WEBVTT

1
00:00:00.000 --> 00:00:01.789
We? We will get started, and we'll have

2
00:00:01.920 --> 00:00:08.729
Matt Amundson: the other folks joining us. But we'll hop into our lecture today to get that started.

3
00:00:09.660 --> 00:00:11.239
Alright. So

4
00:00:12.140 --> 00:00:32.550
Matt Amundson: good morning, everyone, and welcome to another installment to the Dean's lecture series. I'm at Emmons, and I'm one of the learning and development managers for the office of diversity, equity, and inclusion. This session is being recorded. It'll be shared out within 2 days for all those who registered for this event, otherwise the recording could be found under the education and training tab of the Ode website.

5
00:00:32.770 --> 00:00:53.160
Matt Amundson: Live transcription has been enabled, and please know that the live transcript is not perfect, as as it is an auto transcript, and we invite you to take care of yourself as necessary during today's session as we will not be taking a break. And if you have any issues or feedback with this accessibility, please email us email us@dlsodeatumn.edu.

6
00:00:53.190 --> 00:01:10.039
Matt Amundson: and we ask the participants. Please use a. QA. Function instead of the chat. We'll do our best to answer your questions, but please understand that we are working within a set window of time, and should we not get your question, we'll work with presenter to get unanswered questions posted on the Dean's lecture series website.

7
00:01:11.070 --> 00:01:23.710
Matt Amundson: So pasting in the chat, you will find links to the Dean's lecture series, website, the slides to today's lecture and the Dean's Lecture Series email address. And I will now turn it over to Dr. Nunez to introduce today's guest. Lecture.

8
00:01:24.200 --> 00:01:26.540
Ana Nunez MD: morning. Everybody happy March!

9
00:01:26.580 --> 00:01:48.630
Ana Nunez MD: Happy, odd, almost summer, like weather here, and I'm okay with that hope you are, too. My! My lake, that I can see is sort of back, and and all the ice is totally gone. And

so I'm actually happy about that last month, in terms of the the our communication to you all I mentioned a little bit since it was February about heart health.

10
00:01:48.700 --> 00:02:12.860
Ana Nunez MD: And I know actually somebody sent a question. And I said, Wait, wait, hold that question. We have somebody coming. She's gonna give you all the answers, you wanna know, so I am delighted to have us hear from Dr. Mercedes Carnathon. Dr. Carnipon is the Mary Harris Thompson, Professor Vice, chair of Preventive Medicine and Professor of Medicine in the division of pulmonary and critical care.

11
00:02:12.860 --> 00:02:30.909
Ana Nunez MD: She is an epidemiologist who studies the burden and impact of chronic diseases. Specifically cardiovascular disease, obesity, diabetes and lung disease in the population. In particular, she studies. In addition to her focus on research. She is also a leader in postdoctoral and faculty career development

12
00:02:30.910 --> 00:02:51.759
Ana Nunez MD: in recognition. To to her contributions she has multiple awards and sort of been designated as Mentor of the year in 2,018, Paula H. Stern award for outstanding faculty in 2,023. She's an active volunteer and American Heart Association, and serves as the board chairperson

13
00:02:51.760 --> 00:03:08.780
Ana Nunez MD: for the Chicago chapter. She also serves in the Board of Scientific Counselors for National Hearts Long and Blood Institute since 2,021, so very excited to have her here and join us and hear everything we need to know about cardiovascular disease and lifespan. Dr. Karnath, I'm welcome.

14
00:03:09.040 --> 00:03:25.559
Mercedes Carnethon: Well, thank you so much, Dr. Nunez, and thanks to all of you who have joined to hear me talk about an area really of great passion and commitment of mine. I just wanted to do a quick check. I wanted to make sure you can see my screen, and in the appropriate view

15
00:03:27.480 --> 00:03:28.539
Ana Nunez MD: need to switch it.

16
00:03:29.020 --> 00:03:34.790
Mercedes Carnethon: I knew this. See? Yep. How about that?

17
00:03:36.130 --> 00:04:01.109
Mercedes Carnethon: Okay, well, thank you so much. Today. Women's health is really a great passion of mine, and I always have a good time in February and March. Given the intersection

of heart health, particularly the cardiovascular health of women as well as Black History month, which is an important focus of mine, particularly as I consider how we think about health and the different

18
00:04:01.110 --> 00:04:22.529
Mercedes Carnethon: identities that one holds that may place them at a particular risk for cardiovascular diseases and other chronic disease outcomes. So today, I really wanna focus on cardiovascular health among women across the life course, and I have no relevant support to disclose as described. I'm an epidemiologist, so not

19
00:04:22.530 --> 00:04:26.889
a terribly popular target for people wishing for me to sponsor something.

20
00:04:27.000 --> 00:04:47.420
Mercedes Carnethon: So here is the outline of what I'm going to share. Today I'll talk a little bit about the burden of disease, the life course of heart disease and unique factors associated with cardiovascular disease, management and prevention in women. Perfect mode. We need to sort of just have change the display setting.

21
00:04:47.560 --> 00:04:48.710
Mercedes Carnethon: How about this?

22
00:04:50.070 --> 00:04:54.850
Ana Nunez MD: Is this one correct? Is it just me? Cause I'm still seeing everything?

23
00:04:55.070 --> 00:04:59.449
Matt Amundson: No, I still see it, too. I still see your your presenter notes.

24
00:04:59.470 --> 00:05:04.730
Mercedes Carnethon: Yeah, let me do this as let me close out and reopen.

25
00:05:04.850 --> 00:05:16.670
Mercedes Carnethon: it always happens this way, doesn't it? I know we had it so well in the practice mode. See, II told you that. But it's fine, because I never end up.

26
00:05:18.580 --> 00:05:21.400
Mercedes Carnethon: What about now? Where are we?

27
00:05:21.920 --> 00:05:24.309
Matt Amundson: No, still, see

28
00:05:25.250 --> 00:05:34.540
Ana Nunez MD: how about this? Yeah, no problem. Thanks for pointing it out. And please let me know if anything else does come up.

29
00:05:34.800 --> 00:06:00.279
Mercedes Carnethon: You know, I like to start with a description. So I described this as cardiovascular health across the life course and women. But I wanna make sure that the audience and the listeners are aware that I mean for my language to be as inclusive as possible. Who? What defines womanhood is very multi-dimensional. We can discuss biological sex. Females.

30
00:06:00.280 --> 00:06:17.600
Mercedes Carnethon: those born a certain sex and classified into that sex group based on anatomy. But then there's also gender identity which does not need to align with sex, but that is related more closely to one's personal identity and their adoption of cultural and social roles.

31
00:06:17.720 --> 00:06:38.720
Mercedes Carnethon: Today, during my talk, I intend to use the terminologies that were used by the original authors in the work that I present. I think we've seen a lot of evolution and application of more inclusive language. As of late, however, I will be historically presenting what we have shared as a research team and what other investigators have.

