Debunking Folic Acid Myths

MCHB DHSPS Webcast

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JOHANNIE ESCARNE: Good afternoon, I'm Johannie Escarne from the Maternal and Child Health Bureau. On behalf of the division I would like to welcome you to this webcast titled "Debunking Folic Acid Myths". Before I introduce our presenters today I would like to make some technical comments. Slides will appear in the central window and should advance automatically. The slide changes are synchronized with the speaker's presentation. You don't need to do anything to adjust the slides. You may need to match the audio by using the slide delay control at the top of the messaging window. A 12 second delay provides optimal performance for the audience. We encourage you to ask the speakers questions at any time during the presentation. Simply type your question in the white message window on the right of the interface, select question for speaker from the dropdown menu and hit send. Please include your state or organization in your message so that we know where you're participating from. On the left of the interface is the video window. You can adjust the volume of the audio using the volume control slider which you can access by clicking the loudspeaker icon. Those of you who selected accessibility features when you registered will see text captioning underneath the video window. At the end of the broadcast, the interface will close automatically and you'll have the opportunity to fill out an online evaluation. Please take a couple minutes to do so. Your responses will help us plan future broadcasts in this series and improve our technical support. We're very pleased today to have Miss Adriane Griffen with us. She is the project director at the Association of university centers on disability. Miss Cardoza is the project coordinator at the National Council of La Raza. In order to allow ample time for the presentation we'll have a question and answer session at the end of the presentations but email your questions at any time during the presentation. If we don't have the opportunity to respond to your

question during the broadcast, we'll email you afterwards. Without further delay we would like to welcome our presenters and the audience and begin the presentation. Miss. Griffen.

ADRIANE GRIFFEN: On behalf of the National Council on Folic Acid thank you for joining us today. I want to thank HRSA and MCHB for sponsoring this webinar as well as our other partners at the CDC, the national center of birth defects and developmental disabilities and acknowledge others as they're celebrating ten years of service this year in recognition in commemorating their anniversary ten years ago. This is national folic acid awareness week. We wanted to make awareness week this week but stick it with a New Year's resolution thought as health communicators and public health practitioners to leave it in every message we create throughout the year. Not only is this week the awareness week but every week throughout the New Year should be folic acid awareness week. The presentation today will consist of two parts. I will be doing the introduction piece and then I'll also be doing a summarization of a metaanalysis that will hopefully debunk some of the myths you've heard out and about when you're working with women and families and other constituents and then we'll be talking about how cultural myths specifically in the Hispanic community. Vickie will be facilitating that portion of the discussion. Next slide, please. Why is this important? We know that there are 65 million women of childbearing age and we know that folic acid reduces the risk by up to 70% of those women having a birth defect. Specifically neural tube defects. How come NTDs we know that approximately 3,000 pregnancies are affected every year in the United States. And this amounts to 300,000 NTDs globally on an annual basis. We know that's huge and we know that the majority of the time they're preventable with taking folic acid. The general recommendation -- next slide, please, is 400 micrograms per day. If a woman has already had an affected pregnancy than the prevention amount is 4,000 micrograms. That's an important differentiation to make. There are some instances where women will have to advise their health practitioner that they have had this history and they may need a different amount. We know this is a really important message for all women capable of becoming pregnant. Half of the pregnancies in this

country are not planned so any time you are working with a woman of childbearing age it is very important to convey the folic acid message. And just make sure that they are mindful of it and the different ways they can get folic acid either through taking a multivitamin every day, looking for foods that are fortified in folic acid and incorporating healthy diets. A combination of those three ways are the ways that the National Council on Folic Acid recommends that women of childbearing age get the folic acid they need. Let's talk about some of the levels of awareness in the country. Next slide, please. The next couple slides are data sources. I'm going to go through with you they're from the March of Dimes. It shows over the last few years we're making some decent progress in terms of folic acid awareness. It's around 80% or so. Next slide, please. When you look at the knowledge base of what folic acid actually does, it's much lower. In terms of the timing of when you should take folic acid, only 11% of women of childbearing age know it's important to take before pregnancy and if you look at how many women know that it actually prevents birth defects and why they should be taking it, about 20%. We have a lot of work to do to the awareness of folic acid to the knowledge base of what it does. We also have our work cut out for us in terms of daily use of folic acid. Now, this slide summarizes multivitamin consumption and you'll see it's pretty steady, pretty plateaued around 35% I would say is the average. It's pretty flat. So while women of childbearing age have a basic awareness of what folic acid is, their knowledge level dips in terms of what it actually does for them and why they should be taking it. And they're not necessarily taking a multivitamin every day with folic acid. That is what we would recommend for all women of childbearing age to do. What are some of the other strategies for women to get folic acid they need? Next slide, please. In 1998, the U.S. began fortification of grain products. It gives the average person about 100 micrograms per day of folic acid. This just allows a low level folic acid in the general population. Remember, we said for women of childbearing age the recommended daily amount is 400 micrograms. So the thought is that at least exposing women through mandatory fortification of cereal grain products would give them some of the folic acid they need each day. Next slide, please. So what we want to do with our time together this afternoon is really talk about some of the myths around folic acid and hopefully give you some really good data and ammunition to educate the constituents that you

