inSocialWork Podcast Series

Episode 17 - Dr. Sandra Lane: Structural Violence and Disparities in Health

[00:00:08] Welcome to LIVING PROOF. A podcast series of the University at Buffalo School of Social Work at www.socialwork.buffalo.edu. Celebrating 75 years of excellence in social work education. We're glad you could join us today. The series Living Proof examines social work research and practice that makes a difference in people's lives. The University of Buffalo School of Social Work is celebrating 75 years of transforming lives and communities. We would like to invite you to be part of this celebration. Please visit our website www.socialwork.buffalo.edu to see a full list of events marking our 75 year leading up to the gala celebration. Why do racial and ethnic minorities in America experience an undue burden of disease disability and premature death. Today's guest Dr Sandra Lane might say it's all connected. Conditions such as infant mortality low birth weight incarceration high blood lead levels and HIV transmission all interconnect under a system of structural violence to cleave and widen the gap and health disparities among people of color. Although biology and behavior play a role Dr. Lane's work has led her to understand how environment and policies and can foster and even generate disparities in health. Dr. Sandra Lane is a professor of health and wellness and social work at the College of Human Ecology at Syracuse University. Throughout her career Dr. Lane has focused her scholarly and practice endeavors on the issues of poverty race and health.

[00:01:55] Her work as a medical anthropologist and public health specialist has taken her throughout the Middle East including Egypt Sudan Jordan the West Bank and Gaza to study reproductive health and child survival as director of Syracuse healthy start. Dr. Lane is credited with helping to improve birth outcomes in Onondaga County New York which prior to her tenure as director suffered from the highest rates of infant mortality of any U.S. city reporting infant mortality data under Dr. Lane's leadership. The rates of infant mortality declined by more than 25 percent. Dr. Lane is the author of more than two dozen peer reviewed journal articles and 20 book chapters. Her recent book Why are our babies dying. Pregnancy birth and death in America has recently been published by paradigm Dr. Lane has been awarded more than 11 million dollars in research funding including monies from the Ford Foundation the Centers for Disease Control and Prevention and the Environmental Protection Agency. In this podcast Dr Lane discusses how policy and environment contribute to disparities in health. Bernadette Hoppe attorney and adjunct faculty of the University at Buffalo Law School is our interviewer Hi my name is Bernadette Hoppe and I'm an attorney here in Buffalo New York I'm an adjunct faculty member of the law school and I'm also the president of the board of the New York State Perinatal Association. And I have with me today Dr. Sandra Lane welcome. Thank you very much. So Doctor Lane you have such an interesting kind of mix of professional and practical background so can you talk a little bit about how you got started. What came first came first. Well first I was very interested in traveling interested as many anthropology students are of doing field work outside of the United States.

[00:04:07] So as an undergraduate I studied Arabic language and French language and became something of an area specialist in the Middle East and North Africa. Of course you're not a complete specialist when you finish school you're just beginning but they call you a specialist. And so for my doctorate I focused on maternal and child health among people in the Middle East. And after finishing the MPH in epidemiology which I did at the end of my doctorate I went to Egypt and worked in the Ford Foundation where you know the Ford Foundation as a field a large philanthropic organization that has offices all around the world. And I was in the Cairo office with responsibility for Egypt Sudan Lebanon Lebanon Yemen Jordan and the West Bank and Gaza. And I was the reproductive health child survival and population program officer for four years. So this was really quite wonderful it built on all of the things that I did before in all my studies. And it helped me to develop a specialization in what eventually became gender and reproductive health

and culture really focusing largely on women's disadvantage and disparity not so much. Now in Egypt but in the mid 1980s women and girls died disproportionately toward compared to men and boys. So that in the sex ratio if you looked at the whole country there was a dearth of females and that was because they didn't have the poor populations the same access to health care and nutrition. Largely those two as men did. Now that's changed. So how does that work translate or compare to the work that you've done in poor urban cities in the United States. Well I came back to the United States in 1992.