32
00:06:38.720 --> 00:06:56.429
Mercedes Carnethon: If I'm opining or summarizing something. I'm going to try to use the most inclusive definition of women. So I ask in advance for your forgiveness. If I sometimes slip up, I think it's a growth opportunity for all of us to think about what it is that we mean.

33
00:06:57.140 --> 00:07:19.629
Mercedes Carnethon: So a lot of times when people do studies across the life course among women. They're often considering a woman's life course based on her reproductive life cycle pre-menopause, the perimenopausal period menopause and post-menopause. But I would really argue that we should focus instead on when we think about life cycle, the social life cycle.

34
00:07:19.630 --> 00:07:31.980
Mercedes Carnethon: divided broadly into these categories, infancy and childhood, where gender socialization and gender roles are oftentimes driving behaviors. Then there are the

35
00:07:31.980 --> 00:07:36.849
Mercedes Carnethon: changes associated with puberty, adolescence, and young adulthood

36
00:07:36.850 --> 00:07:57.770

Mercedes Carnethon: encompassing hormonal and physical changes solidification of given social roles as well as important life events that do relate to the reproductive life cycle, pregnancy, parenting for many individuals who are women and then adulthood the significant life events related to family dynamics and caregiving

37
00:07:57.770 --> 00:08:10.450
Mercedes Carnethon: middle age. Yeah, a lot of transitions. Each of these lead to factors and conditions that are associated with cardiovascular health and health. More broadly

38
00:08:12.240 --> 00:08:30.119
Mercedes Carnethon: so when I think about the intersection of reproductive the reproductive cycle and the social life cycle. I'd like to really consider the 2 together. How do reproductive and social factors combine across the life course to inform cardiovascular disease risks among women.

39
00:08:30.120 --> 00:08:43.099
Mercedes Carnethon: and as well. What are the macro, social, cultural, and social attitudes that inform the behaviors of women and the ways in which the world treats women to influence cardiovascular disease risk.

40
00:08:43.799 --> 00:08:55.439
Mercedes Carnethon: So just a few facts about heart disease in women, cardiovascular disease kills more women than all forms of cancer combined. Yet only 44% of women recognize this risk.

41
00:08:55.440 --> 00:09:16.519
Mercedes Carnethon: Almost half of all females, ages 20 or older, are living with some form of cardiovascular disease. And this is really the broad definition that includes hypertension, which is the most common medical diagnosis in the United States and around the world, as well as metabolic factors, including overweight and obesity.

42
00:09:16.960 --> 00:09:27.120
Mercedes Carnethon: Less than half of women entering pregnancy have good cardiovascular health. This is a frightening statistic, given that

43
00:09:27.230 --> 00:09:37.430
Mercedes Carnethon: cardiovascular health during pregnancy can inform not only long term cardiovascular risks, but as well, the the health profile of the offspring

44
00:09:37.990 --> 00:09:56.689
Mercedes Carnethon: menopause, the point at which most people say, Gosh! You know, when women enter menopause. That's when they develop cardiovascular disease, cardiovascular

disease, and its development is a lifelong process. Menopause does not cause it, but the changes in hormones as well as social roles can

45
00:09:56.780 --> 00:10:13.700
Mercedes Carnethon: excuse me, influence and inform cardiovascular disease, risk, and I will say a disproportionate numbers of deaths from stroke are among women, and stroke is much more likely to occur in younger women, and is a significant source of disability

46
00:10:15.210 --> 00:10:19.550
Mercedes Carnethon: as we investigate and look at what the leading causes of death

47
00:10:19.750 --> 00:10:42.690
Mercedes Carnethon: are for females and males. In the United States. We have the female death rate in the very socially gendered pink color and the male death rate in blue. You can see that the conditions heavily mirror one another, and I've inserted red arrows to those conditions that are typically considered under the umbrella of cardiovascular

48
00:10:42.800 --> 00:10:59.060
Mercedes Carnethon: cardiovascular meaning heart. We see clearly with heart disease, but as well, the vascular system stroke Alzheimer's diabetes, car kidney disease and hypertension, and these are based on death. Certificate data. You can see that. It's

49
00:10:59.060 --> 00:11:16.850
Mercedes Carnethon: 6 clearly, a very clear 6 of the top 10 causes of death are cardiovascular, and I have a blue arrow next to COVID-19. And the reason I have that included is that individuals with cardiovascular diseases are much more likely to experience the adverse outcomes of death.

50
00:11:17.090 --> 00:11:29.639
Related to COVID-19 and COVID-19. So these were data from 2021. It is still the case as we update that COVID-19 remains one of our leading causes of death.

51
00:11:30.170 --> 00:11:34.369
Mercedes Carnethon: And so we can see that between men and women these numbers are quite parallel.

52
00:11:34.640 --> 00:11:48.839
Mercedes Carnethon: One thing I'd really like to highlight that I think as well. Highlights. An important factor related to disparities is that as we look at younger adults, ages 35 to 64 years old.

53
00:11:48.840 --> 00:11:59.440

Mercedes Carnethon: You can see here that trends over time. So these are data from Cdc, wonder, in a paper that was led by one of our medical students that I was proud to be a part of

54
00:11:59.440 --> 00:12:23.719
Mercedes Carnethon: that over time. Rates of the death rate from heart failure, heart failure related cardiovascular disease, mortality. You can see a significant gap in the death rates between black women and white women, such that black women's heart failure rates, particularly at younger ages, fall only secondary to those of black men, and exceed both white and black men

55
00:12:24.320 --> 00:12:34.650
Mercedes Carnethon: at the older adulthood level. We don't see those same challenges. But you know, when we consider the impact of early life

56
00:12:34.790 --> 00:12:53.909
Mercedes Carnethon: mortality, we it again highlights another piece of work that was led by this same team that I was again proud to be part of is that premature cardiovascular disease. Deaths contribute to significant disparities in the years of potential life lost.

57
00:12:53.910 --> 00:13:17.799
Mercedes Carnethon: The shaded bars on this figure reflect life expectancy. We do have longer life expectancy. Obviously in white women. Slightly longer life expectancy in white men, and shorter life expectancies in black women and black men. You can see that premature mortality percentages are extremely high, particularly in black women.

58
00:13:17.800 --> 00:13:27.719
Mercedes Carnethon: And as well in black men. And this is when we consider heart disease, deaths, deaths from cerebral vascular disease or stroke

59
00:13:27.720 --> 00:13:38.470
Mercedes Carnethon: as well as diabetes. We see significant disparities here, and more years of life, loss for black and white women given their longer life expectancy.