serve when you're working with them. This slide summarizes some of the key concerns that have come up and you're probably familiar with them from literature and different media reports and we will come back to these questions toward the end of the presentation. And prove that they're just myths. That they're concerns but these concerns are actually myths. You've heard about folic acid perhaps being linked to cancer. We know that is not the case or colorectal cancer or breast cancer. Next slide, please. What we want to do is go through some results -- sorry, findings of a metaanalysis that was performed. It actually was just published in the archives of internal medicine in October. A great, thorough metaanalysis that has great power. It is actually a metaanalysis of eight different randomized control trials involving just over 37,000 individuals. So it has great power. What the study's authors have done is gone through it and extrapolated information related to folic acid. This was originally dedicated to looking at the presentations of cardiovascular disease and just to let you know each trial had at least 1,000 participants so again that goes back to the rigor of the study and the power that this had and the trial lasted about a year. So the other great thing about this is that the treatment groups only differed in the intervention to lower homocysteine levels. No other outside confounders. You could look at this data and look at the differences within the groups. I'm sorry? Okay. So in terms of this study, it looked at recurrence of cardiovascular disease. Next slide, please. This slide just does an overview of all of the trials. There were eight, like I said, included. You'll see here that the levels of folic acid are actually much more than the upper recommended limit for folic acid of the recommended limit for folic acid is 1,000 micrograms. So we would never get to this level with fortification alone. This slide also summarizes that the study times again, they all lasted at least a year. The average range was 2 to 7 years. There was a great length of time that the individuals were involved in these studies. And again, another point to take away from this is that the individuals who were involved in these trials might have some slightly different characteristics than the general population because remember this was an observation metaanalysis pulling together trials that were really focused originally on cardiovascular disease. Next slide, please. So let's look at the way the metaanalysis looked at the effects of folic acid on major vascular events. You'll see here that the odds ratio is around 1 for all of these. So looking at

supplementation for all of the B vitamins it was not statistically significance. They were about 16789 this was for coronary, heart, all recurrent heart events. Next slide, please. Looking at the effects of folic acid on cancer incidence. This is also broken out by subgroups. Looking at the relative risk, again, odds ratios are close to 1. Even when examining factors relative to cancer incidence. Again, this is not statistically significant and there is not a correlation between folic acid use and cancer incidence in these subgroups. Next slide, please. Looking at the effects of folic acid on more cause-specific mortality, the odds ratio was again around 1. So again, it's not statistically significant difference and again, there is no difference for cancer as you can see here summarized on this slide. Next slide, please. So overall this metaanalysis did find that there was about a 25% reduction in homocysteine levels which is what you would expect and this was maintained for about five years and even with this reduction, folic acid treatment still had no significant effects on major vascular events and we also know that the folic acid treatment group versus the placebo group for cancer, it didn't make any difference. We know that folic acid treatment was not associated with any mortality as the last bullet shows. Next slide, please. The overall questions that we looked at in the beginning, does folic acid reduce the risk for cardiovascular disease by lowering homocysteine levels? No, it doesn't. Does it increase the risk for cancer incidence and mortality? No, it doesn't. Does folic acid cause colorectal cancer? No. Does folic acid cause breast cancer? No. And we feel very confident about the data in this meta-analysis just because of the power of the data, you know, there were over 37,000 individuals involved in all of those eight studies combined. We feel pretty confident about the data shown there. We hope this gives you some nice data that you can refer to when you're informing the public and the constituents that you serve about what folic acid really does do. We have solid studies that show that folic acid does reduce the risk of birth defects and that women of childbearing age should be incorporating folic acid into their daily routine. Next slide, please. The overall take-home message is that the lack of adverse effects of folic acid on the recurrence of vascular events, cancer incidence, mortality and overall mortality just provides reassurance that folic acid is safe and that folic acid fortification is a sound and safe method for helping women of childbearing age

get the folic acid they need. So at this time I want to turn it over to Vickie who will be talking a little bit more about different myths that Latinos may have when it comes to folic acid.