[00:06:24] And at that point I really didn't know much about my own country especially much about my own country's health system. And I wanted to make a difference I felt that I had made a difference in the Middle East in my own modest way. And I wanted to make a difference here. And I looked around and I felt that racial and ethnic minority populations in the United States faced many of the same issues of lower education less access to health promoting resources and less access to access to health care as women and girls in the Middle East. I felt that those issues were really quite applicable. And so that's what I've worked on since. So working on reproductive health and women's health a lot of your research has been around infant mortality low birth weight and kind of low intra uterine growths. Can you explain a little bit about what does that tell us. What does the why are researchers so interested in infant mortality what does that tell us about the health of a population. Well infant mortality is important in and of itself because babies are are you know our future and babies are absolutely dear to families but also infant mortality is used by international agencies. World Health Organization UNICEF etc. use in infant mortality and under 5. Child mortality as a measure of the development of a society by that measure the city of Syracuse where I live and have done most of my research which it shares with many other U.S. cities is underdeveloped. We may have and we do have wonderful health care. We have several hospitals. You can get there. You can get a tummy tuck you can get your heart valves replaced.

[00:08:31] You can get advanced care and treatment for cancers. But with regard to the health and survival of people of color in Syracuse we are underdeveloped because there's a great disparity. So let's talk about kind of from a numerical perspective what that looks like. Right. So infant mortality is the you know the death of a baby under one year of age. Right. Yes. So when you say that there's a disparity what does that look like. Like how many babies how many white babies die in Syracuse every year compared to how many babies of color and what are some of those different disparities. If you look at it nationally just under seven babies per thousand approximately die if they're born alive and die before their first birthday. It had gone down for a while and then now it's popped back up we think for various reasons perhaps having to do with fertility treatment in Syracuse. The white population has approximately many years that infant death rate some years it's gone up for similar reasons to the country. The African-American death rate in the 1980s late 1980s was thirty point eight per thousand Syracuse led all the cities comparable sized cities in the country. We had the highest infant death rate in the year 1987. And I wasn't there then not. It had come down a bit through great effort on the part of a lot of people in the city including the Syracuse commission on women that took the lead on this. But by 1997 10 years later it had come down to twenty point seven per thousand.

[00:10:25] And that year the white infant mortality rate was just around 7 per thousand so you see that at that point the disparity was great. African-Americans were dying infants were dying at about three times the white rate. Latinos Syracuse has I think it is according to several measures. One of the highest Latino child poverty rates in the nation in the nation. I think it's the second or third highest. So although it's a small population a latino population they have in many measures worse infant health and survival outcomes than African-Americans. Now it's much better much better which is to say that it's only twice as bad for people of color as for white people. That represents a great improvement in hard work on the part of everybody. But it's still a disaster. The Healthy People 2010 goal for our country is 4.5 infant deaths per thousand live births and just you know

those who are not even coming close to that. So so much of your research has been to look at all of the different of factors that might contribute to that. So what is it that causes that incredible disparity. Two to three times the rate of death for babies. I mean African-American and Latino communities and it is in the white community. So first we have to look at what causes infant death. And there are some known causes and some causes that we're still scratching our heads about and trying to figure out. But those causes the known causes for example women should get prenatal care they should not take drugs they should not smoke.

[00:12:16] We know all of that and then we have some unknown causes are hard to understand causes like when a woman's blood pressure becomes elevated during pregnancy or when a baby is born with birth defects that are not compatible with life. When we talk about the disparity though that's not what we're talking about. Those things tragically affect people of all backgrounds. Initially when people tried to look at that disparity they took the same measures that we knew about that caused infant death and tried to find if African-American women and Latinas for example were had worse health behavior. They were looking for individual level risks that lo and behold in Syracuse African-American women and Latinos do not drink more and did not take drugs more than white women. In fact they smoke less during pregnancy than white women. We have an unbelievable rate of smoking during pregnancy in Syracuse it's around 25 percent. You know it's depending on the group African-Americans and Latinos it's a bit lower around 20 or 18 percent and in the country it's 16 percent of women smoke during pregnancy so that's an issue. But that doesn't tell us why African-Americans have twice the rate of infant mortality and higher low birth weight than white women. So my research team and I have looked outside of the individual level risk behavior model which is not to say that we shouldn't all try to take responsibility for our own health but the gap the disparity is not because of individual behavior. That is our strong contention. The gap is about things that happen to people in their lives in their environment. Sometimes it has to do with policies that were implemented the untoward effect an unforeseen effect of policies like welfare reform yielded a peak in infant mortality during the time it was implemented.

