UNNATURAL CAUSES ... is inequality making us sick?

A four-hour series airing on PBS and a national public impact campaign

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When the Bough Breaks

TRT 29 min

DVD Chapter 1: Race Gap

NARRATOR: Several years ago, two physicians in Chicago set out to solve a mystery: why do African American women have babies that are born too small, at twice the rate of white American women?

Richard David and James Collins are neonatologists -- pediatricians who specialize in the care of infants who come into the world too early or dangerously underweight – and often both. Like virtually everyone in their field, they were troubled by the striking racial differences in rates of premature and low birth-weight babies. What could account for the differences?

JAMES COLLINS (Neonatologist, Children's Memorial Hospital, Chicago): Originally I thought that the disparity in premature delivery was really driven by socioeconomic differences between African Americans and whites. It's well known that African Americans have a lower, collectively, socioeconomic status than whites; they're less likely to receive college education than whites. So I thought once you corrected for that, that the gap would go away.

NARRATOR: But Collins and David discovered the gap didn't go away.

COLLINS: We were very surprised to find that the gap actually widened as education and socioeconomic status improved and then began to look at it from a bigger perspective and broader perspective, and really started to realize, well maybe it's something about lifelong minority status which is the driving factor here.

RICHARD DAVID (Neonatologist, Stroger Hospital of Cook County, Chicago): There's something about growing up as a black female in the United States that's not good for your childbearing health. I don't know how else to summarize it.

NARRATOR: So the two neonatologists began to explore whether being a member of a particular minority group might affect pregnancy outcomes, and they came up with a controversial hypothesis. What's behind the low birth weight and premature birth for African American babies is the unequal treatment of African Americans in American society. In other words, racism is taking a heavy toll on African-American children even before they leave their mother's wombs. It's an idea that's slowly gaining acceptance.

R. DAVID: We're in the midst of a paradigm shift. 15 years ago, racism as a risk factor was almost never heard of in a scientific paper; whereas now it's much more a possibility.

DVD Chapter 2: Kim Anderson's Story

NARRATOR: The story of Kim Anderson, a successful Atlanta executive and lawyer illustrates exactly what David and Collins are talking about. We know that a healthy lifestyle should lead to a healthy baby. Women who eat well, exercise, get prenatal care, avoid alcohol and drugs, and cigarettes are more likely to have a good pregnancy. But one of the best predictors for a healthy pregnancy outcome is higher education.

KIM ANDERSON: This is a picture of me, May 1984, when I graduated from Columbia Law School. People would think I'm living the American Dream: a lawyer with two cars, two and a half kids, the dog, the porch, a good husband, great family. I've always been lucky to have good health. Always ate well. Exercised. Never smoked.

NARRATOR: So when we look at Kim Anderson – a well-paid lawyer in good health -- we would expect her newborn to be a healthy, full-term baby. It didn't turn out that way. Back in 1990 when she was pregnant with her first child, Kim went into labor two and a half months early.

KIM ANDERSON: I just wanted to know at least that if she was born alive, that at least we had a fighting chance. I heard her cry, I said, "Thank, God." But she was so small. I mean you could like, hold her in the palm of your hand.

NARRATOR: Kim's baby, Danielle, weighed only two pounds thirteen ounces when she was born. She joined the ranks of almost 300,000 low birth-weight infants born in the U.S. that year, about 1 out of every 14 babies, all of them at a high risk of dying before their first birthday.

KIM ANDERSON: I remember getting home and being in the bathroom, just, I fell apart. You know, 'cause it's like I didn't get to take my baby home, you know. I remember just sort of falling apart.

NARRATOR: Preterm and low birth weight are the leading reasons that the US claims the dubious distinction of having one of the worst infant survival rates in the industrialized world. We fall behind dozens of countries. Babies born in Slovenia, Cyprus, Malta and Croatia stand a better chance of living to the age of one than a baby born here.

R. DAVID: It is kind of like the canary in the mine; it's the most sensitive of our health outcome indicators per population.

NARRATOR: And infant mortality is not just a problem for African Americans.

R. DAVID: White Americans, if they were a separate country, would still rank 23rd in the world. So outcomes are very bad.

NARRATOR: As a country we pay an enormous price for our high rate of premature and low birth weight babies. Pre term birth is the second leading cause of death for infants. If they're lucky enough to survive, many face a lifetime of learning and medical problems. Studies show that prematurity increases the risk for hypertension, diabetes and coronary artery disease. And the high cost of their medical care begins the moment they're born. One month's stay in a neonatal intensive care unit averages \$68,000 dollars.