VICKY CARDOZA: Thank you, everyone. First I want to thank HRSA and MCHB for inviting us on behalf of NCLR. I'm really pleased to be here and for allowing us the opportunity to share how Hispanic Americans fit into this picture in terms of folic acid consumption. I'll go over what NCLR does. The Institute for Hispanic Health. I give a brief overview, general facts about the Hispanic or Latino communities and talk about pre-natal issues to consider when working with the lat teen owe community and I'll talk about myths, birth defects about the neural tube deficiencies related to folic acid consumption and how to debunk these myths. We're going to talk a little bit about how it is leaning to approach Latinos when we're working with them. Next slide, please. So the national council is the largest civil rights and advocacy group in the United States. We have many different approaches. Two of them is applied research, policy analysis and advocacy for Hispanic Americans and provide capacity building assistants through our affiliate network composed of 300 community-based organizations and at the institute we work on increasing quality of life and we seek to promote culturally competent and linguistically appropriate. We try to reduce health-related problems and promote their well-being through partnering with our community based organizations or affiliates and our funders through different agencies in the government, private funders as well as other organizations. Next slide. So just the Latino community. Just to understand who we are, I'm a Latino as well. We're the largest, fastest growing minority group in the United States. Also one of the youngest which means a lot of things that happen within the Latino community with significantly impact the general U.S. population. And so here we see that in the United States 60% of the total population excluding Puerto Rico are Latinos and these Latinos comprise and represent 20 different countries, north America, central, South America as well as the Caribbean islands and it's about 27.4 years in comparison to other subgroups of the population. And then this point really to what it is that we're targeting here. The female reproductive age in Hispanic

Americans, almost half of the Latinos are, you know, -- with females of that 15 to 44, which is the reproductive age. Next slide. So a little bit more about Latinas, specifically. Many of you know that Latinas have one of the highest fertility rates of the non-Hispanic whites in the nation. You see the specific data points. That is the latest statistics we have from the government. Also as Adriane was saying, in the general population, most pregnancies in the Latino community are unplanned. Almost half, a little more than half. And 53% of Latina teenagers of the Latina teenagers, 50% will become pregnant once before turning 20. Next slide. So some of the things to consider when you're addressing or working with Latinas just as the general population is that there are different things you have to take into consideration. For example, where are they from? What is their national origin? That will dictate of lot of their cultural values, belief, religion and other factors underneath. We have to look at their race. Hispanic is not a race, just an ethnic. That includes other groups as well. It can be Hispanic, you know, white, my culture we're in between. So it has a lot of impact on access to healthcare and many other social determinants. Geographical areas of residents whether Hispanics live in a highly-populated community in Chicago, California, New York City, Florida as opposed to newly established Latino communities where they may be more disconnected because of say cities in Pennsylvania, Pittsburgh, for example. Latinos are not very connected or don't have an established social or support network. Access to care may be very different for them. Also educational literacy levels directly impact access to care and the health of individuals in general. Immigration status can determine whether or not Hispanics will seek general medical care or emergency care. Also acculturation level. That will strongly determine -- there are a lot of studies out there that say that's a good thing and sometimes it's a bad thing. So really you need to take a look at your community specifically and see what the needs are. And I'll be highlighting this throughout the presentation. Also, when it comes to sexual reproductive health we need to consider religious views and sensitive to beliefs and know how to work around them to educate community members without offending but being able to provide the information that is necessary. Next slide. Prenatal care in the Latino community. These general points are taken from some of the studies that NCRL has done with the Latino population across the nation. This includes different subgroups of the