[00:14:24] Things like no supermarkets in the inner city. Our research team has demonstrated with fairly extensive statistical analysis that where there are no supermarkets selling healthy fresh food the specific kind of low birth weight called growth restriction where the baby doesn't grow well inside of its mother is much higher. And if you add the risk factor of supermarket to the analysis it wipes out the racial difference. It explains the racial difference in this kind of growth restriction. So just having access to a supermarket even if you are even if all of those other things are the same you know smoking or poverty or education that makes a difference it looks that way. There's one inner city neighborhood that has access to a full service supermarket run by Paul no James and he and his family have been you know in the community for two generations now and he has stayed there although it's difficult and this community that he's in has a probably the very highest poverty in our city and it has a much lower rate of growth restriction among the among the babies in the three census tracts around surrounding his supermarket. There may be other explanatory factors but it convinced me when I looked at that. But then babies also die after the first month of life before the first birthday. And some of the factors that they die from are Sudden Infant Death Syndrome or what we now call positional asphyxia babies who suffocate on betting like fluffy couches where they get themselves borrowed and with the the the pillows or if they're sleeping with siblings they might suffocate.

[00:16:29] There's accidents unfortunately sometimes babies are left in the bath and you know while a parent answers the door there's some kinds of infections that could've been helped if the parent had brought the baby to the hospital in the amount of time we think that the underlying one of the underlying issues with all of these deaths that occur after the first month of life and before the first birthday have to do with parental care is there are there are enough adults who are not exhausted are not forced to go back to work or if the mother is forced to go back to work quickly. Is

there really good childcare where the person is not smoking and is conscious and taking good care of the baby. This is much much harder with female headed households. Single parents who get exhausted and have to go to work and often have inadequate childcare. We have found that with the baby's father is not involved with the pregnancy with his baby's mother at the time of the birth. There is almost four times the infant mortality in that later part of the first year. And if you look at the main reason there's a lot of different reasons but one of the key reasons that differs greatly between African-Americans and white folks in Syracuse is that the father is incarcerated. We did an analysis of a hundred births to find out much more in-depth about what's going on and 17 of these births. So 17 percent. The baby's father was incarcerated at some time during the pregnancy or before the first month of the baby's life and among those dads two thirds were African-American. So why do you think that the father's incarceration makes such a big difference.

[00:18:32] Well first of all he's not there. The mothers interestingly we did in-depth interviews with the mothers and the mothers who have partners who are incarcerated still feel connected to their partners the partners call them usually collect and always collect. I would say we have also found out that at least in an earlier era when this was looked at around 2002 that our county jail was getting kickbacks from the telephone company for these collect calls. And this was admitted to in the newspaper by the director of the correctional facility so that the young single mothers who were paying they pay on average 200 dollars a month for the collect phone calls to keep their baby's father involved. And they're sort of helping to fund the jail which I believe is not good policy if we want to keep the father's involved with their children. The baby's mothers do try to keep their baby's father's involved but it's very difficult. And then when they come out of the correctional facility they have an increased risk of HIV. Our research team was I believe one of the first to raise this issue not the very first certainly but among the first to raise this issue in an article that we wrote in 2004 and since then there been a wealth of articles coming out about this very issue where it has been looked at and it hasn't been looked at really in the most rigorous epidemiologic manner but it has been looked at the transmission of HIV hepatitis B C in jail or prison is up to ten times that that occurs in the community the penalty rates. Yes.

[00:20:37] Now this I mean we of course jails and correctional facilities differ and I don't want to make a blanket statement that that's the way it is all taught all the time. But when you think about those men African-American men in Syracuse are incarcerated at 11 times the white rate. So if you think about those folks returning to their partners they're somewhat more likely to be infected. And then there have been studies. One study by the CDC that asked infected women and non infected women it was a case control study on HIV asked them about their history what they knew about their partner's incarceration and the male partner's incarceration was a statistically significant risk factor for the female partners HIV infection. So what is going on in jail. I know that you've done some focus groups around with the men who have been incarcerated. Because certainly if you ask the prison officials they would say nothing is happening here and you know facilitate the transmission of what's happening. Well there's all the risk factors for the transmission of blood borne and semen born diseases occur in prison and correctional facilities. I have to acknowledge Human Rights Watch that has done a really huge analysis of this and they have a website that anyone can go to about rape in prison. A lot of men are raped in prison. When we found this out we asked the various people in our local correctional facilities and they said it didn't happen.