COLLINS: Neonatology is a lot of things. Inexpensive is not one of them. And we spend a disproportionately high amount of our income as a society taking care of infants, a lot of whose problems probably could have been prevented if they had stayed in the womb until term.

NURSE: Her current weight today, mom, is 2 pounds, 6.3 ounces.

MOM WITH PREMIE: Ok.

NURSE: Ok? So she's gaining, she gained 15 grams from yesterday.

MOM WITH PREMIE: This is my first child, so I was like just amazed, y'know, and I was, I was a little shocked. I have never seen a child this small before - never. It just took me away, but you see how she is now – she's 2 pounds. So, miracles do happen. Everyday.

DVD Chapter 3: SES, Genes, & Health

NARRATOR: In the terminology of social scientists, Kim Anderson's family enjoys high socioeconomic status, which increases the odds for overall good health.

DAVID WILLIAMS (Sociologist, Harvard School of Public Health): Persons who are higher in socioeconomic status, persons who have more income or more education or better jobs or more wealth, live longer, and have fewer health problems than those who are lower in socioeconomic status.

CAMARA PHYLLIS JONES (Medical Epidemiologist, Centers for Disease Control and Prevention): Education, for example, predicts infant mortality for both black women and white women. And the more educated you are, the less likely you are to have a low birth-weight baby, a preterm baby, or an infant death.

NARRATOR: Women who are poorest and least educated are those whose babies are at greatest risk in any racial group. But the babies of African American mothers with higher education are still at greater risk than we'd expect. Infant mortality among white American women with a college degree or higher is about 4 deaths per thousand births.

But among African American women with the same level of education, infant mortality is about 10 per thousand births – almost three times higher. In fact, African American mothers with a college degree have worse birth outcomes than white mothers without a high school education.

MICHAEL LU (Obstetrician, David Geffen School of Medicine, UCLA): Think about this. We're talking about African-American doctors, lawyers, and business executives. And they still have a higher infant mortality rate than non-Hispanic white women who never went to high school in the first place.

KIM ANDERSON: As a mother you're thinking: I did all the right things. They told me to take vitamins; I took vitamins. They told me to walk. They told me to eat vegetables. They told me not to drink. I didn't do all that, and why is my kid sitting here with these needles and, you know, so you feel real helpless. You really feel helpless.

NARRATOR: So Doctors Collins and David asked themselves if the answer could possibly be genetic – it's well known that prematurity can run in families. Is there something in the DNA of African American women that tends toward premature births regardless of education, prenatal care, or lifestyle? To answer the question, they created a study based on a simple assumption:

R. DAVID: If there was such a thing as a "prematurity" gene, and it came from Africa, then Africans should have more of it.

NARRATOR: They compared newborns among three groups: African American women, African immigrants to the U.S., and U.S.-born white women.

R. DAVID: It turns out that the Africans and the whites were about the same. The African Americans, on the other hand, had babies that weighed almost eight or nine ounces less than the other two groups.

NARRATOR: In other words, African immigrants to the U.S. and white women born in the U.S. had similar pregnancy outcomes. So if there is any genetic pre-disposition for low birth weight babies, it's doubtful that it falls along what we call racial lines. It turns out that when African women immigrate to the US, it takes only one generation before their daughters are at risk of having premature babies at a significantly higher rate and with poorer birth outcomes.

R. DAVID: Has her heart rate been in that range? Over 180?

NURSE: No actually, it's been about 160.

COLLINS: So within one generation, women of African descent are doing poorly. This to us really suggests that something is driving this that's related to the social milieu that African American women live in throughout their entire life.

DVD Chapter 4: Civil Rights Gains

NARRATOR: The news was once more hopeful. During the 1960s and 70s, with the civil rights and antipoverty movements, the health of African Americans compared to whites improved overall. Government initiatives not only integrated hospitals, but also opened up education opportunities and better jobs and housing. The health of African-Americans began to catch up with that of whites. And infant mortality rates in the African American community declined.

CAMARA JONES: During my lifetime the gap has closed a bit, and I think it's as a result of social policies. After the War on Poverty and the civil rights movement, we had social policies that were allowing people more opportunity.

NARRATOR: But in the 1980s, economic growth stagnated, and government began cutting back social programs. The impact on infant deaths was dramatic. The ratio of infant mortality among African Americans compared to whites began to climb. And continues to climb today.