Hispanic community and it is well-known that childbearing capability, that is the ability to have children, is a major concern for Latinas. Something that is very important and cherished. It is a very strong cultural value and generally this responsibility for taking care of children and having healthy sexual life mostly relies on the mother or the female. But at the same time, we see a double edged sword. There is a stigma associated with having knowledge of sexual health-related topics. Having -- if you're not married there is a stigma with seeking gynecological examinations. It is amazing how everyone concluded the same thing. That if a young woman is not married and not old enough or she's really looked down upon if she's seeking these services or if she knows certain facts that she shouldn't know at her age or within her marital status. So those are things that we really need to consider. Because it really does impact prenatal care in Latinos. And more than 20% of Latina women do not begin prenatal care during the first trimester. Oftentimes women who do seek care and that includes Pap testing as well, will only do it until they're very aware that they're pregnant and they actually -- the doctor has to advise her to do certain things. Next slide, please. Now, in terms of folic acid intake, research shows that Latina women have lower blood folate level and less likely to consume foods fortified with folic acid. There is information out there showing that there are genetic factors that influence -- or that affect Latino women's ability to metabolize folic acid from natural sources. Here is next thing a March of Dimes survey conducted -- published in 2009 found that nationally 17% of Spanish speaking women take a vitamin. 40% of them who are of childbearing age will take a multivitamin with folic acid. That's less than half of women who should be doing it. And then again Adriane was mentioning this, 11% of the women really do know they need to take folic acid during pregnancy. That's a very low number. Next slide. And specifically to Hispanic or Latino women, they're very -- many studies show that they're less likely to have heard about folic acid and to know that they can actually prevent certain birth defects or, you know, they don't know to take vitamins with folic acid before pregnancy. They usually associate -- if they do know about it, they only learn it from going to the doctor during pregnancy. And as Adriane was also mentioned in 1998 U.S. had a mandatory fortification of foods such as pastas, breads and cereals and they're fortified with folic acid however staple foods in the Hispanic community, corn products don't fortification. Hispanic

women are at 1 1/2 to 3 times higher than non-Hispanic white women for having a child affected with birth defects to the brain and spine. Next slide. These are myths and truths about birth defects in folic acids taken from the March of Dimes -- the spina bifida association. I listed some myths. The first one is as long as you have a good diet and exercise while pregnant your child will be born healthy. These are beliefs in the Latino community. I've listed the truths to each one of them and as you all know, some of them -- some women feel like if they have a healthy lifestyle and they do everything as they should, they shouldn't really have a problem and that's not really true because there are many different factors that can cause a child to be born with birth defects. Myth 2, there is no history of spina bifida in my family and I don't have to take folic acid. Many women believe if they hear about things or know that in their family things -- a lot of those things that are passed down in the Latino community are by word of mouth in the community, whether aunt or mother told her. They don't really think -- not to say they don't -- but generally the information that they obtain is from their community. So if they feel like well, we haven't seen that in our family, they don't know that it can happen. Next slide. Myth number 3. Spina bifida can be cured and the truth is that it a long -- life long disability which can affect individuals differently and there is no cure, sadly, up to date. Myth 4. I don't plan to get pregnant any time soon so I don't have to take folic acid. As we stated it is not a fact that if you're not planning on having children you won't have one. More than half of pregnancies are not planned so it's important to make sure to prevent, you know, neural tube deficiencies by taking folic acid if you're of reproductive age. Fifth myth, next slide. Having a cup of orange juice will give me the folic acid I need. The truth is that our bodies absorb synthetic folic acid much better than ones that are found in foods or in natural sources. So it's best to, you know, get the folic acid you need by taking vitamins with folic acid every day in addition to the food in your diets. Debunking the myths, next slide. Here is where, you know, I'm going to start talking about what are the approaches. We don't have a specific answer because as I said each community can be different. If you really want to start debunking the myths, I feel that, you know, from a public health standpoint you need to make sure you address the root cause of the problem. Looking here at this slide you see the social approach that has the four different levels. The social level, community level, interpersonal level and

individual level. Often we focus on the individual level to educate women and Latinas about folic acid intake and make sure they follow guidelines stipulated from medical standpoint but the truth is for Latinas and for other groups as well, that is the last point that we need to take or the last measure we need to take. First we need to be able to address all of these factors that are inhibiting Latino women from doing these things. From the broad social level as we were mentioning, fortification of foods that Latino women consume is very important because that itself doesn't need to -- it reduces Latino women from having to make an effort when it comes to behavior change, it's difficult. If you fortify foods, they'll just have to consume the folic acid. And then from a community level, last year we presented on how to really reach networks, Latino networks on promotion of programs in the community, how to address the issue through media networks and we have developed a toolkit. If you need any additional information on this I would be happy to provide that information. Basically it's a toolkit on how to touch bases with Latino media channels to promote folic acid intake in Latino women. At the interpersonal level we need to understand that Latino women as other groups, they don't really act on their own and are heavily influenced. If you're a wife by your husband or your children. If you are a single woman, it might be by your parents or other relatives as well. So when we are doing interventions or we're conducting interventions we need to make sure we're addressing the family, the friends, the community partners as well depending on, you know, acculturation levels. Some women may feel heavily inhibited by what parents or partners' opinions maybe about their own personal health. We ask when you're considering working with them you take into consideration who are the people surrounding and influencing the behavior of Latino women? Lastly, you know, addressing things -- addressing folic acid intake at the individual level. After addressing all of these other levels, and simultaneously, we can also educate women. And by promoting folic acid use, increasing awareness of the need to take folic acid before and during pregnancy and throughout reproductive age is important and there is a lot of information that is not out there and has not reached Latino women so we ask that, you know, when you do decide to work with them, that you take all of these factors into consideration because just doing it at the individual level may not be effective. Next slide, please. And this is at the Institute for Hispanic Health. The community-based participatory