[00:22:27] So then we went and had a young man who had just emerged from a correctional facility do focus groups with men of color in Syracuse and lo and behold Of course they didn't say that it happened to them and we didn't want them to talk about their own personal issues and a focus group. We asked them about the norms in prison and they were able to say absolutely that rape is a fact factor especially for the young more vulnerable inmates and we know that youngsters are are often people still in their adolescent late adolescent period are often put in with older inmates. Then there's sharing of drug use equipment in correctional facilities and these types of injection I guess

you could sort of only remotely call it a needle and syringe because it's sort of a homemade type of injection equipment is used by many more people than would normally share needles and syringes shooting up illicit substances outside of the correctional facilities and then men and women in correctional facilities get tattoos. And in our local facilities in Onadaga county it was reported to us that guitar strings cut up guitar strings are used to tattoo. And the men try the best they can to avoid blood borne transmission of diseases. But this has been found in analyses by the CDC in correctional facilities in Georgia to be a risk factor for outbreaks that they documented of hepatitis B. So we are you can spread Hepatitis B can spread HIV. So you have actually kind of coined a term for this whole kind of the picture the whole picture that kind of emerges when you start to look at the risks in the community. Can you talk a little bit about that. Well there's one term that we didn't coin invent that we use a lot which is structural violence is that the one that you need. Yes.

[00:24:44] OK so Paul Farmer uses that term and a number of other people prior to us but we think it really suits. We're always concerned with violence in Iraq for example we're worried about the civilian deaths and the casualties to our troops and those casualties are usually the result of intentional injury of one person or another or somebody on the side getting hit by crossfire. And in that case you can find where imagine at least who pulled the trigger. But structural violence is deadly. It can kill. But there's no one person who you can blame. It's it's caused by inequalities and risk factors that are embedded into the society and embedded into institutions and into policies. Although I am not in any way claiming that policies are put in place to hurt people but the side effect the unintended effect of some policies can be hurtful. So let's talk about some of those policies kind of having impact on the health of a community. I know you were earlier refer to Walter Reed as being one of those things. Can you talk a little bit about some of the work that you've done. Sure. This came out of the Syracuse Healthy Start project which I worked on and many of the women in Healthy Start told us that they had to go to a JOBS Plus which is part of welfare reform. And so I I looked at that and a great deal more depth. We used to have a program called AFDC Aid to Families with Dependent Children. And in 1997 the Congress passed legislation changing that to Temporary Assistance to Needy Families.

[00:26:38] Many states put a five year cap on eligibility and as part of that there was an expectation among the people who were allowing people in the gate keepers to the projects that they would decrease the number of people who were eligible. And there's been a great cost savings of that program and some of the people have claimed that it's an absolutely wonderful program because it has put more people to work. My analysis doesn't question whether the program is good or is not good. My now and I'm not against people working. My analysis has to do with the implementation of the program which was draconian. It was implemented such that by the year 2001 was the first year women who had reached their five year cap were expelled from the program. But prior to that there was a great decrease in women being deemed eligible for the program. And so if you look at women who were on Medicaid which is the federally funded and to states and localities pay for it also insurance for poor women especially during pregnancy it's used. If you look at African-American women for example on Medicaid and white women on Medicaid and the approximately 50 percent of the African-American women on Medicaid in 2000 in 1997 approximately 50 percent were on AFDC during the time of the pregnancy which is often a difficult time to get work. And often people lose their employment at that time. It went down by the year 2001 to under 5 percent. So this was the loss of income the loss of housing to a large extent people doubling up on houses people being homeless teens surfing from couch to couch to couch. And it happened in a very sort of short period.

[00:28:57] This was tied with as I said the Jobs Plus program which encourages women to get work they are required to look for work 32 hours per week until a 36 week of pregnancy. And this is hard but imagine if you are a pregnant woman in Syracuse during the winter and you have to take buses and you are perhaps poor and at risk for preterm delivery or poor growth of your baby in utero.