60
00:13:39.010 --> 00:13:52.729
Mercedes Carnethon: you know, in summary, cardiovascular diseases are a leading cause of death among women. 6 of the 10 top 10 leading causes of death are cardiovascular, metabolic, or cerebral, vascular, and early onset

61
00:13:52.730 --> 00:14:10.739
Mercedes Carnethon: illnesses are significant contributors to years of potential life lost. And what we really see in in the scope of disparities are that racial disparities are even more pronounced, given the earlier age of onset, of cardiovascular diseases among women.

62
00:14:10.740 --> 00:14:32.759
Mercedes Carnethon: And in this next section, when I talk about the life course, you can see what some of these early adult origins are of cardiovascular disease, and I'll break this section really into the infancy and childhood adolescence, young, middle, and older adulthood that follows the social life cycle that I shared earlier.

63
00:14:34.010 --> 00:14:40.280
Mercedes Carnethon: So we think about pregnancy and adverse pregnancy outcomes in the United States, collectively,

64
00:14:41.040 --> 00:14:55.830
Mercedes Carnethon: 10 to 20% of pregnancies in the United States are complicated by an adverse pregnancy outcome. Hypertensive disorders of pregnancy lead the way. Preterm. Birth occurs in 9.9 or 9 point

65
00:14:55.830 --> 00:15:11.790
Mercedes Carnethon: comprise 9.9% of these complicated pregnancies. Low birth weight reflects 8.2% of these complicated birth rates. And we see significant disparities in a pos or adverse pregnancy outcomes

66
00:15:11.790 --> 00:15:28.480
Mercedes Carnethon: amongst individuals who are black Latina, and low ses. Additionally, we have demonstrated findings showing that immigrants, particularly certain immigrant groups are at much higher rates of adverse pregnancy outcomes, namely, gestational diabetes.

67
00:15:28.940 --> 00:15:42.150
Mercedes Carnethon: and unfortunately, women with less favorable cardiovascular risk. Characteristics going into pregnancy are at higher risk for a POS. And this is depicted by this figure, which you can see on the

68
00:15:42.830 --> 00:16:05.680
Mercedes Carnethon: at on the left column. These labels, pre-pregnancy, pre-pregnancy, evidence of glucose intolerance, obesity, hypertension and hyperlipidemia lead to impaired responses. Such that when the body is stressed by pregnancy, and we do consider pregnancy to be a cardiovascular stress test or risk.

69
00:16:05.680 --> 00:16:22.810
Mercedes Carnethon: Those individuals are much more likely to experience the more common forms of adverse pregnancy outcomes which then, later, even though many of these do resolve, they later predispose to the development of cardiovascular disease, risk factors.

70
00:16:24.880 --> 00:16:47.300

Mercedes Carnethon: The premenopausal period infancy. In childhood there is as well an unfortunate intergenerational risk, transmission of cardiovascular disease whereby women who are so the offspring of women who experienced adverse pregnancy outcomes have a higher long-term risk of cardiovascular disease.

71
00:16:47.300 --> 00:17:00.719
Mercedes Carnethon: It appears that the threshold for vascular risk factors is really shifted among the population that you can see here in Red who had experienced who were the, you know, who

72
00:17:01.020 --> 00:17:23.439
Mercedes Carnethon: were the result of a population that was complicated by cardiovascular disease risk factors. And these risks are enhanced during the pregnancy period, whereby those individuals are much more likely to develop adverse pregnancy outcomes themselves, which then predispose to an earlier onset of cardiovascular disease, risk

73
00:17:25.420 --> 00:17:42.630
Mercedes Carnethon: the childhood origins of atherosclerotic cardiovascular disease can be numerous. And I've really learned a lot more than I knew before about congenital heart diseases. Congenital heart diseases affect 1% of births nearly 40,000 per year.

74
00:17:42.630 --> 00:17:56.200
Mercedes Carnethon: There are with, particularly with the advancements that we see in therapies for congenital heart disease. Even therapies that take place in utero the survival rates of

75
00:17:56.200 --> 00:18:23.449
Mercedes Carnethon: children born with congenital heart. Diseases are growing, and this growing population of survivors are at risk for developing atherosclerotic, cardiovascular diseases with aging, and women with congenital heart disease who become pregnant are at a higher risk for themselves, developing adverse pregnancy outcomes as well as for future as well as deterioration of their cardiovascular function over time.

76
00:18:24.520 --> 00:18:53.020
Mercedes Carnethon: The other routes for the childhood and early life origins of cardio metabolic risk. Factors include cardio metabolic risk factors that occur during childhood, overweight and at risk for obesity, high blood pressure, glucose disorders and dyslipidemia as well as adverse lifestyle, behaviors, physical inactivity, poor diet, sleep, disturbances. Each of those factors predispose youth in children.

77
00:18:53.330 --> 00:19:13.800
Mercedes Carnethon: and I'm sharing with you here some work that we did in the Hispanic community health study. And I focus on this population, because at the time it was fairly novel

to look at cardiovascular risks in what was a relatively large population of Hispanic Latino adults. This was from the

78
00:19:13.800 --> 00:19:26.910
Mercedes Carnethon: sole youth study that we conducted a number of years ago, where we recruited the offspring of participants in the Hispanic community health study. And in this population of 1,600 adults

79
00:19:26.910 --> 00:19:45.220
Mercedes Carnethon: we looked at boys and girls, and, not only calculated the prevalence of pre-diabetes and diabetes, dyslipidemia, and the prevalence of 3 or more cardiovascular disease risk factors in the population, but we also stratified this by weight status.

80
00:19:45.230 --> 00:19:56.949
Mercedes Carnethon: The first observation, if we look, I think we see the trends most clearly among dyslipidemia are that the rates of dyslipidemia go up with increasing weight class.

81
00:19:57.110 --> 00:20:16.860
Mercedes Carnethon: As we look, for example, at the dyslipidemia panel with boys on the left and girls on the right. What we see is that cardio metabolic risk profiles are actually slightly worse in boys as compared with girls, which could be a a good thing. But I'll share later some data about health behaviors.

82
00:20:16.860 --> 00:20:27.919
Mercedes Carnethon: But you know, in general we do see something of a burden. The weighted prevalence of dyslipidemia being fairly high in this population.

83
00:20:27.920 --> 00:20:31.900
Mercedes Carnethon: pre-diabetes and diabetes, rates being slightly lower.

84
00:20:31.900 --> 00:20:56.129
Mercedes Carnethon: but as well. The prevalence of 3 or more risk factors. Again, these trends do tend to be worse than boys versus girls a finding that is replicated in other race and ethnic groups. We have a fair amount of data in blacks and whites. To support this, we have relatively fewer data in Asian populations or in immigrant groups or in lower socioeconomic groups, and that has to do in part with who we've

85
00:20:56.130 --> 00:21:08.020
Mercedes Carnethon: devoted money and attention to studying who we've been able to get into our research studies to be able to characterize these patterns. But again, these are fairly common in other race and ethnic groups.

