part 3: teaching

Expert Interview: Dian Baker Ph.D., R.N.

Dr. Dian Baker *has been a pediatric nurse practitioner and community advocate for over 30 years. She holds two masters' degrees from California State University, Sacramento and earned her PhD from the University of Hawaii at Manoa. Baker recently completed a postdoctoral research fellowship at the Betty Irene Moore School of Nursing at the University of California, Davis where she studied health inequities among Southeast Asian communities. She is an associate professor of nursing at California State University, Sacramento and a member of the Center for Excellence in Developmental Disabilities at UC Davis MIND Institute. Baker can be researched at: dibaker@csus.edu.*

Cap Radio News: I'm talking with Dr. Dian Baker (PhD, BSN) of Sacramento State University's School of Nursing. She's been doing research in the Hmong community now for 20 years. Dr. Baker, thank you for being with us. How widespread is diabetes in the Hmong community here in California?

Dr. Dian Baker: General estimates are that diabetes in the Hmong community is around 16-20%, which is almost double that found in the European-American community. One study in Minnesota, done by Dr. Herr actually indicated levels as high as 41%, either identified with diabetes or at significant risk, we call that a pre-diabetic state. So the impact is huge and growing.

Cap Radio News: Those are some really staggering numbers, that 41% especially. Now you were involved with a community assessment done through the Hmong Women's Heritage Association. Fi Dan Lo, one of the people we hear from in our documentary, helped to gather information through those surveys and focus groups. Can you tell us a little bit about what you found?

Dr. Baker: First we found that diabetes is devastating the Hmong community. There's definitely an awareness of the impact of diabetes. It's being talked about. The severe side effects are affecting families, life, workability, and we also found some very startling pieces of news, one of which is that there's a lack of basic access to care for the Hmong. They are an underinsured group, and when they are actually able to get to care, there's a lack of trust with the western healthcare providers. So even when they get recommendations for care, it's hard for them to follow up and do what's being recommended, particularly taking medication, etc.

We also realize that the complication rates, things such as being on dialysis, kidney failure, blindness, amputation, severe depression, were surmounting and just affecting almost every family that we talked to. Very widespread. The complications from diabetes such as kidney failure, lack of vision, amputation, can be prevented but in the Hmong community these complications are widespread and the efforts of prevention are not working.

Cap Radio News: What do other studies say about the impact that diabetes has had on the Hmong community?

Dr. Baker: The other studies, I think, just correspond exactly with what we found here in Sacramento. The main studies have come out of Minnesota, and prevalence rates around 20% are consistent. They also

found high levels of complications and a lack of, I would say, very strong packages of medical care for diabetes. So for example, a typical healthcare organization would have a patient with diabetes come into the clinic, they would see a whole team of diabetes care professionals. That would include a health educator, an ophthalmologist, somebody checking their feet, nutritionists as well as seeing an endocrinologist and a certified diabetic expert.

However, in our studies, and also followed up with studies in Minnesota, we found out that when the Hmong are getting to healthcare, they're not necessarily getting a level of care with all those components. We found that only 13% had ever had a foot check, which should be a standard of care. 30% had been recommended to get dilated eye exams, which should be done annually, so that's way under what our target would ideally be. And only 35% had actually seen a diabetic healthcare educator. 38% were not aware of their A1C levels, and A1C is a very critical marker. Everyone with diabetes should know what their A1C is, because it tells you how your diabetes and glucose levels have been managed over time.

So in none of these cases were the Hmong even getting 50% of the care that they should be getting, and there's a variety of reasons for that. One of which is that a lot of the care is being offered through the Safety Net clinics, and they just don't have the resources to bring this comprehensive package that's required for diabetic care.

Cap Radio News: There isn't much existing data about diabetes in the Hmong community. Why is that?

Dr. Baker: I think there are two big, important reasons for that. One of which is just a general overall policy on the way that we collect data. We tend to gather everyone who has any relationship to the word Asian into one big bucket. We do that with our census data and with our public health collection of data. And there are at least 39 distinct groups that could be within that, at least. So if everybody is Asian and yet each of those groups is culturally different, linguistically different, healthcare or genetically different, why are we grouping them like that? So healthcare issues among the Hmong, the Mien, Lao, many other groups in Sacramento just get buried. They get hidden. And it has to do with our public policy, the way we collect data.