Imagine having to look for work 32 hours a week and until eight months pregnant up until Yeah eight months of pregnancy 36 weeks of pregnancy in fact the the week before you would be deemed full term. This is just we felt that it was just too much. We actually requested that our local Department of Social Services change that to 28 weeks of pregnancy. So we weren't asking for very much. And we said that we would put in place various parenting classes et cetera. They did not agree they could not agree it turns out because they couldn't they were they were obliged to fulfill the letter of the program. So one of the things I did was look at the neonatal intensive care unit cost for babies on the TANF program who were their mothers were on jobs plus compared to all other Medicaid covered babies. And then you looked at the babies the outcome of the babies who had been born to women who were had to do this very kind of draconian for the outcome in terms of did they spend time in the neonatal intensive care unit which was estimated at that time to between to be between 1500 or 3000 dollars a day. It's real expensive. Right.

[00:30:59] So if you're saving money on TANF by making women work longer than 28 weeks and keep looking for 32 weeks that might be a little cost savings is it are you not. Is this not just a fairly high risk shell game where you are transferring the costs to Medicaid costs that there are neonatal intensive care unit costs and you are obviously right in front of me I can't give you the exact figures but it was substantially more days that the TANF babies spent in the neonatal intensive care unit than all the other babies. And then the Medicaid cover all of their Medicaid covered babies both and this was it was clear to me that that the TANF program was looking good by adhering to the letter of the law but resulted in a great excess cost to the taxpayers. And if you think of how many of those TANF babies in the neonatal intensive care unit now are growing up with increased learning deficits possible hearing deficits possible visual deficits and the like the cost might be borne by the taxpayers for a long time. And this is all for purported kind of savings of a couple of hundred dollars right. We weren't asking for the program not to be implemented. The program had been passed by our Congress and we weren't in fact against the program we wanted the implementation of the program to be more humane and more in line with the science of how babies grow.

[00:32:49] Let's talk a little bit beyond some of the things that happened in the pregnancy once babies are born and they have you know there if there's an increased risk of low birth weight are kind of small growth during the course of the pregnancy. What then happens to them as children. And what are some of the other kind of neighborhood factors that contribute to the health of children. Well there's a woman named currie. I'm sorry I forget her first name he has written this wonderful article that I am very taken with and we are developing a project to test out her hypothesis and she says that she believes up to 25 percent of the gap in school performance. Now she's comparing African-American and white children you could compare well-off and poor children because it's nothing inherent in being African-American. But this gap in school performance she says 25 percent of it is due to health disparities by looking in Syracuse. We think it's much higher. So if you look at babies who are born too early who come out of their mothers too early and consequently too little and et cetera they may have had difficult growth inside of their mothers for various reasons. One as I mentioned could be that the mothers don't live near a supermarket but there are others. Then those babies. There's numbers and numbers of studies on extremely low birth weight babies and premature babies especially those who didn't grow so well. What happens is it's not just that their bodies are not large their brains are not fully as developed as they might have been and they are less likely to graduate from high school and may have subtle and not so subtle learning deficits. There are others. There's lead poisoning.

[00:34:51] For example Syracuse and Buffalo and Rochester and a few other places in New York State have significant problems remaining with lead poisoning although we've made great strides nationwide on decreasing lead poisoning. Five Syracuse zip codes account for I think it is seven point seven percent of all elevated blood lead in children in New York State. And one of our zip codes 1 3 2 0 4 has the second highest lead poisoning rate in children outside of New York City. So

what I say is that we are in the midst of a sort of a love canal situation and we know that there's very good evidence now that lead is associated with learning deficits that can be significant and some of those deficits are not just decreasing IQ. For example but they decrease what is called executive function which is the ability to think ahead make a plan an active behavior reflect on the behavior and do better next time. If you think about that that's what all of us went through in adolescence learning what not to do not to dream like that. Right. So imagine if you're a little behind an executive function that's not such a good thing. It's been found very very well done study from Cincinnati has demonstrated to many people conclusively that childhood lead poisoning is associated with arrests for crime in adolescence and increasing increments of lead poisoning is associated with arrests for violent crime. So it's associated with bad behavior in adolescence girls adolescent girls or young women young females don't tend to get arrested in the rates that boys get arrested when they get in trouble in adolescence. It's usually reproductive trouble. They may those with our research team has demonstrated in one study.