86

00:21:09.710 --> 00:21:33.689
Mercedes Carnethon: You know, when we consider that at least we do see when we look at the prevalence, the rates to be slightly lower among females as compared with males. That's a good thing. However, we do see some changes during puberty, while there are certainly social weather. Certainly hormonal changes, I would suggest that the social and physical effects of change are particularly noteworthy.

87
00:21:33.690 --> 00:21:56.229
Mercedes Carnethon: The cognitive development and socialization that tends to emphasize gender roles. These intensify during adolescents and divergences emerge between girls and boys, and how they spend their time and attention, how their families expect them to spend their time and attention. And these behavior changes tend to follow to suit one's identity.

88
00:21:57.400 --> 00:22:07.140
Mercedes Carnethon: And I think this is a really excellent example. This is some work that we did in a national database. Looking at changes in physical activity patterns over time.

89
00:22:07.290 --> 00:22:18.219
Mercedes Carnethon: and among girls we see patterns of change whereby large proportions of the population tended to decrease their physical activity. Behaviors over time.

90
00:22:18.630 --> 00:22:44.059
Mercedes Carnethon: And fewer when we examine this, these trajectories, so these are latent class trajectories that grouped activity patterns that were measured repeatedly with aging. What we found was that fewer black girls were in those green groups, or even in that group, too, where we see less steep declines in activity. Green and red are the colors, but more black girls were

91
00:22:44.280 --> 00:22:54.959
Mercedes Carnethon: in the steep declines group of physical activity. Unfortunately, we didn't have findings from other race and ethnic groups in this particular study.

92
00:22:54.960 --> 00:23:20.840
Mercedes Carnethon: But what we do see in national data are that the percentage of us students in grades, 9 through 12, who were active for 60 min a day across 7 days was lower among females who were white, black, and Hispanic. The blue bars reflect greater than or equal to, 5 days, and the red are those who reported for over

93
00:23:21.140 --> 00:23:40.399
Mercedes Carnethon: 7 all 7 days, and these are based on accelerometry, meaning activity guidelines for youth, which is for 60 min a day. You'll note that among adults physical activity guidelines recommend 150 min a week, or roughly, 30 min per day. But we expect children to be much more active.

94
00:23:41.040 --> 00:23:53.960
Mercedes Carnethon: and we see a problem, and we see lower rates of physical activity in females as compared with males, and unfortunately, behaviors tend to track from youth into adulthood.

95
00:23:53.970 --> 00:24:18.950
Mercedes Carnethon: However, there are a few longitudinal studies that actually do measure youth as they transition into adulthood. Classic examples from the cardiovascular field include the Bogalusa heart study, the fells longitudinal cohort, but the ability to actually measure and track health behaviors falls far behind what we see when we measure actual, measured behaviors which can be done, particularly

96
00:24:18.950 --> 00:24:28.870
Mercedes Carnethon: studies in Europe, where they have universal health care systems. And we can actually see that obese children become obese adults.

97
00:24:28.920 --> 00:24:41.319
Mercedes Carnethon: children who have lipid disorders tend to become adults who have lipid disorders, but inactive youth also become inactive. Adults. Dietary patterns also show relative stability.

98
00:24:41.330 --> 00:24:54.100
Mercedes Carnethon: But we also note that. And this is particularly relevant for women, that pregnancy does present really an inflection point. So when we've had the opportunity to model these changes over time.

99
00:24:54.140 --> 00:25:02.969
Mercedes Carnethon: we see that pregnancy is an inflection point in young adulthood where both behaviour patterns and health risk factors tend to worsen.

100
00:25:03.400 --> 00:25:23.009
Mercedes Carnethon: Here we have a depiction of this is a graphical depiction of something that we created to reflect the problem of postpartum weight. Retention on the X-axis is pregnancy, and then different postpartum periods. And I show different curves of what this could look like

101
00:25:27.040 --> 00:25:53.080
Mercedes Carnethon: and what we see is that some women do return to pre-pregnancy weight. However, unfortunately for some women at one year, postpartum 24% of women retain 10 pounds. And that's 10 pounds over their pregnancy weight. Nearly half are retaining greater than 10 pounds of weight at one year, and a full 75% or 3 out of 4 women are heavier

102

00:25:53.080 --> 00:26:22.290
Mercedes Carnethon: post pardon than they are pre-pregnancy. Now, this can feel as though it's a very aggressive period of time to really try to promote weight loss. But again, a lot of these women are then going to engage in a second pregnancy, and that pre-pregnancy interval, and what once cardiovascular health looks like during this interval, can inform pregnancy, outcomes in the subsequent pregnancy, as well as reflect what the long term trajectory of one's cardiovascular health is.

103
00:26:22.670 --> 00:26:34.770
Mercedes Carnethon: And as we think about pregnancy, I really want to highlight disparities in adverse pregnancy outcomes. This is the story of Shalon Irving, who was a Cdc. Epidemiologist studying disparities.

104
00:26:34.870 --> 00:27:03.500
Mercedes Carnethon: she was discharged 2 days after having had a C-section, she developed a hematoma that had to be drained and had home nursing support to change the wound. Even with home nursing support. This nurse noted a blood pressure of 1 58, over 100, without any other symptoms, but extremely high, especially as we consider target blood pressure goals as being less than 1, 20, over 80. Look at how high this was

105
00:27:03.510 --> 00:27:32.160
Mercedes Carnethon: she had in this, in the intervening days after her pregnancy, subsequent weight gains swelling and mild headaches. The nurse knew this. She contacted her healthcare providers who provided reassurance. However, she was sent back home, where she collapsed and died. And you know this sort of tragedy happens more often than you would think, and it is clearly not as driven by socioeconomic lines as one would expect.

106
00:27:32.280 --> 00:27:54.880
Mercedes Carnethon: A full black women are 243% more likely to die following childbirth than white women, and these rates of maternal mortality really reflect where we stand as a society, as it is an indicator of society. When we see these sort of deaths in women who should otherwise be low risk.

107
00:27:55.130 --> 00:27:58.059
Mercedes Carnethon: Even once we make it past pregnancy.

108
00:27:58.420 --> 00:28:03.849
Mercedes Carnethon: There are long-term cardiovascular risks after adverse pregnancy outcomes

109
00:28:04.010 --> 00:28:27.560
Mercedes Carnethon: this particular paper highlights, hypertensive disorders of pregnancy, which are the most common pregnancy, adverse pregnancy, outcome, and those are

associated with in the figure we can see sorry. In the leftmost panel, a hazard ratio. Individuals who have had hypertensive disorders of pregnancy, 1.8 times more likely to eventually develop

110
00:28:27.620 --> 00:28:40.380
Mercedes Carnethon: coronary artery disease, 1.7 times more likely to develop heart failure. And down the line you can see very significant elevations in heart failure, aortic stenosis, and mitral.

