

AMCHP Annual Conference, 2010

Moving Ahead Together:

Celebrating the Legacy, Shaping the Future of Maternal and Child Health

From Analysis to Action:

Addressing Maternal Morbidity and Mortality at the State and International Levels

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SHABIR AHMAD: California has been doing a surveillance about maternal morbidity and mortality for the last ten years and we have seen that the maternal mortality has been rising and the last date that we have is 2006 when the maternal mortality rate was 16.8 in the state, which is almost fourfold then the 2010 Healthy People objective. Karen Ramstrom will just start with the data, what it looks like in California and some of the initial activities and then Dr. Connie Mitchell will go into the more in-depth, the framework (inaudible) California has the ambition to work to reduce maternal morbidity and mortality. So, Dr. Ramstrom.

KAREN RAMSTROM: Hello everybody. So, I'm going to mentioning our maternal health workgroup in a bit and just to give you an idea this is the folks who are involved that are in the Maternal Child Health Division at the state health department in California and our maternal health workgroup that we established we decided we wanted to be data driven. We only use best practices and so the variety of folks involved here are from program policy and our epidemiology section. So, I just wanted to give them credit and recognize them. This also includes staff who work on regional perinatal programs,

preconception health and our other maternal health projects. So, we wanted to share with you how we got to where we are and I'm going to go pretty quickly because I want to leave plenty of time for Connie to talk through her piece and actually we're going to do some exercises and share some detailed information with you that we hope will provide a good resource and tools for you to take back home with you. So this is just sort of our process. So, why did we decide that we needed a framework for improving maternal health in California? As Shabir mentioned one of our functions, one of the ten essential services that we are responsible for is monitoring the health of our population. As you can see on this slide and I'm sure many have seen this before there has been an upward trend in maternal mortality rates. So this is deaths related to pregnancy within 42 days after delivery. You can see California rates there in blue and US rates in green and this is the pregnancy related mortality rate, so death was within a year of delivery and for California and again an upward trend of concern. Even more concerning is this widening gap in disparities that is disproportionately impacting African American women. So, we've been monitoring this. We certainly have programs in place that target African American women but have a desire to understand why this is going on in more detail. So, what initial steps have we taken in California? These are some of our existing programs and I know many of you are in the same situation. Some programs we have just because we've had them for a longtime, some are in statute, some have just been the way they are for a longtime, and others have come along with national initiatives. So, this is kind of a mix of all of the above but our California Pregnancy Associated Mortality Review was established in 2004 to get a better idea

about what is going on with this upward trend and specifically what seems to be influencing these disparities.

Our California Maternal Quality Care Collaborative Effort is looking at quality maternity care and has developed some tools in that area specifically a hemorrhage toolkit and a toolkit to address selective deliveries. We have some efforts and through our Maternal Quality Indicators work looking at maternal morbidities. We have a couple of local projects going on for our local maternal child health programs one looking at addressing the issue of OB hemorrhage and another looking at inductions and elective deliveries. Our preconception health work, we established a counsel in 2006 and have a couple of major efforts going on right now developing post-partum guidelines for clinicians and we also have a really nice website called, Every Woman California. I would direct you there to get resources for consumers and also to find tools to use on your job and you can actually join that website to access and to post tools for preconception health promotion. Then recently we've been working on our Black Human Health Program, which serves pregnant and parenting African American women with the goal of improving maternal health and infant health and it's really an exciting effort that's drawing on the latest evidence nationwide. We have the fortunate opportunity to work with Paula Bravemen at UCSF Center on Social Disparities and Health, a nationally known expert in the area of disparities and she's helping guide this work and really is taking on a social support group model that we're hoping to roll out in the summer. So, keep an eye out for that and we'll keep you posted on that effort.

What can we do more to improve maternal health? So, we have all of those efforts in place but we felt like we really wanted to be able to look at this complex issues comprehensively and make sure we're not missing anything. So, what are the gaps in our current programs? Are our current programs effective? Are they doing enough? What are we missing? What framework can actually help us to look at this issue more comprehensively and more strategically? So, as I mentioned earlier we established our maternal health, internal workgroup. We wanted to focus on a public health model with focus on prevention. I credit (inaudible). I said, "Let's use a social ecology model." This is a complex issue. It would really help us frame this issue and we also were interested in incorporating a life course. All of you are area of primary, secondary and tertiary preventions. So, we have those concepts in mind. The social ecological model at the individual level, women's health status versus economic status for education level or age. How does that influence maternal health? At the family and relationships level what kind of social support does she have or not have? What are her relationships like? What influences? What are the peer influences that she's exposed to positive or negative? Is this a pregnancy coercion or pregnancy pact? At the community level access to culturally competent OB services and linguistically competent OB services. The ability to get to the services that she can actually access a provider who takes her insurance or her Medicaid. At the social level really the policies, the policies that support or don't support women during pregnancy. Our PE policies have become part of our culture of where they are right now and so maternal lead policies and that sort of thing.