[00:37:17] Of course now this is just the first study it needs to be repeated. But we did very careful statistical analysis and controlled for everything that we could control for and has been published in a peer reviewed journal. We have shown that where a child or girl child had elevated blood lead as a toddler. She is more likely to be on her second or third or fourth pregnancy as a teenager compared to those girls who were on their first pregnancy. We weren't able to compare nonpregnant teens with pregnant teens while we had one group of teens who are getting care at a healthy start who are already pregnant. But those 10 we couldn't control for race Medicaid age. So we controlled for everything that we could and if those teens who had elevated blood lead as toddlers were 56 percent more likely to be on a second third or fourth pregnancy. And when you think about it lead decreases learning certainly to effectively use contraception. It helps to be able to read well and to understand concepts and to learn and have a good memory. And it decreases executive function and certainly for women. And I would say for men one of the good things about executive function is being able to discern if a potential intimate partner is good for you and cares for you and respects you and is going to take good care of you as opposed to just using you. And that's going to stick around. You have to be a partner in having babies. And of course there's such a big difference if you're 15 or 16 or 17 you have one child. It's such a big difference in having two or three.

[00:39:09] It's a very big difference. We looked at the grade level of female adolescents who were on their first child compared to their second child and twice as many of those on their second pregnancy were were behind their grade level in school as those on their first pregnancy. So it has a huge impact lifelong impact and an impact on that baby worth. So Cindy what do you see as kind of the future of your research what are some of the projects that you're working on now and what are some of the things that you would like to do. Well as I said we are with my colleague I have to give a plug to Dr. MBK Krishna Kumar who is the chair of Child and Family Studies and others. We are putting together a project with the City School District in Syracuse to look at the role of health disparities in the gap in school performance and the health disparities we're looking at looking at start in utero but then go on in childhood to include lead poisoning asthma and A.D.H.D diagnoses. That's one project and she will be the principal investigator of that project. The second project that we're talking about doing this is with Professor Rob Keefe here in Buffalo in the School of Social Work and others in Syracuse is that with regard to HIV and lead poisoning and a whole lot of other bad things. But HIV in particular there's this statistical recognition that women of color are the fastest rising group of those infected. And so people have started looking at what is it about women of color.

[00:41:09] I mean to present some information today that compares women of color women and people of color in two zip codes in Syracuse with people of color in the surrounding white Ryan White region which is an 11 county region excluding those two zip codes. And my contention is it's clear that people in those two zip codes no matter what their background or gender is are more

likely to be infected compared to their counterparts outside of those two zip codes. In the 11 county region. So I'm beginning to think that it's not race or ethnicity at all it's geography and of course it interacts with race and ethnicity and poverty because of segregation and because of the poverty the excess poverty facing people of color. But what is it about those zip codes. I think it is at least for HIV that those are the zip codes. There's just a few zip codes in New York state that people return to from incarceration and where there's disproportionate arrest and we tend to think as I've said before of disproportionate arrest affecting people of color. But it's not people of color everywhere it's people of color in certain zip codes. So that's that has enormous public health implications because we tend to think of the risks of getting HIV as being sort of spread around the population rather evenly. And so we spend a lot of money on health education that reaches everybody and I'm not saying that we shouldn't educate the populace generally but I believe that we have to look at those sort of hardest hit sort of the epicenter zip codes is what I'm thinking of that have multiple risks. I wouldn't be surprised if the people who have HIV also had lead poisoning wouldn't surprise me at all.

[00:43:19] And it makes perfect sense given the whole the conceptual framework. Yeah well Dr. Lane I want to thank you so much for coming to Buffalo and for sharing your work with us and for speaking with us today. Thank you for inviting me. And for anybody who's interested in learning more about Dr. Lane's work I highly recommend her book. Why are our babies dying. Pregnancy birth and death in America publishing paradigm BIPAC Paradigm Publishers in 2008. Thank you so much. You've been listening to Dr Sandra Lane discuss structural violence and disparities in health. Join us again next time for more lectures and conversations on social work practice and research. Hi I'm Nancy Smyth professor and dean at the University of Buffalo School of Social Work. Thanks for listening to our podcast. Our school is celebrating 75 years of research teaching and service to the community. More information about who we are our history our programs and what we do. We invite you to visit our Web site at www.socialwork.buffalo.edu. Here at UB we are living proof that social work makes a difference in people's lives.