Another important reason is that in a study published in the American Journal of Public Health by [5:46 Ganache], the NIH is only funding about 2% of their healthcare dollars for Asian-American Pacific Islanders, and less than 1% of the publications in PubMed list those groups. So we have underfunding at the national level, we have collection data systems that just don't allow us to know about these groups. So it takes grassroots efforts in the community. It takes healthcare providers reaching out to those communities to actually even uncover this disparity, so that's why we have a lack of data and why the efforts of Hmong Women's Heritage Association as well as UC Davis, Sac State and others to find out exactly what's going on in our communities.

Cap Radio News: You've already cited some astonishing numbers, rates from 16-20%, as high as 41% in one study. In your experience, why are the diabetes rates so high?

Dr. Baker: There's almost a perfect storm. When you have refugee groups that come in from very high-energy, agrarian societies and they arrive in the United States and they quickly have a very sedentary lifestyle, there's a risk factor there. The food and ability to eat the variety and depth of food that they're used to is highly impacted. Certainly fast food plays into this. And then there are also genetic factors. There's a protective gene that has been identified in many of the persons of Asian heritage that actually sort of prepares you for having low food resource. But when you come to an area where there's high food resource, suddenly that gene's working against you. And it's working real hard to keep the fat and keep that

energy level for you, but it's not needed anymore because you have food sources. So even typical diets can allow you to gain weight, and of course weight gain is a high risk factor for diabetes.

So all those factors play into it, and then there are just the issues related to depression and being in refugee status and isolation and a sense of loneliness, I think. And there's a direct relationship between depression and diabetes. Persons that have diabetes have more depression, and people that suffer from depression are more often diagnosed with diabetes.

Cap Radio News: When it comes to reducing diabetes rates, what are some of the challenges specific to this community?

Dr. Baker: I think that reducing the rates really implies prevention, and in order to have good preventative efforts you have to do something over a sustained period of time. It requires social marketing, it requires health literacy, it requires an enhancement of understanding in the community. Most of our grant funding tends to be short-term and wants a quick impact. It doesn't tend to be sustained enough, so things like changing health literacy knowledge, for example, probably requires five to ten years. And yet a typical grant will be a year. The other factor, this has to do with school and education. We pretty much cut health out of our educational system. So when you're a refugee, and even though you may be doing very well in school, you may have limited access to even basic health knowledge.

And then there's just the idea of being able to eat healthy foods in your community. Factors such as poverty, lack of neighborhood grocery stores with fresh fruits and vegetables, places to exercise or even understanding how to exercise are all limited and have impact. And then there's just screening. The idea of going into a healthcare provider and getting screened for a disease in the Hmong community is often perceived as kind of inviting the disease into your house. If it's unspoken, it won't happen. So to go and get screened for diabetes may open you up to actually getting diabetes. So you have cultural issues, educational issues, issues related to poverty that all combine to limit the ability to do good, preventative healthcare programs.

Cap Radio News: In our documentary, we hear that Chia Chao Lo, who is Fi Dan's father, used alternative healing practices such as spiritual callings and herbal remedies. How common is this within the Hmong community, and does it help or hinder their diabetes management?

Dr. Baker: The use of alternative or complementary healthcare is very common in the Hmong community, and actually is common in almost every community. It's just the degree and how much we talk about it. In some community surveys we've done, we found that there is about 40-50% of the Hmong community that identified regularly asking shamans or herbalists for care. However, I think it's much higher than that if you consider what I call the combination approach, where you're using western healthcare in combination with the complementary providers in the Hmong community. We have had lots of discussion with the shamans about working with western healthcare around diabetes, depression and other issues, and they very much see themselves as partners. That together they should work to help the person's spirit and soul, as well as their physical body.