So this is what the first take looked like. So, primary, secondary and tertiary prevention across the top and then our social, ecological framework down that left-hand column there. This is schematically used for the life course and all the red arrows indicate areas where you can actually intervene across the life force knowing that that first box on the left on the lower side there, child and adolescent health that's going to actually impact the health of mom ultimately when she becomes pregnant and also of her children. So, we edited the top of our framework from primary, secondary and tertiary prevention to incorporate the life force to maximize health before pregnancy, during pregnancy and then addressing any issues that arise during pregnancy. Then we plugged in our programs just to give us a snapshot of how are we doing? Where are the gaps? We noticed there are lots of gaps. So, these acronyms are the programs that I mentioned earlier. The Black Human Health Program, our Quality Indicators Project looking at maternal morbidities, our Pregnancy Associated Mortality Review and Maternal Mortality Care Collaborative and our local projects. As you can see we're getting a smattering of the framework covered but we certainly aren't covering it comprehensively and we may not be covering that little box as well as we should or as comprehensively as we should either. So, I'm going to turn it over to Connie and she's going to dig into this a little bit deeper.

CONNIE MITCHELL: Shabir and I have the same cold that we've been passing around our whole department but I think I can last through this presentation. If I'm speaking too softly raise your hand in the back. The next step that we did is I was hired in. I had worked in academia for almost 20 years and I kept moving in the School of Medicine

and kept moving further and further up in prevention. So, I said, "I think I'll go back to school and get my MPH." Then, I was looking for work through the state department of health and luckily got connected to the state MCAH but then the first assignment that I had from Karen was let's do something on maternal health and so then since I was so new I said, "What does that mean?" So sometimes its really good to bring a novice in because I'm asking the questions from a child's perspective. What does that look like? What are you currently doing? Where are your gaps? Where do you want to go? So those naïve childlike questions pointed out to us that we did need a framework and we needed to kind of have an idea of what the roadmap was. So, I began to look through the literature because we had this (inaudible) what are the contributing factors? What do we know? What is the evidence based information we have that contributed factors for maternal health? Then we started to fill-out. You received the framework and we started to fill it out. We would go through a series and in fact were another one of our focus groups. We're going to keep taking this framework to group after group until nobody adds any additional information. So, you're about our seventh or eighth group I think and we wanted to see what would you identify as a contributing factor even if it only has face validity. You don't have published evidence yet for it but in your experience that would be important to add. Thus far as we've done this process people have told us that they really liked the framework. They find it to be suitable and a workable framework for maternal health. So, I just want to give you an idea of how we're filling it in and then I want to ask you for some other ideas. So just for an example to show in the first box, which is labeled on yours as box 1A. Next, the health part, the pregnancy at the individual level might be basic health literacy or reproductive health literacy, being a

non-smoker and then for maintaining health during pregnancy, if you follow along the individual row would be appropriate weight gain during pregnancy. Then if there was a health issue that arises during pregnancy, let's say gestational diabetes that they were able to manage their gestational diabetes and get assistance with that.

So, here are a couple of examples but what I wanted you to do is to look at the blank and then I do actually have one that's filled in but this is something that we thought you could take back to your own states or to your own experiences. So, if you could just think for a minute and then I'll take a couple of responses, what would you put into one of these boxes that you perceive as a contributing factor for maternal health? So, I'll give you a minute to think and then I'll ask for some volunteers. Okay, so if you have a suggestion, we're just going to take a couple of samples. Can someone volunteer and tell me what you would put in?

VOLUNTEER: In 2A, I would put adequate nutrition and nutritional supplements. In 1A, normal weight.

VOLUNTEER: In 1A, I would think about saying something about healthy relations. So, young women in high school learn about healthy relationships early on and perhaps under the part 3, maybe under C or D, I'd put something about EMS learning to make sure they know how to handle OB/GYN emergencies.

VOLUNTEER: Under 1A, I would put something about optimal management of chronic medical diseases like chronic hypertension, existing diabetes and things like that.

