

## **AMCHP 2007 ANNUAL CONFERENCE**

### **HEALTHY COMMUNITIES**

March 3rd to 7th, 2007

#### **Maternal Depression and its Impact on Young Children: Strategies for Prevention and Methods for Establishing an Evidence-Base Influence Policy**

TEDDY MILDER: Hi everybody. How are you doing? This is the post prandial hour so I'm hoping we don't lose many of you. I'm Teddy Milder and I'm the evaluation and technology director for First Five Alameda County in California, also known as Every Child Counts.

And probably by now you've guessed that we are from various parts of the country all addressing a similar issue and we've been packaged together and I think that we sort of flow nicely in terms of setting the context and defining what we're talking about, looking at some system capacity change efforts and I'm going to tag onto that and talk a little bit more of an applied strategies to how to cope with this and then you're going to learn some treatment options at the very end. So it just happened to flow. We all were sort of packaged together. So I wanted to give you that context.

How many of you know what First Five is? Have you heard of it before? Some, not all. Well in California's inevitable way we seem to legislate by referendum. So

Proposition 10 was passed in 1998 by the people of California. It's a tobacco tax and it was a very finely crafted piece of legislation. What it did was targeted all of the revenues generated by the tax for children zero to five. And a very unique opportunity, the money, 80% of the money goes directly to counties. And each county gets to establish what they're going to do with that money. We all develop a strategic plan. Our plan is known as Every Child Counts. We actually were the first county in California to develop a plan. And all of the plans have to address supporting health and well being and school readiness of children, their families and providers who serve them.

I love this photo. It represents the diversity of our county. The other neat thing is these are the infants of a new parents support group. So they were new moms who actually were brought together to do preventive work around maternal depression. So Alameda County has a population about a million and a half. We have 20,000 births a year. Our birth rate is not declining, which in many counties in California it is. We are not one of the counties that it's declining.

We have about 1,000 births of children that wind up in the NICUs. We have 125,000 children from birth to five years, so we have a very significant size population of children that we're dealing with. And we're one of the most diverse counties in the United States, 64% of households speak English in the home. Over 50 languages were spoken by entering kindergartners. So that gives you some sense of what we have to face.

Every Child Counts, this is our program wheel and we really have programs in three major areas, family support services where children are in the home, children in child care or early care and education programs and children in the community with a lot of community based strategies. We fund or contract or run directly a lot of different programs. We're very fortunate to have the resource to be able to do so. And we're all held together by that various concepts that you see in the center. I'm not going to spend a lot of time on the other programs. What I'm going to focus on are our family support services.

And our family support services are really--they're really a balance. It's a continuum of care of prevention and targeted services of providing actual direct services and really looking at how we can change the system of care for children in our county. Most of the work that we do is focused on systems change.

So one of the programs that we have is a hospital based enrollment of new mothers for postpartum home visits. It is not a long-term strategy. They get up to three visits and they can have more if they're at risk. So it is not similar to the nurse family partnership in that it is a short-term strategy with identification of those at risk and more services.

Our longer term strategies we call intensive family support. And we have three main programs. One is called Special Start and it is for infants who are

discharged from the NICUs and they receive services up to three years from a multidisciplinary team of case managers. And then we have pregnant and parenting teen programs and it is for not only pregnant teens but those who have children and it's for fathers as well as moms. And then we--and they can be seen until the teen ages out or the child ages out because we can't serve past the fifth birthday.

And then we have families that are referred from our child abuse hotline into social services. It's a very unique partnership with community based agencies. It's also our differential response for those of you who have been involved in setting up those kinds of programs. It's basically for families who don't meet the threshold for services but really are isolated, are at risk of abuse and need to be plugged into resources and know more about community services.

Another piece of the family support program is our specialty provider team, which is unique. It's a direct service component of the work that we do. So in-house we have staff that are developmental specialists, mental health providers, and substance use specialists. They provide direct services, but more importantly, the majority of their work is around provider consultation.

So they will work with public health nurses, they will work with other case managers around the issues of their particular specialty. They do case

conferences. They do informal training through mentoring and work with case manager around using standardized tools.

So to put this in the context of depression, which is the theme, and I think that Suzanne framed it for us but in (inaudible) 2006 there was a recent article that really gave us the background of linking depressed parents with a high rate of anxiety and depressive disorders that begin early and continue into adulthood. So there is a key linkage between maternal depression and poor child outcome.

