}190$ AIA etc are the approaches that are needed
- NOTE Confidence: 0.8967860466666667
- $00{:}24{:}00{.}190 \dashrightarrow 00{:}24{:}03{.}565$ to prevent cervical cancer among 30-60
- NOTE Confidence: 0.8967860466666667
- $00{:}24{:}03.565 \dashrightarrow 00{:}24{:}06.260$ year old women who are alive today.
- NOTE Confidence: 0.8967860466666667
- $00{:}24{:}06{.}260 \dashrightarrow 00{:}24{:}09{.}200$ So there are these two different
- NOTE Confidence: 0.8967860466666667
- $00:24:09.200 \longrightarrow 00:24:12.636$ strategies based on age and then in
- NOTE Confidence: 0.8967860466666667
- $00{:}24{:}12.636 \dashrightarrow 00{:}24{:}16.080$ terms od differences by culture.
- NOTE Confidence: 0.8967860466666667
- $00{:}24{:}16.080 \dashrightarrow 00{:}24{:}19.070$ It seems to me that
- NOTE Confidence: 0.8967860466666667
- 00:24:19.070 --> 00:24:22.834 Pap smear has been made widely
- NOTE Confidence: 0.8967860466666667
- 00:24:22.834 --> 00:24:24.769 available in the United States,
- NOTE Confidence: 0.8967860466666667
- $00{:}24{:}24{.}770 \dashrightarrow 00{:}24{:}27{.}910$ such that cervical cancer is
- NOTE Confidence: 0.8967860466666667
- 00:24:28.684 --> 00:24:31.780 a very rare disease here in the United
- NOTE Confidence: 0.8967860466666667
- $00:24:31.869 \longrightarrow 00:24:34.935$ States with the disparity and
- NOTE Confidence: 0.859216045384615
- $00:24:36.950 \longrightarrow 00:24:38.945$ what are the causes of the

00:24:38.945 --> 00:24:40.929 disparity here in the United States?

NOTE Confidence: 0.859216045384615

 $00:24:40.930 \longrightarrow 00:24:44.301$ Might probably have similarities with

NOTE Confidence: 0.859216045384615

00:24:44.301 --> 00:24:46.287 what's happening in Mexico and Nepal,

NOTE Confidence: 0.859216045384615

 $00{:}24{:}46{.}290 \dashrightarrow 00{:}24{:}47{.}656$ for example, stigma.

NOTE Confidence: 0.859216045384615

 $00{:}24{:}47.656 \dashrightarrow 00{:}24{:}49.912$ And there might be cultures where

NOTE Confidence: 0.859216045384615

 $00{:}24{:}49{.}912 \dashrightarrow 00{:}24{:}52{.}274$ stigma is within the United States

NOTE Confidence: 0.859216045384615

 $00:24:52.274 \longrightarrow 00:24:54.219$ is more important than others.

NOTE Confidence: 0.859216045384615

 $00{:}24{:}54{.}220 \dashrightarrow 00{:}24{:}56{.}908$ We have a PhD student here in the

NOTE Confidence: 0.859216045384615

00:24:56.908 --> 00:24:58.532 chronic Disease Epidemiology Department

NOTE Confidence: 0.859216045384615

 $00:24:58.532 \longrightarrow 00:25:01.605$ who's working with me

NOTE Confidence: 0.859216045384615

 $00{:}25{:}01.605 \dashrightarrow 00{:}25{:}04.165$ on investigating the extent to

NOTE Confidence: 0.859216045384615

 $00{:}25{:}04{.}165 \dashrightarrow 00{:}25{:}07{.}060$ which cancer stigma is operating

NOTE Confidence: 0.859216045384615

 $00{:}25{:}07.060 \dashrightarrow 00{:}25{:}09.510$ among women in New Haven and

NOTE Confidence: 0.859216045384615

 $00{:}25{:}09{.}510$ --> $00{:}25{:}12{.}020$ providers in the Cornell Scott clinics

NOTE Confidence: 0.85685111375

 $00{:}25{:}12{.}370 \dashrightarrow 00{:}25{:}14{.}274$ who are treating them, and we'll have more