111
00:28:40.560 --> 00:28:59.550
Mercedes Carnethon: Regurgitation! The curves are shown here, the long-term risks of each of these conditions being much higher in populations who've suffered this? You can see as well that if we do see much higher rates of hypertensive disorders of pregnancy in certain subgroups

112
00:28:59.550 --> 00:29:10.719
Mercedes Carnethon: defined by race ethnicity, immigration status, and socioeconomic status. But this is really driving some of our long-term disparities in cardiovascular risk.

113
00:29:10.720 --> 00:29:19.180
Mercedes Carnethon: And these disparities and cardiovascular disease risk are what inform the shorter average life expectancy of certain populations.

114
00:29:20.250 --> 00:29:36.429
Mercedes Carnethon: But moving now into middle adulthood and later adulthood. The higher rates in the younger 2 age groups. This figure is from the this figure is from the annual statistical update that the American Heart Association puts out.

115
00:29:36.430 --> 00:30:05.100
Mercedes Carnethon: Men are in blue, women are in red in the 20 to 39, and 40 to 59 year old age groups. Women have a lower prevalence of cardiovascular disease, but that tends to even out in middle adulthood and older age, particularly with the transition to postmenopausal status and the loss of protection with the onset of perimenopause and eventually menopause. But is it all about hormones?

116
00:30:05.280 --> 00:30:34.389
Mercedes Carnethon: I would argue not, I think, that one of the interesting findings. There's a particular study from the study of women across the nation, and someone asked me a very thoughtful question about whether stress on its own can trigger cardiovascular disease. I think stress works through multiple different pathways to influence cardiovascular risk. Both behavioral pathways with adverse coping, with stress as well as somatic pathways, such as stimulation of the

117
00:30:34.390 --> 00:30:46.420

Mercedes Carnethon: Hpa access, hypothalamic, pituitary adrenal access that can lead to changes in autonomic nervous system, function, endothelial dysfunction and inflammation.

118
00:30:46.420 --> 00:31:10.440
Mercedes Carnethon: This particular study looked at and queried. Role, related stress and reward in relation to the life simple, 7. Life simple. 7. Being a metric used to define cardiovascular risk and surveill that risk in the population comprised of the different health risk factors and behaviors that are listed

119
00:31:10.440 --> 00:31:19.739
Mercedes Carnethon: in the variable column. Here, and women's social role quality is associated with cardiovascular health. At midlife.

120
00:31:19.930 --> 00:31:46.969
Mercedes Carnethon: women who reported greater stressful roles are less likely to achieve ideal cardiovascular health, whereas women who report more rewards are more likely to report better health. These are beta coefficients and so positive values that do not include 0 reflect a statistically significant difference. And we can see that the number of ideal cardiovascular health components with

121
00:31:46.970 --> 00:31:59.150
Mercedes Carnethon: increases and stressors are significantly lower. But and that's the top line, and with increasing rewards are much higher. They're much more likely to have a greater combination of these

122
00:31:59.630 --> 00:32:16.209
Mercedes Carnethon: cardiovascular risk factors. And again, those are, I'm sorry, presented as odds, ratios below, whereby values less than one reflect protection and values higher than one indicate, much more likely to adhere to be meeting those guidelines.

123
00:32:17.590 --> 00:32:44.359
Mercedes Carnethon: however, when both stress and reward are included in the same model, we see something slightly different. The rewards, if we look at that top column. The rewards are no longer mitigated when we consider stress in the same model. So having those rewards and positive roles in one's life don't mitigate the damage of stressors.

124
00:32:44.470 --> 00:32:59.480
Mercedes Carnethon: And this happens when they're studied simultaneously. The presence of stressors does not overcome the positive benefits of rewards. So really, considering the role of stress in one's overall cardiovascular risk is critically important.

125
00:33:00.290 --> 00:33:26.250

Mercedes Carnethon: As we move into older adulthood, we do see that life expectancy is longer in women as compared with men. Socially, more women are living alone. Social isolation can become a risk factor. More women are spent caregiving from male partners who have chronic diseases, caregiving on its own induces a lot of stressors. There can also be a lot of financial stress with the loss of one income. If there's a partner who's been lost.

126
00:33:26.650 --> 00:33:34.960
Mercedes Carnethon: More women do survive. Incident, cardiovascular disease, which enhances their risk of long term cvd mortality.

127
00:33:35.140 --> 00:33:53.240
Mercedes Carnethon: And we also do see higher rates of overweight and obesity among older women than older women, older men, which may convey higher risks for diabetes and cardiovascular disease, each of which can influence physical functioning and the ability to live independently as an older adult.

128
00:33:55.260 --> 00:34:10.440
Mercedes Carnethon: So, returning back to the issues related to disparities, these are data from the Eric surveillance study, the atherosclerosis, risk and communities. Cohort and Minnesota is a site. University of Minnesota is a site for this particular study.

129
00:34:10.510 --> 00:34:18.800
Mercedes Carnethon: We can see that black females and white males over time are much more likely at every stage across the life course.

130
00:34:19.179 --> 00:34:25.900
Mercedes Carnethon: Sorry. They have fairly comparable rates across the life course of having an incident, heart attack or fatal Chd

131
00:34:27.800 --> 00:34:35.660
Mercedes Carnethon: and you know these patterns are notable, and we see much lower rates among white females.

132
00:34:36.230 --> 00:35:04.640
Mercedes Carnethon: I think the psychosocial stressors that we see among minority. Women can influence cardiovascular risk disparities when we think about intersectional identities, both sex and race and the resulting isms. Racism, sexism can really magnify the stress that is borne by women who are racial and ethnic minorities, and this is demonstrated by mistreatment and inadequate treatment by providers. Lack of access to health, promoting resources.

133
00:35:04.640 --> 00:35:12.620

Mercedes Carnethon: even a lack of alignment. We see a lot about alignment of provider and patient demonstrating better health outcomes.

134
00:35:12.700 --> 00:35:24.860
Mercedes Carnethon: I think there are multiple pathways by which stress enhances cardiovascular risk, adverse behavioural coping, the psychosocial stress response that I described earlier as well.

135
00:35:25.260 --> 00:35:39.669
Mercedes Carnethon: A few years ago I had an opportunity to speak at the American Heart Association in a session on disparities that was convened by Gaynell Magwood, who is a nurse researcher now at University of South Carolina, or maybe she moved to Clemson.

136
00:35:39.790 --> 00:36:04.860
Mercedes Carnethon: about the superwoman schema, which wasn't something I was familiar with. It arises, I believe, from the field of psychology or sociology and its definition. I mean, it's actually used across multiple cultures. A set of characteristics found in a woman who performs or attempts to perform all the duties typically associated with several different full-time roles. Wage earner, mother, homemaker, and wife.

137
00:36:04.860 --> 00:36:21.310
Mercedes Carnethon: And what happens when the responsibilities become too much. And I put these depictions up because when I looked up the superwoman schema, it was reflected in multiple different cultures. So not just meant to reflect the black American experience, but also other cultures as well.