So we developed a system wide strategy to promote early intervention and identification. So the approach we had was let's identify and screen, let's get a standard way of talking about it and then let's link that and integrate it with all of these family support programs that I just told you about. And we call this Child Find. Now we focus a lot on child development, but we really feel that we can't separate child development and maternal depression or how the parents are doing. And so that's why so many of our strategies are interlinked.

By the way, all of the photos in the slideshow are of children and families that have been served by our programs. This is a teen mom. So I'm going to tell you about six key strategies that we use to address this issue. And one was to increase awareness and knowledge about the importance of maternal and caregiver depression. And we did not limit it to only the perinatal period because we do serve children older and serve families older than the perinatal period.

We do multidisciplinary and multicultural training and promotion. We do technical assistance and consultation around dealing with depression. And we train early childhood mental health providers to try and build the capacity in the county for serving those that screen positive.

We actually have promoted the use of the Edinburg depression screening tool and we've automated it and I'll show you in a minute. It is what we see as one of the systems change efforts. This is an infant in the NICU.

The third strategy is just increase the number of screens that are done throughout the county in all kinds of venues by all kinds of providers. And we do that both for those that are picked up for the normal sort of newborn, the postpartums, and those that are served by the intensive family home visits. We also provide the specialty provider team mental health consultation and we have worked on trying to increase the capacity for referrals once we have positive screens.

So just to tell you a little bit about all of--a little bit more about all of those. The multidisciplinary, multicultural training and promotion, we have a huge training center at our office and each year maternal depression is a designated seminar that's held. We have monthly specialty topics that are attended by over 100 providers from a wide range of disciplines. They can be childcare providers. They

can be nurses. They can be physicians, nutritionists, mental health providers, the whole works.

At these sessions I think what's unique is that we have multicultural panels where there are representatives from the various ethnicities and cultures that we serve where people discuss what it means in their culture. So it helps to frame the issues that I think Mary was talking about from they could be recipients of services or they might be providers on the panel. And it's a very enriching experience for those that attend.

We also have something called the Harris training which is for clinicians. It's for early childhood mental health providers and some experienced early childhood educators to expand our county's capacity for treatment and referral services. I don't know about you, but there are very few mental health specialists that are trained in early childhood. So we felt that this was really critical that we expand that.

And then we have informal training that the specialty provider team does and I mentioned that before. They attend case conferences weekly by public health nurses or other folks that are doing the family support services. And as they attend, they can hold the issue of mental health or of depression in the room. And so when they're talking about various issues that the family or the child may

have, they can help to refocus the lens so that they don't forget to include that in what's being reviewed.

The second strategy was automating standardized tools. We are very fortunate, again, because we have had the resource. We have a very state of the art web-based cross agency information system. We call it Exchange, but to Bill Gates' dismay. ECC for Every Child Counts. And we actually see this as a systems change tool. We use technology so that we can have a common way of recording and talking about what we're doing. And we developed this tool in a way that the providers use it as part of their work. It serves their need for case management as well as informing our need for outcomes and tracking what we're doing.

We have been using it about five or six years, so we have quite a pool of information. Just to give you some sense of it, in the county there were 782 active users of the system. And as of September, which is a while ago now, we had 21,000 cases recorded in the system, which represented 66,000 families. So it is truly a cross agency system with a wealth of data.

This is the Edinburg depression scale, which we automated. It's very easy to record. It may be administered in various languages. It is translated and validated in a variety of languages, but it is recorded in the system in this manner. And it's automated so it makes it easy so it's not a big deal to get people to screen.

Postpartum screening. Now the hospital outreach coordinators do not use the Edinburg . They have access to charts. So they can do chart review and pick up past history of any mental illness or as they interview the moms and offer the services, they can pick up clinically a mom that might be depressed and then make a direct referral to either the specialty provider team or pick up the phone and call the public health nurse and let them know that they're worried about this mom. So our specialty provider team received 305 referrals just in this part year, 131 were for depression.

And I thought I would just share a couple of stories from the hospital outreach coordinators who pick up these families. I enrolled an African American mom at St. Rose Hospital who had just delivered her eighth baby. She was a young woman of 32 and it seemed she had spent most of her young years pregnant and with small children. I fully expected her to decline the home visiting services because she already had so much experience with children. But offered her a home visit anyway and mentioned that we offer support for moms who feel depressed postpartum. She was very interested in our services. She explained that she was not only experiencing depression at the moment but she had terrible bouts of depression after every one of her deliveries. This mom had been struggling with depression for almost half her life. She had never been offered support and she did not know where to turn. The look on her face was a success for the day, the program and everything we set out to do as an agency.