 $00:25:14.290 \longrightarrow 00:25:15.840$ information about that in the

NOTE Confidence: 0.942234191818182

 $00:25:15.840 \rightarrow 00:25:17.770$ next six months to a year,

NOTE Confidence: 0.942234191818182

 $00{:}25{:}17{.}770 \dashrightarrow 00{:}25{:}20{.}930$ there can also be

NOTE Confidence: 0.942234191818182

 $00:25:20.930 \rightarrow 00:25:23.350$ issues with provider training,

NOTE Confidence: 0.942234191818182

 $00:25:23.350 \longrightarrow 00:25:27.450$ provider overload, burnout.

NOTE Confidence: 0.942234191818182

 $00{:}25{:}27{.}450 \dashrightarrow 00{:}25{:}30{.}110$ And there can be issues,

NOTE Confidence: 0.942234191818182

 $00:25:30.110 \longrightarrow 00:25:31.606$ similarly to other countries,

NOTE Confidence: 0.942234191818182

 $00:25:31.606 \rightarrow 00:25:34.310$ with not having the time to go in,

NOTE Confidence: 0.942234191818182

 $00{:}25{:}34{.}310 \dashrightarrow 00{:}25{:}36{.}602$ not being able to get off work,

NOTE Confidence: 0.942234191818182

 $00:25:36.602 \rightarrow 00:25:38.786$ not having the money to be able

NOTE Confidence: 0.942234191818182

 $00{:}25{:}38{.}786 \dashrightarrow 00{:}25{:}41{.}166$ to get to the clinic and so on.

NOTE Confidence: 0.942234191818182

 $00{:}25{:}41.166 \dashrightarrow 00{:}25{:}43.577$ And so all of these things need to be

NOTE Confidence: 0.942234191818182

 $00{:}25{:}43.577 \dashrightarrow 00{:}25{:}45.600$ looked at and we'll see how different

NOTE Confidence: 0.942234191818182

 $00:25:45.600 \rightarrow 00:25:48.074$ they are from one place to another.

NOTE Confidence: 0.942234191818182

 $00:25:48.074 \rightarrow 00:25:49.490$ My personal bias,

NOTE Confidence: 0.942234191818182

 $00:25:49.490 \rightarrow 00:25:52.101$ having done quite a bit of public

 $00:25:52.101 \rightarrow 00:25:54.356$ health research both in the United

NOTE Confidence: 0.942234191818182

 $00:25:54.356 \longrightarrow 00:25:56.126$ States as well as overseas,

NOTE Confidence: 0.942234191818182

 $00:25:56.130 \longrightarrow 00:25:58.090$ is that people are pretty similar

NOTE Confidence: 0.942234191818182

 $00:25:58.090 \rightarrow 00:25:59.695$ everywhere and on the issues

NOTE Confidence: 0.942234191818182

00:25:59.695 - 00:26:01.860 that come up are pretty similar.

 $00{:}26{:}02{.}328 \dashrightarrow 00{:}26{:}05{.}136$ Of course there's exceptions and we

NOTE Confidence: 0.942234191818182

00:26:05.136 --> 00:26:08.217 always have to be mindful of those

NOTE Confidence: 0.942234191818182

 $00{:}26{:}08{.}217 \dashrightarrow 00{:}26{:}10{.}217$ and to adapt our interventions

NOTE Confidence: 0.942234191818182

 $00:26:10.217 \rightarrow 00:26:13.007$ to optimally reach the people we are trying to.

00:26:17.730 --> 00:26:19.676 Yeah, I mean, I think some of

NOTE Confidence: 0.905402032

 $00:26:19.676 \longrightarrow 00:26:21.472$ the issues that you mentioned

NOTE Confidence: 0.905402032

00:26:21.472 --> 00:26:23.536 are pretty ubiquitous, right?

NOTE Confidence: 0.905402032

00:26:23.536 --> 00:26:27.166 Lack of time, physician overload,

NOTE Confidence: 0.905402032

00:26:27.170 --> 00:26:32.630 burnout, you know, etcetera, etcetera.