research model and it is basically the steps we follow whenever we're conducting intervention in the Latino community and we have found that it works very well. It doesn't matter. We do serve Hispanic Americans but as I've mentioned they're all different depending on where they are, what the needs of this particular community may be. So the first step you see in the very bottom is the planning and that's when we -- internally we decide who it is we need to target, who do we need to interview, what kind of focus groups do we need to conduct with, with whom? What are the questions we need to ask? What are the needs. It's the needs assessments points. Then we conduct the research when we go out into the community and if time allows and we have enough time we try to -- what really is the situation at that specific community so we know by the time that we are, you know, planning all of these interventions, that it is addressing the needs of that specific community. And then phase three as we move up we see we spend quite a while developing materials that are culturally competent and that are linguistically appropriate to that population. Things may vary from one Hispanic group to another. I've had that many times, specifically for, you know, sexual help and reproductive terms and may vary depending on religious beliefs. If you have straight out abstinence or sexual reproductive health education they'll shut you down if they're a strong Catholic community. We need to know how to address certain topics, especially when it comes to reproductive health because they're very sensitive topics. And then phase four, you know, once we have obtained input from the community, once we have obtained input from the leaders in the community and gate keepers we do our field testing and we test it with community members, community health educators. They go out there and they test out materials or interventions and see how it is that it really affects and how does it help or if it doesn't help the Latino community. And then we have also the phase five. Our evaluation and follow-up. We have a center that specifically focuses on conducting and accessing how effective or ineffective our programs are because we need to learn from everything that we do, you know, did it work? If it didn't, why not? In an ideal setting everything would be included but it is important to know that because a lot of the times when we are at that point, we still get feedback and say you know what? This didn't work because X or Y. We need to go back. Sometimes we'll change it and sometimes we'll just make addendums and just try to make sure

that as we disseminate all this information we're letting the people disseminating the information understand what factors to consider as they're doing that. Because it's very important to -- as we're doing research, you know, with the Latino community, there is that strong stigma associated with research. We want to make sure the community understands that we're doing this to improve health and not just to obtain numbers. Ultimately we want to disseminate our findings and our interventions across the United States because we want to improve the health of Hispanic Americans. Next slide. Just to summarize, we've learned that -- we know that neural tube defects are conditions that affect Hispanic children disproportionately and we know that consumption of folic acid can decrease the rate of children and neural tube defects. The Latino community needs increased support in terms of interventions that address the root cause of the problems that are able to reach community in a culturally competent manner and that they're also linguistically appropriate based on the educational level and terms used by the Hispanic group or subgroups. We also need to teach Hispanics that the increase of folic acid consumption can diminish spina bifida and other anencephaly rates in our community. We also promote peer support because it is a very effective way of reaching Hispanics and wherever they are in the United States and whatever region they may be located, we feel it's a very effective model when conducting interventions that have to do with health promotion. And finally, we also seek to increase access to quality care. For example, I put here facilitating patients under medical homes for Latinas. A lot of the researchers that we've interviewed have said all these problems would be solved if we found medical homes for Hispanics and other individuals, but -- so we strive for that and we seek to promote patient-centered medical homes that will -- where Latinos can assist Latinos. That's it. If you have any questions, next slide, you can contact me. This is my email and you can visit our website, WWW.NCLR.org. Thank you.

JOHANNIE ESCARNE: We are now into our question and answer portion of our webcast. Our first question is for Adriane. The question is, can you comment on the archives of metaanalysis of eight randomized control studies showing no impact on heart.

ADRIANE GRIFFEN: The study is really a meta-analysis. For each of the studies the odds ratio analysis that was performed was pretty close to 1, which means there is really not significance one way or the other. So that was pretty consistently found. When you looked at the pooled data for all eight studies. And that really has strong power base because it had just over 37,000 individuals in the whole study. So I would say that in response to that question.