138
00:36:22.320 --> 00:36:35.909
Mercedes Carnethon: And I think what happens is we see exhaustion. We see particularly minority women experiencing much higher rates as is reflected in the figure that I showed that I showed.

139
00:36:36.670 --> 00:37:00.660
Mercedes Carnethon: So I think, in summary cardiovascular risk in women is the culmination of a life course of exposure. Childhood behaviors track into adulthood, and in young and middle adulthood present numerous unique risk factors for cardiovascular disease, particularly related to adverse pregnancy outcomes as well as the burdens of playing multiple roles. So even for those individuals

140
00:37:00.660 --> 00:37:17.880
Mercedes Carnethon: who choose not to have children, many of these women are in the workforce and experiencing discrimination from multiple angles which can lead to psychosocial stressors that predispose to work. Excuse me, predispose to cardiovascular risk

141

00:37:17.890 --> 00:37:42.339
Mercedes Carnethon: and older adulthood is associated with greater equality and cardiovascular risk. Not a good thing between men and women, but women, because they are much more likely to become to be survivors into older adulthoods, and often survivors alone, with still a lot of responsibility. May face increased burden with few people to provide care for them when they reach older adulthood.

142
00:37:43.890 --> 00:37:58.119
Mercedes Carnethon: So what are some of the unique factors associated with management in women? And I pose this question particularly for the discussion and Q&A are different preventive strategies and treatments warranted.

143
00:37:59.940 --> 00:38:07.059
Mercedes Carnethon: And if, as you consider this final segment, you think that different strategies for management are warranted, why is that?

144
00:38:07.860 --> 00:38:19.409
Mercedes Carnethon: And what type of additional training is required in medical schools and in ancillary professions, to support the different need for treatments, which then, you know.

145
00:38:19.650 --> 00:38:27.299
Mercedes Carnethon: I think, bleeds into the next question which disciplines outside of medicine should contribute to this education.

146
00:38:28.440 --> 00:38:56.170
Mercedes Carnethon: Women are diagnosed with multiple forms of cardiovascular disease later than men. Some of this later diagnosis is appropriate, because, as we demonstrated before, women are much more likely to be to develop these cardiovascular diseases later, because of the protections of the pre menopausal period. So some diseases develop later, I put this in green because that's acceptable as a reason for age of diagnosis.

147
00:38:56.170 --> 00:39:25.429
Mercedes Carnethon: And what I'm showing. Here is the age of diagnosis in men in blue and women in red. For these different conditions, older diagnosis for coronary, artery disease on the left slightly younger or comparable. Actually, this slightly younger diagnosis for stroke. Again, when one survives a stroke can be associated with significant disability. Later age of diagnosis for lipid disorders and a later age of diagnosis for hypertension.

148
00:39:25.490 --> 00:39:40.299
Mercedes Carnethon: In many cases the risk factors may be different, and they may be they may include social roles reproduction. The clinical presentation is also different. This is in gray, because whether or not this is acceptable

149

00:39:40.330 --> 00:39:48.079
Mercedes Carnethon: is up for debate, but a reason it's really not acceptable is that women don't look like they're at risk for Cbd.

150
00:39:48.240 --> 00:39:55.329
Mercedes Carnethon: and to really share this bias, here's a screenshot of an interview that we did on the local news

151
00:39:55.560 --> 00:40:13.700
Mercedes Carnethon: 2 years ago. No, last year for Go red for women, month for the American Heart Association. We featured this survivor of cardiac arrest, who in her 30 S. Was at home, having breakfast with her 4 children, and she collapsed from sudden cardiac, arrest

152
00:40:14.000 --> 00:40:17.749
Mercedes Carnethon: her 15 year old, who learned Cpr. At school.

153
00:40:17.790 --> 00:40:25.409
Mercedes Carnethon: Sorry she didn't. He didn't perform it at work. He performed it on her and saved her life in front of the other children.

154
00:40:25.520 --> 00:40:31.000
Mercedes Carnethon: Women, unfortunately, are less likely than men to receive bystander. Cpr.

155
00:40:31.000 --> 00:40:55.710
Mercedes Carnethon: And the reasons they're less likely to receive it. When surveyed concerns about modesty. You've got to tear that blouse open. You've got to properly place your hands and perform chest compressions. We did a segment on this as well, particularly as some of the individuals who make these mannequins developed womankins is what they call them, so that people could practice becoming comfortable

156
00:40:55.710 --> 00:41:11.580
Mercedes Carnethon: providing bystander. Cpr. When women collapse an argument I made is that if you save a woman's life, no one is gonna be overly concerned about you, inadvertently touching her breasts during the process of Cpr.

157
00:41:12.750 --> 00:41:24.100
Mercedes Carnethon: And I think you know, summarizing where I see interventions needing to go. This is the freedoms, health impact pyramid, whereby the

158
00:41:24.110 --> 00:41:46.450

Mercedes Carnethon: factors, if they are intervened upon. At the base of the pyramid are interventions that have the broadest impact on populations. You might see relatively small changes with smoking bans, with policies that provide access to healthy foods, such as wic or subsidies for fresh fruits and vegetables. But those small changes have a large impact on the population

159
00:41:46.450 --> 00:41:56.459
Mercedes Carnethon: versus the top of the pyramid, which relies a lot more on increasing individual effort. However, if we were to focus all attention on the top of the pyramid

160
00:41:56.460 --> 00:42:19.799
Mercedes Carnethon: say, for example, encouraging physical activity, but without providing the supports at the social and structural level, so that people have access to these resources. Only certain populations will get better. They'll see major gains, but we're leaving the majority of the population behind, and as a public health professional, I really struggle with and encourage us to be thoughtful about this balance.

161
00:42:20.140 --> 00:42:49.530
Mercedes Carnethon: So in summary, despite clearing consistent data, that heart diseases are a significant cause of morbidity and mortality among women. Women are less often presumed to have Cbd. And they are less often intervened upon. I think that training in medical schools, schools, schools of public health, and other schools. Should emphasize that women can have a different profile of symptoms, but that the risk is still there, and training and education should support interventions when women do have cardiovascular events.

162
00:42:49.550 --> 00:43:04.599
Mercedes Carnethon: Really thank each of you for listening. Today, I acknowledge my work with the American Heart Association and scientific collaborators not just within Northwestern, but outside. And thank you for this opportunity to share today.

163
00:43:04.840 --> 00:43:12.119
Mercedes Carnethon: So love to open this up for question and answer. I see there are some in the chat

164
00:43:12.140 --> 00:43:13.730
Mercedes Carnethon: already.

165
00:43:14.000 --> 00:43:25.200
Mercedes Carnethon: I'm not sure I don't mind moderating this myself, as I'm looking at them. The first question is, but actually Dr. Noon. Yes, I'd like to offer you a chance to ask questions first.