But that doesn't explain the case of middle-class African American women like Kim Anderson. Why should highly educated women with good incomes still have high rates of premature and low birth weight babies? Once again a study by Collins and David points to racism as a key factor.

R. DAVID: Women who perceived that they had been treated unfairly on the basis of their race, whether it was looking for work, in an educational setting, or a variety of other settings, had more than two-fold increased risk of very low birth weight infant.

DVD Chapter 5: Chronic Stress

NARRATOR: So if racism is contributing to premature births among African American women – how does it work? How might racism take a physical toll on the human body over a lifetime? Increasingly researchers are looking at chronic stress – the stress caused by living day in and day out with discrimination.

COLLINS: Recent data suggests that chronic stress associated with being a minority, particularly being African American, for some biological reason, increases the risk of delivering a premature, low birth weight infant.

TYAN PARKER DOMINGUEZ (Assistant Professor, USC School of Social Work): When you have a reaction to a situation in your life that makes you anxious or gets you stressed out, you not only have a psychological or emotional reaction to that; you also have a body reaction.

MICHAEL LU: And if that stress is chronic, constant, and you just can't escape it, over time that chronic stress, the chronic activation of that response, creates wear and tear on your body's organs and systems so that you create this overload on these systems so that they don't work very well.

NARRATOR: Researchers believe stress can affect pregnancy outcomes in several different ways. Stress hormones are part of the intricate chemistry of pregnancy under normal conditions. When those hormones reach a certain level they may help trigger labor. But what might happen if you went into pregnancy already overloaded with stress hormones?

DOMINGUEZ: Think about a woman who is pregnant who is under a great deal of stress. Her body is going to start pumping out extra stress hormones. And so she may reach that tipping point for labor to begin sooner.

NARRATOR: Stress can also constrict blood flow to the placenta, which could limit fetal growth and may lead to premature delivery. Chronic stress may also contribute to serious inflammation inside the uterus, which can trigger premature labor. Research suggests it's not so much stress during pregnancy that may determine the health of a mother's baby, but the cumulative experiences of the mother over the course of her entire life, regardless of race. Dr. Lu calls this hypothesis the "life-course perspective."

LU: The life-course perspective posits that birth outcomes are the product of not simply the nine months of pregnancy, but really the entire life course of a woman. And the corollary for that is, disparity in birth outcomes is really the consequences not only of differential exposures during pregnancy, but really the differential experiences across the life-course of women of color.

NARRATOR: But is racism so dominant throughout the lives of African American women, that it can affect the birth outcomes of their children? One recent study reports that the majority of white Americans believe racial discrimination is a problem of the past. The evidence indicates otherwise. For example, African Americans at all income levels are more likely to be denied mortgages, pay more for automobiles, and receive fewer job interviews.

DAVID WILLIAMS: It was a fairly dramatic study done in Milwaukee, Wisconsin where they sent black and white men, all with identical resumes to apply for 350 entry-level jobs. What this study found was that a black male with a clean record, no criminal record, was less likely to be offered a job than a white male with a felony conviction. So it was a dramatic example of – in the year 2004 – of the persistence of discrimination in American society.

NARRATOR: This racial stress can have a life-long impact on African American families and their health.

DVD Chapter 6: Institutional Racism

RICHARD DAVID: Racism is a societal level problem. It's institutionalized; it's part of our educational system; it's part of our media; it's part of our culture. It's one of the struts that reinforces inequality in the society we live in.

KIM ANDERSON: So nobody, when I walk in a store, nobody says, "Oh, that's Kim Anderson, African-American, female lawyer, went to Columbia," they just see a black woman. I was in a store once, just walking around, thinking I was going to buy a pair of jeans. This clerk's following me around. So I said, "Why are you following me around? I'm not going to steal anything. Leave me alone. I'm not going to take something." When you're confronted with racism, that covert racism, your stomach just gets like so tight. You can feel it almost moving through your body; almost you can feel it going into your bloodstream.

NANCY KRIEGER (Social Epidemiologist, Harvard School of Public Health): There are very different kinds of quote, unquote stressors in the world. You can have a bad day and somebody else can have a bad day. They can cut you out of a parking space. It's an occasion, but it's not premised on the idea of second-class citizenship. It's not something that is a repeated and reactivated insult that occurs.

LU: So if we're serious about improving birth outcomes and reducing disparities, we've got to start taking care of woman *before* pregnancy and not just talking about that one visit three months pre-conceptionally; I'm talking about when she's a baby inside her mother's womb, an infant, and then a child, an adolescent and really taking care of women and families across their life course.