JOHANNIE ESCARNE: The next question I think is yours, too, Adriane. Given nearly 12 to 13 years of fortification in the U.S., has the prevalence of NTD's changed at all and any discussion about increasing fortification levels?

ADRIANE GRIFFEN: Good question. Yes, the fortification levels have, over time, led to a reduction in the overall number of births in the United States affected by NTDs. It had been closer to 4,000 pregnancies affected annually and now it's closer to 3,000 as I shared at first. It is making a difference over time. In terms of the second part, the part B of the question, the levels of fortification, there is a real debate within some sectors saying to the community about not wanting to go above the upper limit of folic acid. The recommended upper limit is 1,000 micrograms. The thought is with the current levels of fortification and if an individual takes a multivitamin and has other food sources, that they want to make sure that the average American would still stay below 1,000. And I think given some discussions at the food Food and Drug Administration and colleagues at CDC think the levels of fortification are where they'll be for now. It's something that has been looked at in terms of your point, Vickie, the Hispanic community not having the benefit of some of these staple food products, like corn flour not being fortified. As that issue gets examined more closely I believe the fortification level issue will be examined more closely as well.

JOHANNIE ESCARNE: Talk to them about the Hispanic population, one of the questions was does -- do you have to be Hispanic to work with this population?

VICKY CARDOZA: No. That's the truth. One of the constituents I'm working with in D.C., we have a lot of English speakers who do speak Spanish. It is important that if you are reaching a Spanish-speaking audience that you speak the language with them. It is not ultimately important and there are studies that show that you don't have to be of the same race or ethnic group of the person you're reaching but you do need to have -- they will see through you like any other group can see if your ultimate goal is benefiting them rather than yourself or your own research so if you have all the intention and good heart to come in and address Hispanic Americans you should not have a problem.

JOHANNIE ESCARNE: I don't have any questions right now. I'll give them a couple of minutes. While we're waiting, do you guys have any other closing remarks that you want to say? Do you want to expand?

ADRIANE GRIFFEN: I would do a plug for the National Council on Folic Acid's website. I forgot to put it in the slides. If you have general questions about folic acid, it's a great resource for,. It's folic acid info.org.

JOHANNIE ESCARNE: We did put that up.

ADRIANE GRIFFEN: Okay, thanks.

JOHANNIE ESCARNE: Anything to add?

>> Not at the moment.

JOHANNIE ESCARNE: Okay. I still haven't gotten any other questions yet.

>> Sometimes it takes time.

JOHANNIE ESCARNE: It takes time to get that question for speaker from the dropdown menu.

ADRIANE GRIFFEN: It was one of the percentages you shared I was struck. More than 20% of Latinas do not begin pre-natal care in the first trimester. That struck me. I wasn't familiar with that statistics.

VICKY CARDOZA: It is not just with folic acid but prenatal care in general. As I was saying, that stigma that is associated, you know, a lot of these women are unmarried so if they go see a gynecologist, it is taboo if you're not a married woman or if you're underage, under 18. The truth is that Hispanics do have one of the highest pregnancy rates. The rates have gone down. That's a good thing, but we still see a large disparity when it comes to Hispanic teens and other ethnic groups. So to me it's not surprising because we know we don't speak about these things and I include myself in there because in families, you know, it's something you keep hush. You see the interesting picture over here. This is-these are pictures taken with some of our community members. The ones on the slide on debunking. They've said this one

where they see them all hushing. That's how they feel. They're hushed if they even asked about sexual reproductive health or if they're seeking a gynecologist or OB/GYN. It was their idea to say we feel like we're not able to ask or we're not told even by other women, even by other older Hispanic women. We can't do that. So yeah, it is a lot of -- I do a lot of other projects like cervical cancer and Pap testing which goes along with the prenatal care and we see that. A lot of women don't actually get Pap testing. They won't go until they found out they're pregnant.

ADRIANE GRIFFEN: Very interesting.

JOHANNIE ESCARNE: I guess you have been so clear that no one else has any questions. So I'll give them a minute. No. On behalf of the Division of Healthy Start and perinatal services I would like to thank our presenters and the audience. And our contractor for the advancement of -- at the University of Illinois in Chicago public health for making this technology work. Today's webcast will be archived and available in a few days on the website at mchcom.com. We encourage you to let your colleagues know about this website. Thank you and we look forward to your participation in future webcasts.