166
00:43:25.450 --> 00:43:26.230

Mercedes Carnethon: Thanks.

167
00:43:26.660 --> 00:43:35.910
Ana Nunez MD: You're on mute, though I'm good at reading lips, but not so good. This is, you know. II swear that I won't be unmuted effectively once we start.

168
00:43:35.910 --> 00:44:05.250
Ana Nunez MD: But those things are related. So you know, there had been discussion, I think, for quite some period of time about addressing sort of stressors, whether from caregiver stress or differential care, differential stress. That perhaps you know, as in sort of Framingham space, about sort of smoking and diabetes, that psychological stressors somehow could be made sort of more granular as sort of one that sort of counts, especially since we see the predominance, especially in younger women.

169
00:44:05.270 --> 00:44:13.760
Ana Nunez MD: and and has there been, whether it's, you know, at the extreme sort of biomarkers in terms of stress? Or is it in terms of others that we can kind of say.

170
00:44:13.760 --> 00:44:37.890
Ana Nunez MD: has diabetes? Does smoke, etc., in terms of sort of eliminating what a long time ago referred to as the female advantage. 10 year lead time that women had, as compared to their male compatriots in terms of manifesting disease, not your lifestyle approach but have has there been any progress in terms of sort of putting psychological stress? And some of that came from looking at individuals who had autoimmune disease.

171
00:44:37.890 --> 00:44:55.159
Ana Nunez MD: diseases like lupus and rheumatoid arthritis. In terms of that has there been any progress in terms of, if you will, uplifting psychological stress as a risk factor. That probably is true for men and women identify it correctly. Right? But certainly we might play a more important role for women.

172
00:44:55.830 --> 00:45:16.649
Mercedes Carnethon: That's an excellent point. I am trained in epidemiology, and I bring that up to say that the strength of an association can depend very heavily based on our ability to measure it with great precision. The challenge of including and being very clear about psychosocial stress as a risk factor comes from the reality, that

173
00:45:16.650 --> 00:45:27.320
Mercedes Carnethon: what is a significant stressor to one may not be a significant stressor to someone else. And what I believe mitigates the the

174
00:45:27.580 --> 00:45:32.039
Mercedes Carnethon: impact and internalization of a stressor is having

175
00:45:32.210 --> 00:45:36.399
Mercedes Carnethon: the resources to cope with that stressor. So it's

176
00:45:36.900 --> 00:45:39.569
Mercedes Carnethon: fairly easy to say that something like

177
00:45:39.610 --> 00:45:52.250
Mercedes Carnethon: the death of a spouse or the death of a loved one is a psychological stressor. So the extent to which our studies can focus on measuring specific stressors that might be universally agreed upon.

178
00:45:52.360 --> 00:46:11.409
Mercedes Carnethon: and that have a clearly identified biological pathway by which they might cause cardiovascular disease. That is one option that certainly we can all agree that that would outline and and very clearly be a stressor. But so many more stressors are

179
00:46:11.410 --> 00:46:19.600
Mercedes Carnethon: much more subtle thinking about the intersectional identity and the isms. You know. What is a microaggression to one is not a microaggression type

180
00:46:19.600 --> 00:46:43.840
Mercedes Carnethon: to others. So I think where the field is going now. Obviously, there's a lot of work trying to get under the skin and measure the psychological response to stressors. There's a lot of work trying to refine our instrumentation for capturing what could be stressors because they're culturally and socially relevant. But I think where the focus is that I'm most enthusiastic about

181
00:46:44.000 --> 00:47:02.109
Mercedes Carnethon: is promoting positive psychological attributes positive. There's a positive psychology movement. There's stress reduction things that promote resilience so that one can better cope with stressors. So I, in my opinion, before I. In my opinion, I think we all agree.

182
00:47:02.110 --> 00:47:19.560
Mercedes Carnethon: Stressors, social determinants of health are a risk factor. However, we can't put a number behind it in the same way that we can for diabetes or hypertension. And so our attention should focus on promoting resilience and positive psychological attributes to cope with stressors.

183
00:47:19.940 --> 00:47:39.919
Ana Nunez MD: So it sounds like it's sort of a numerator and denominator thing, right? Sort of everybody gets stressed. Thank you very much. But in the denominator in terms of what can

we mitigate it? In terms of support or training, or or etc.? Doctor Bla Blaze actually adds to us, thanks for a wonderful talk. We see disparities in other chronic diseases, such as cancer.

184
00:47:40.100 --> 00:48:09.229
Ana Nunez MD: stress is an impact. How do you take into account these other inflammatory diseases and their impact on Cvd, and I think that the whisper here is that with inflammatory diseases, we do have biomarkers in terms of how under control or not under control. Things are and maybe there's a piece to this this. You know how long. Not well controlled in terms of sort of in biomarkers that might play a role might serve in this. But your thoughts, Dr. Kind of up.

185
00:48:09.480 --> 00:48:24.419
Mercedes Carnethon: No, I think you're right. So you know, stress and psychological stress is an umbrella that is over many different conditions. The pathways that we see by which stress leads to challenges in inflammatory diseases.

186
00:48:24.420 --> 00:48:39.840
Mercedes Carnethon: Many of these same pathways are present in cardiovascular disease. Atherosclerotic, cardiovascular diseases do have an inflammatory origin as well. When you're layering on the management of multiple chronic conditions that are arising from one core

187
00:48:40.140 --> 00:49:04.520
Mercedes Carnethon: exposure. That being stress. Obviously, we would see the greatest impact if we can influence stress. Now it's not actually logical, I think, in many cases to intervene upon stress, but to intervene upon the strategies and ways which with which one copes with stress could yield overall benefits from multiple chronic conditions.

188
00:49:04.520 --> 00:49:29.699
Mercedes Carnethon: In speaking with one of my good colleague one of my colleagues who studies social factors as a social epidemiologist, she pointed out, look, I studied this in relation to adverse pregnancy, outcomes cancer, cardiovascular disease transplant, you know, a range of outcomes because social factors are ubiquitous. And II would advocate for targeting that umbrella that oversees so many different conditions.

189
00:49:30.440 --> 00:49:49.929
Ana Nunez MD: So here's one of our attendees has more of a comment than a question. But women are being empowered to have more rights and access to independence, their male counterparts, but still face societal pressure, to perform domestic duties. Best way to combat this is to hold men more accountable for domestic and independent duties. The difficulty comes because equality is scary

190
00:49:50.180 --> 00:50:03.000

Ana Nunez MD: for men quote when all you've experiences. Privilege, equality feels like oppression, end quote. There's also an argument to be made for women's pains not being taken as seriously in the medical field. But community support is a great first step.

191
00:50:03.470 --> 00:50:05.220
Mercedes Carnethon: My response is, yes.