VOLUNTEER: Family support for 1B. I would put a faith based organization, a pastor or rabbi or reverend and then for 2B, stress reduction activity like a walk or prenatal massage.

VOLUNTEER: Make sure that with the emergency drills that's EMS, not obstetrician, so make sure you add EMS to that.

VOLUNTEER: For 3D, I would say first part on Medicaid coverage.

CONNIE MITCHELL: So, you see how quickly that this solicited your responses. It didn't take a lot of thinking to kind of figure out what the exercise was about and this is what we found when we have done the same exercise in different group formats. So, now we're going to give you a list of what we created thus far and actually I know that the EMS that was a great suggestion. I never heard that before. So, then in qualitative research you just keep going until you get to a session or two where nobody has anything further to add to your list and that's where we are. So, you've given me some of your ideas for contributing factors and this is where we were going to type them in on the blank grid but in the interest of time we took your ideas orally. So, then the question was, okay this is a nice conceptual framework. It gives you an idea of what are the contributing factors for maternal health. I think more importantly, if you've never seen

something like this before it gives you an idea that you can very easily get stuck in tertiary care or addressing the complications of pregnancy and you can very easily get stuck at addressing the individual and forgetting about the value of interventions for the family or at the community level. I think that's a very important key point is that no one thing is going to make the difference in maternal health. We believe that it will be efforts at all the different boxes both at the social level, at the individual level, primary, secondary, tertiary, before pregnancy, during pregnancy to keep people healthy and then addressing any complications of pregnancy should they arrive.

But this wasn't enough for us because then the issue was well of the programs that we have in place where do they match up and how do we know that they're working effectively. So, we took something that might look simple here and we decided to bump it up a little bit and we said okay, can we take the contributing factors for maternal health? So, we take each box and we link it to programs or specific policies that address that contributing factor and then do we know how we're measuring and whether it's been effective or not. So, we took each box off of that 3x4 grid. So that will give you 12 and that became contributing factors, programs and policies to address it and then how the progress was measured and this became a scavenger hunt. This is the way that I got people kind of interested in it and they said that it was actually kind of fun because it meant reaching out across, not just within our own MCH but there may be other areas and especially when we're talking about social determinants. You have to reach out to education. You have to reach out to housing departments, transportation. You have to find out who else is doing work to improve maternal health that maybe you're not aware

of and try to not only identify what they're doing but how they're measuring the effectiveness and then you'll know how to set your priorities.

So again, let's go back to that basic framework and I chose the first box and highlighted it for you in orange and now if we take that we can see that what we created here is we can take basic reproductive health literacy and we can say, well you know the department of education they have required sex education for curriculum K-12 but is it required for graduation? Initially, we didn't know that but we found out whether it was or wasn't. We knew that health education was but we weren't sure about sex education. We had family resource centers that were doing some basic reproductive health literacy. This was another contributing factor. Self-perception of health is good to excellent. We knew that our Black Infant Health Program promotes empowerment and self-efficacy through reproductive health knowledge. That was clearly a measure of that program and they had specific measures to see if they were making a difference in their clients' lives to do that but we also had some other health surveys. The California Women's Health Survey had specific questions on this and even our (inaudible) which is like (inaudible) asked a specific question about how would you self-rate your level of health? So, now what Karen was passing out to you was an example. This was an example from three of the quadrants just to show you how detailed this can be. If you look at each of those examples you can see that I chose one quadrant from the first row and one from the second and one from the third row and you can see how now it's been filled in. You can see that every contributing factor is linked to a specific program and that every program then we're trying to find a measure of it's effectiveness for any kind

of trend analysis of that particular program so that we can have a more comprehensive idea of are we meeting maternal health needs? Are we meeting them comprehensively? Do we have programs in place and are they doing what we want to do?

So, I hope this hasn't been too overwhelming. The idea is that we started with a conceptual framework model where it was prevention focused. We incorporated the social ecology model and a life course perspective and we translated it into a functional framework where we took contributing factors for maternal health, linked it to MCH programs and policies and outcomes and measures and evaluations. What we hope you'll also see about this is that we think it's translatable to every state and we think that you can take the framework. We're hoping that you can immediately go back to your group and your organization and start to kind of challenge and see what is your current level of functioning and what's going on in your state and how can you work more effectively with your partners that may also be working towards maternal health just like you are and maybe didn't even realize they fit into the whole framework. So, we're pretty excited about this. Our partners really like it. It's giving us a vision of where we want to go. We hope that you share our vision and that's it.

I think we're ready for some questions.