NOTE Confidence: 0.905402032

 $00{:}26{:}32.630 \dashrightarrow 00{:}26{:}35.030$ To address these issues, however,

NOTE Confidence: 0.905402032

 $00{:}26{:}35{.}030 \dashrightarrow 00{:}26{:}39{.}486$ it seems like there would need to be

 $00{:}26{:}39{.}486 \dashrightarrow 00{:}26{:}43{.}040$ larger societal policy changes that are

NOTE Confidence: 0.905402032

 $00{:}26{:}43.040 \dashrightarrow 00{:}26{:}45.530$ made that really address these issues.

NOTE Confidence: 0.905402032

00:26:45.530 --> 00:26:49.238 Can you talk a little bit about

NOTE Confidence: 0.905402032

00:26:49.238 --> 00:26:51.750 where we are in terms of work that's

NOTE Confidence: 0.905402032

 $00{:}26{:}51.822 \dashrightarrow 00{:}26{:}54.349$ moving the issue on the policy level?

NOTE Confidence: 0.7998643

 $00{:}26{:}55{.}610 \dashrightarrow 00{:}27{:}00{.}224$ Well globally I think that

NOTE Confidence: 0.901680226923077

 $00{:}27{:}00{.}230 \dashrightarrow 00{:}27{:}02{.}718$ the main effort that I know about is

NOTE Confidence: 0.901680226923077

 $00{:}27{:}02{.}718 \dashrightarrow 00{:}27{:}05{.}149$ that the World Health Organization

NOTE Confidence: 0.901680226923077

00:27:05.150 --> 00:27:09.790 initiated a zero Cervical Cancer campaign.

NOTE Confidence: 0.901680226923077

 $00:27:09.790 \longrightarrow 00:27:11.490$ I don't remember the year,

NOTE Confidence: 0.901680226923077

 $00:27:11.490 \longrightarrow 00:27:13.290$ the target goal of the year.

NOTE Confidence: 0.901680226923077

 $00:27:13.290 \longrightarrow 00:27:15.530$ And oftentimes when they

NOTE Confidence: 0.901680226923077

00:27:15.530 -> 00:27:19.350 have say zero polio or zero TB

NOTE Confidence: 0.901680226923077

 $00{:}27{:}19.350 \dashrightarrow 00{:}27{:}22.200$ it does stimulate governments to

NOTE Confidence: 0.901680226923077

 $00:27:22.200 \longrightarrow 00:27:25.650$ put more effort and money into

NOTE Confidence: 0.901680226923077

 $00{:}27{:}25.650 \dashrightarrow 00{:}27{:}27.219$ implementing their national

- NOTE Confidence: 0.901680226923077
- 00:27:27.219 --> 00:27:29.834 policies because like I said,
- NOTE Confidence: 0.901680226923077
- $00{:}27{:}29{.}840 \dashrightarrow 00{:}27{:}32{.}162$ in every country that I've ever
- NOTE Confidence: 0.901680226923077
- $00:27:32.162 \longrightarrow 00:27:34.840$ worked in on any health issue,
- NOTE Confidence: 0.901680226923077
- $00:27:34.840 \longrightarrow 00:27:36.655$ the policies that we would
- NOTE Confidence: 0.901680226923077
- $00:27:36.655 \longrightarrow 00:27:39.359$ like to see are in the books.
- NOTE Confidence: 0.901680226923077
- $00:27:39.360 \longrightarrow 00:27:43.343$ So the question is more the political
- NOTE Confidence: 0.901680226923077
- $00:27:43.343 \rightarrow 00:27:46.740$ will to increase implementation.
- NOTE Confidence: 0.901680226923077
- 00:27:46.740 --> 00:27:47.910 And you know,
- NOTE Confidence: 0.901680226923077
- $00{:}27{:}47{.}910 \dashrightarrow 00{:}27{:}49{.}860$ unfortunately in many countries it's
- NOTE Confidence: 0.901680226923077
- $00{:}27{:}49.860 \dashrightarrow 00{:}27{:}52.736$ sort of a 0 sum situation and that if
- NOTE Confidence: 0.901680226923077
- $00:27:52.736 \rightarrow 00:27:55.360$ more money is put into cervical cancer,
- NOTE Confidence: 0.901680226923077
- $00:27:55.360 \longrightarrow 00:27:56.200$ less money
- NOTE Confidence: 0.901680226923077
- $00{:}27{:}56{.}200 \dashrightarrow 00{:}27{:}57{.}880$ was put into HIV.
- NOTE Confidence: 0.901680226923077
- $00:27:57.880 \longrightarrow 00:27:59.047$ And you know,
- NOTE Confidence: 0.901680226923077
- $00:27:59.047 \longrightarrow 00:28:01.381$ that's not always true but it's
- NOTE Confidence: 0.901680226923077