One more story. I met a woman one day that seemed to be holding herself together throughout my interview until I mentioned postpartum depression. Before I finished talking, she broke down and cried. I asked her what was happening and she let it all out. She just wanted peace with her family. The social worker from the hospital gave her resources and I was glad to be able to refer her to the Every Child Counts mental health consultant. It sort of makes it more real.

So the fourth strategy is to try and increase the screening across the county. And so we looked at the number of screens we had from 2002 to 2006 over 2,000 families were screened. Of those, an average of about 28% were screened positive. And you can see on the chart that we have, in fact, impacted systems change--44% were screened from 2002 to 2004 and we're up to 66% last year.

It does vary depending on the program that they're involved with, as I told you before. Of course these are very high rates, you might note. I think the national statistic is 10% positive. So the special start, those are the NICU babies. So 28% of those screened were positive. The pregnant and parenting teens were close, 26%, 39% is our Another Road to Safety and that's the child abuse prevention. So these are families--all three of these areas are families that are at risk anyway, but it's quite striking I think.

We also looked at the breakdown race ethnically. Of the whole pool that was screened, this is the breakdown by race ethnicity. But then we looked at within each race ethnic category what percent of those screened, screened positive. So 35% of the Caucasian or multi-race were the ones that scored highest followed by African American, Hispanic, Asian and so forth. I think that some this speaks to the issues that I think Mary raised in terms of how do cultures frame or talk about depression.

And although the Edinburg has been validated, many of us have questions about the way the questions are asked and if they're appropriate. And it could be that some of the responses are as a result of that. There was no difference in the responses between English and Spanish speaking. And we feel that our Asian language sample size is too small to make a while lot of comment about it.

We looked at insurance of those that screen positive. Medicaid or Medical as it's known in California, almost 80% of them had it. But then the private, no insurance or other public insurance, which does not cover any treatment, which is the point here. So we have 20% of those screened that we have to find some place to--or some reimbursement strategy.

We looked at all of the families and tried to associate who were those that were more likely to screen positive. And not surprisingly those that live in our school readiness neighborhoods which are elementary schools that have low performing

APIs, academic performance index. They are much more likely. And those are proxies for poverty. Those neighborhoods have multiple risk issues.

The teens that had less than 12 years of education--this was interesting. We expected that the lowest weight babies would be more likely to have a mom who was positive--was not the case. In the context of all the risk factors that we analyzed, the fact that the baby was very low birth weight did not necessarily indicate that you were going to get a positive screen, which was an unexpected finding.

This is--we actually were able in our data to validate the [unintelligible] article that I quoted you in the beginning. We of course knew that there was association between positive depression and child development concerns but it lit up in our data--68% of the moms who screened positive also had developmental screens on their children. And those screens are done when there's some concern that the children might be at risk. So they're not done uniformly on everyone. And then 51% of the mothers who screen positive did have a child with at least one area of concern compared to those who did not screen positive were 44% of the children. Now that's still high to come up with 44% of the kids that had some concern. But much stronger correlation with those.

The specialty provider team I'm not going to go through this, but they provide, as you can see, a huge amount of consultation and direct service. I think referrals

and treatment is our biggest challenge. We are really working to try and build the capacity within the country, not just for traditional mental health services but alternatives to try and find funding sources. We've been able to leverage EPSDT which was new in our county. It had not been done before, for mental health services. And then we fund community grantees to have sort of community based strategies for treatment.

Just to give you some more. We just started to track referrals because so what if they get a referral. Did they get there? Did it make any difference? And this is data just from our last year of the 255 with positive screens that were tracked and had data in them on referral. They were referred to mental health, education or vocation or for food. And of the 40 referred for mental health, 29 were--kept the referral or were in the process of following through. So there's much more work to be done there.

Our gaps and challenges. I think I mentioned, I think the constant search for the perfect screening tool that's going to be culturally appropriate is not over. We will continue to look. Really trying to identify culturally appropriate treatment practices. And I think Deb is going to tell us about one that we're all excited to hear about.

The reimbursement strategies always. And then we're looking at integrating--we do child development screening in pediatric offices. We do the Healthy Steps

program. And we're looking at integrating the maternal depression screen along with the child development screen.

And then how do we track? How do we follow-up and make sure that they receive services and what was the outcome? Was it effective of the referral.

Okay, I think I made it. If you have questions, please--you can go to our website.

We have our annual report data and we have a wealth of information. There's some handouts in the back about some results of our programs. Thank you.