192
00:50:05.420 --> 00:50:31.270
Mercedes Carnethon: III couldn't agree more. I mean, you know, at the end of the day equality. Someone is gonna feel that something is being taken from them. And we see a lot of this happening. Right? I mean, we see if you call these issues out, you and you try to effect change, you get pushback. And you, I think what is surprising is that you do get pushback from some groups of women who are well served by the current

193
00:50:31.380 --> 00:50:53.149
Mercedes Carnethon: way things stand, and those tend to be women who are beneficiaries of significant privilege. They as well don't have as much incentive to see this push for equality. So we face many barriers. I think the best thing that we can do, particularly as professionals in this field is, call attention to it with some degree of bravery.

194
00:50:53.460 --> 00:50:59.549
Ana Nunez MD: Well, and if we make more accessible in terms of resources and opportunity for resilience and growth.

195
00:50:59.550 --> 00:51:24.319
Ana Nunez MD: The reality of it. It is, it does raise all votes right? So everybody actually benefits at the end of the day in terms of. I think it's also important to to serve as role models for the next generation. You know, there are a lot of things that men now do, that men in the forties and fifties would have never thought was their role. So we do see a lot of evolution among men. We had our women in Medicine Conference last Friday at Northwestern.

196
00:51:24.390 --> 00:51:34.609
and one of the laments is that there weren't enough men in the room to hear the things that were being discussed. Because we need men as advocates and partners in making this change.

197
00:51:35.550 --> 00:51:44.029
Ana Nunez MD: There is a question about any recommendation for women caregivers. You talked about caregiver stress the examples in terms of

198
00:51:44.260 --> 00:51:49.860
Ana Nunez MD: unique ideas about support or ways to promote employees that you have sort of come across.

199
00:51:50.080 --> 00:52:19.919
Mercedes Carnethon: I don't have a lot of innovation. Innovative thoughts in this space. I do think that community provides a lot of support for individuals. I think that caregivers need to have communities of support for one another. I think that the extent to which there can be policies that might provide some sort of financial support or relief for caregivers. A colleague of mine studies children who are medically complicated.

200
00:52:19.920 --> 00:52:33.069
Mercedes Carnethon: and she mentioned that when you you see this, what ends up happening is that people can't find appropriate care, particularly with the amount of subsidy available to provide for care, and these are low wage occupations

201
00:52:33.070 --> 00:52:57.930
Mercedes Carnethon: that she argued for a policy whereby one would pay caregivers so that they could leave the workforce and not have their family suffer by that loss of income. So when I think about structural interventions, such as paid caregiving. Who better to provide care for medically complicated baby, or a medically complicated adult or partner than their partner. But if they have to lose income to

202
00:52:57.930 --> 00:53:14.210
Mercedes Carnethon: do it. Then we have introduced another problem. If they never have respite care so that they can then go see their doctor. Then we've developed a problem in the caregiver which then will have downstream consequences for both, the person being cared for as well as the caregiver.

203
00:53:14.210 --> 00:53:32.249
Mercedes Carnethon: I have young children myself, and I remember after the first year thinking, Oh, when did I last go to the dentist? And how can I even make that a priority. I've got this screaming infant so I think one of the one area of emphasis really is focusing on the caregiver and acknowledging the burdens that they face.

204
00:53:32.600 --> 00:53:41.709
Ana Nunez MD: And, as you mentioned, there's also sort of the cultural push that you know, as an internist sort of say to a female patient, you know, who couldn't get to the dentist or couldn't get to the doctor

205
00:53:41.840 --> 00:54:05.420
Ana Nunez MD: schedule at the same day you schedule your kids visits, and there was like, oh, I could do that cause we sort of forget about us, right? And so how do we equation in terms of doing that? We're we're we're running out of time. But I'm gonna see if we can kind of get to these off. The the thing here first is research about diabetes, medication for weight loss, helping with overall cardiovascular outcomes any any thoughts or information about that?

206
00:54:05.420 --> 00:54:29.220
Mercedes Carnethon: Sure. So the major trial results from the new from the semaglotide field were presented this past summer and fall both at the European side for Cardiology and the American Heart Association sex was a pre-specified subgroup, and there were similar benefits in both women and men.

207
00:54:29.220 --> 00:54:40.289
Mercedes Carnethon: So I think that's very positive. A positive note that I would make is that we need to have women in more clinical trials so that we can address these questions. And those studies did do that. And we do see similar benefits

208
00:54:40.290 --> 00:54:51.520
Ana Nunez MD: great. And then, speaking of you, said Europe, we'll talk about other countries. Do we see in terms of countries? I think the assumption here is that a racially concordant for African Americans?

209
00:54:51.520 --> 00:55:16.369
Mercedes Carnethon: Are there differences across those other countries about our health like we see in the Us. You know. I don't know for sure, because they would be focusing on different metrics, particularly if you were in a country where it was racially homogeneous. It's one of those where social class, you would see differences by social class. And that would be the marker we'd investigate. We don't have great data coming out of developing economy countries about these questions.

210
00:55:16.370 --> 00:55:37.379
Mercedes Carnethon: And there's so many more structural factors as well as cultural factors that would influence one's ex, you know, ability to access care, you know, thinking about countries where they're very males play a much more prominent role. Who gets access to care? It may not be the women. And so I'm very curious. And I'm less familiar with that line of research.

211
00:55:37.500 --> 00:55:55.700
Ana Nunez MD: Okay, I do know that we have sort of at least previous literature that said, If you come to join us in the Us. Thank you very much. Your heart health risks. Go up even if you come from a country for which it's lower. Whether it's the ability to smoking, or whatever good for your health. So all the more work we need to do

212
00:55:55.920 --> 00:56:13.289
Mercedes Carnethon: this was fabulous any parting thoughts or or anything, as we wrap up here. No, I really appreciate everyone's attention and keep the thoughts coming. I think the level of innovation and contributions from multiple fields will be the way in which we can actually have a lasting influence on women's health.

213

00:56:13.380 --> 00:56:20.150
Ana Nunez MD: Great. Thank you very much, Dr. Carnathan. We're we're wrap, Matt. I'll turn it over to you. Please

214
00:56:20.780 --> 00:56:36.009
Mercedes Carnethon: have a good day, everybody. Thank you. Sounds good. Yeah, thank you so much, Dr. Current. Alright. Thank you. Everyone for being here. One question survey will appear in your web, Browser, immediately after ending the zoom session. Please take the time to complete the survey, to inform us of future presentation topics.

215
00:56:36.010 --> 00:56:54.279
Matt Amundson: and reminded that this session was recorded, and will be shared within 2 days to all those who registered for the event and otherwise recording can be found under the education and training tab of the Ode website. And please save the date. Our next things lecture Series session will be on Wednesday, April tenth, with Dr. Sultan, and from discussing, discussing Dei and medicine.

216
00:56:54.310 --> 00:56:56.780
Matt Amundson: Until then. Take good care. Thank you. Everyone.