NARRATOR: So how do we actually identify and measure the kind of subtle, everyday racism that follows black women throughout their lives?

Camara Phyllis Jones is a family physician and epidemiologist at the Centers for Disease Control. She was one among of the first to investigate the connection between racism and health. One study looking at chronic diseases in over 100,000 women, posed a critical question to get a better understanding of how women internalize their racial experience.

JONES: How often do you think about your race? For white women, fifty percent saying that they never think about their race. For black women, almost fifty percent think about their race once a day or more frequently, with twenty-one percent thinking about their race constantly. That's an eternity of experience apart.

DVD Chapter 7: Everyday Racism

CAROL HOGUE (Epidemiologist, Emory University): Recently there has been a coming together around the hypothesis that stress really does make a difference. And that racism is a particular kind of stressor. It's like an addon to the other stressors of one's life: losing a job, losing a spouse, etc. The question is, "how do you address this?" You have to measure it.

FOCUS GROUP WOMAN #1: You know, there have been times where I've called on the phone and been like – I can't do this today y'all. Somebody, you know, come help, come...

NARRATOR: Finding ways to identify and measure racism is a challenging task. Psychologist Fleda Jackson, sociologist Mona Phillips and epidemiologist Carol Hogue have attempted to measure the impact of racism on middle-class African American women. It's a first step in understanding how ordinary, daily encounters with racism can affect women throughout their life course.

FLEDA JACKSON (**Psychologist**, **Emory University**): To collect the data we decided we first needed to hear from African-American women about what were the stressors in their lives. And so we started with focus groups.

HOGUE: And over a period of about 15 years, we evolved this measure, which is gendered. It's only just for African-American women.

FOCUS GROUP WOMAN #1: I think constantly having to internalize the racism that we experience every day. It's like, to me, where do you escape to? My daughter she's real open and friendly, and so, you know, she'll run up to the white children and say, "Can I play with you?" And then they don't even answer; they just look at her and run away. It's heartbreaking for me to see that.

JACKSON: If you have to take children outside of your neighborhood for the best educational opportunities; if you have concerns that they will be racially profiled; if there are concerns about the opportunities that they will have, all of that represents serious kinds of stresses that are experienced by African-American women on a constant basis.

JONES: It's like gunning the engine of a car, without ever letting up. Just wearing it out, wearing it out without rest. And I think that the stresses of everyday racism are doing that.

FOCUS GROUP WOMAN #2: You have a doctor that comes in that doesn't really pay attention to what it is you're saying, that invalidates what it is you're saying.

FOCUS GROUP WOMAN #3: No matter how many times I made it to the final interview, or how many programs come out of my research, it's just not enough. And I think it's unfortunate, but it does something to me internally. I've taken jobs, I mean, getting paid way less than the people that I know don't have as much education. I don't know what kind of resume to write at this point. So, you know, I'm scared to give people a resume.

NARRATOR: Can we protect African American women's bodies from the wear and tear of racism? One program, The Family Health and Birth Center in Washington, DC provides family support, employment and financial counseling-- and prenatal care. The result: preterm births were reduced by a third and low birth weight deliveries cut in half.

DVD Chapter 8: Coda

NARRATOR: In Kim Anderson's case it's impossible to pinpoint one cause for Danielle's premature birth—the stress of racism, genetic predisposition, or other factors. But researchers work with averages, not individuals. And with thousands of examples — the evidence pointing to the impact of racism and stress on pregnancy outcomes is becoming hard to ignore.

KIM ANDERSON: Danielle was discharged, even though she was so small, you know four pounds, but she just pulled through. She could have had sight problems; she could have had learning disabilities. She's a great student. She doesn't have problems with health. It could have been so different. It could have been so different.

MICHAEL LU: What kind of nation do we want? I have two daughters, and the question is: What kind of nation do we want them to-to grow up in? This nation was founded on the self-evident truth that all men and women are created equal, and yet 230 years later, that truth still not quite so self-evident. Right – you ain't created equal if you can't get a equal start.

KIM ANDERSON: Sometimes I do worry what would happen if my daughter delivered a preemie. I'm looking at a second-generation preemie who says she wants to be a cardiologist and neonatologist, which to me is stress on top of stress, and as a African American woman, (laugh) who now wears dreads. So, so all those things that are going to be on her heart, on her mind, in her life. You don't want her have to worry about what to do with a preemie. Just don't want her to have to go through that and experience that, and wonder what the outcome would be. And I hope, I pray, that if it happens, her outcome will be as blessed and successful as ours has been with her.

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