00:28:01.381 --> 00:28:03.642 often true unless new donor money

NOTE Confidence: 0.901680226923077

 $00{:}28{:}03.642 \dashrightarrow 00{:}28{:}06.586$ can be raised for a specific health

NOTE Confidence: 0.901680226923077

 $00:28:06.586 \rightarrow 00:28:09.256$ issue and sometimes that happens.

 $00:28:11.260 \longrightarrow 00:28:13.213$ So I guess what we're trying to

NOTE Confidence: 0.901680226923077

 $00:28:13.213 \longrightarrow 00:28:15.739$ do is maybe go a little bit from

NOTE Confidence: 0.901680226923077

 $00{:}28{:}15.739 \dashrightarrow 00{:}28{:}17.782$ the bottom up and demonstrate that

NOTE Confidence: 0.901680226923077

 $00:28:17.782 \longrightarrow 00:28:19.882$ these issues can if there's the

NOTE Confidence: 0.901680226923077

 $00:28:19.882 \rightarrow 00:28:23.148$ political will to implement its scale,

NOTE Confidence: 0.901680226923077

 $00:28:23.148 \longrightarrow 00:28:26.760$ we have effective and

NOTE Confidence: 0.901680226923077

 $00{:}28{:}26.760 \dashrightarrow 00{:}28{:}28.365$ cost effective implementation

NOTE Confidence: 0.901680226923077

 $00{:}28{:}28{.}365 \dashrightarrow 00{:}28{:}31{.}389$ strategies that can address the issue.

00:28:33.070 --> 00:28:35.215 Doctor Donna Spiegelman is Susan

NOTE Confidence: 0.870965249375

00:28:35.215 --> 00:28:37.360 Dwight Bliss professor of Biostatistics

NOTE Confidence: 0.870965249375

 $00{:}28{:}37{.}422 \dashrightarrow 00{:}28{:}39{.}270$ at the Yale School of Medicine.

NOTE Confidence: 0.870965249375

 $00:28:39.270 \longrightarrow 00:28:41.314$ If you have questions,

NOTE Confidence: 0.870965249375

 $00:28:41.314 \rightarrow 00:28:43.309$ the address is canceranswers@yale.edu

NOTE Confidence: 0.870965249375

 $00{:}28{:}43{.}309 \dashrightarrow 00{:}28{:}46{.}063$ and past editions of the program

- NOTE Confidence: 0.870965249375
- $00:28:46.063 \rightarrow 00:28:48.470$ are available in audio and written
- NOTE Confidence: 0.870965249375
- $00:28:48.470 \rightarrow 00:28:49.416$ form at yalecancercenter.org.
- NOTE Confidence: 0.870965249375
- $00:28:49.416 \longrightarrow 00:28:51.558$ We hope you'll join us next week
- NOTE Confidence: 0.870965249375
- $00{:}28{:}51{.}558 \dashrightarrow 00{:}28{:}53{.}424$ to learn more about the fight
- NOTE Confidence: 0.870965249375
- $00{:}28{:}53{.}424 \dashrightarrow 00{:}28{:}54{.}929$ against cancer here on Connecticut
- NOTE Confidence: 0.870965249375
- 00:28:54.929 --> 00:28:56.398 Public radio. Funding for Yale
- NOTE Confidence: 0.870965249375
- 00:28:56.400 --> 00:28:58.200 Cancer Answers is provided
- NOTE Confidence: 0.870965249375
- 00:28:58.200 --> 00:29:00.000 by Smilow Cancer Hospital.