And specifically with diabetes, I think the shamans are aware and clear that it's a problem with the physical part of the body, and that the shaman will work on the spirit but that the doctors should also be consulted to work on the physical aspects of care. So I see it as complementary and beneficial and helpful and wonderful. The herbalists, however, are a little bit different story. They are in business, they make a lot of money, they advertise on Hmong radio. And the challenge there is that they are offering a cure for diabetes with their herbs and teas and medicines and, as we know, diabetes cannot be cured. It can be very successfully managed, but not cured. So if you think if you're a person that's Hmong and somebody's

offering you a cure, of course that would be where you would want to go. And when you go, you get 35-45 minutes, or hour visits. Somebody's listening to you talk about your difficulties and challenges and hardships and coming up with very specific herbal remedies for you that are going to make a difference.

Compare that to a typical western healthcare visit. Ten minutes, in and out, through a translator. What would you do? So the herbalists are quite popular, very commonly used, and sometimes we see this dance where someone will use herbs for a while then take their diabetes medicine for a while then use herbs for a while and kind of go back and forth. It really puts them at risk for increasing complications. Most of the herbs, I think, are probably benign. But some of them are actually harmful and raise blood-glucose levels, they raise blood pressure, and can actually counteract the medication. So there are challenges I think around the widespread use of herbalists that are advertising on Hmong radio and the uptake with that. And the western healthcare providers usually aren't very aware that herbalists are being used. They often don't ask, and when they do ask they're not sure what those herbs are doing. But UC Davis is beginning to put out lists of hundreds of herbs that are used in the Hmong community, and talking about the medicinal effects. So we're making some headway there.

Cap Radio News: Let's talk about bridging that gap and doing away with the distrust of western medicine. How successful have those efforts been, and what do you do?

Dr. Baker: In western healthcare, I think that we've had a very big push, in fact a lot of policy and regulation around becoming culturally competent. Unfortunately, we have tended to define cultural competency in terms of language access, so we have beautifully laid out, translated, American Diabetes Association food diets in Hmong. We have foot care brochures that are in Hmong, and they're very nicely done. But they're translated western diets, and so when the Hmong get them, even if they can read them and look at them, it doesn't mean anything.

Cap Radio News: They're looking at unfamiliar foods.

Dr. Baker: Unfamiliar foods, and foods that just aren't of value to them. It just looks icky I guess. So it just gets discarded. So I think one of the important things we need to do is move beyond language translation and interpretation and really get into cultural brokerage, and work directly with community health navigators. We've done some of this through the efforts with Hmong Women's Healthcare Association. Dr. Samira Jones has a PhD from UC Davis and is a nutritionist, and she's gone into the Hmong markets, taken pictures of the food that's there, gone into the homes, taken pictures of typical foods, and then translated that with the ADA recommendations and portions and servings and seen just exactly what the food is they're going to eat. And until we begin to take those kinds of approaches, we're not going to bridge those gaps.

Cap Radio News: In our documentary, Fi Dan Lo, who works at the Hmong Women's Heritage Association, tells us that eating healthfully and exercising is difficult for the Hmong people. Why would that be?

Dr. Baker: There's a couple of reasons, one of which draws back just to the issue of poverty. It's very hard to purchase fresh fruits and vegetables on a limited income, and as one of the women in the focus group said to me, "You know, it gets to this. White bread is a lot cheaper than wheat bread." And of course we're going to make those selections that allow us to extend our food to all of our children, rather than the more expensive, healthy foods. So that plays into it. There are issues of transportation, getting to markets where fresh fruits and vegetables are served.

And around exercise, we again have to take that approach of naturalistic exercise that could occur in the home and how to make that happen. One of the focus group women told me that she was told by her

doctor to exercise. She went to the local Park and Rec program, which was actually designed for Asians, so she was thinking that was a pretty good idea. And when she got there, the Jazzercise was taught in Chinese, so she didn't understand the language, and she described that they were doing "teen rock dancing." And she was embarrassed and she felt like people were looking at her. She couldn't relate to it.

Cap Radio News: There's that whole cultural relevance thing too, and we're talking about a community that back in their homeland was very active in this agrarian society.

Dr. Baker: Exactly. They had naturalistic exercise every day. They were farming. Large families, anybody that has kids knows that six to ten kids can keep you pretty physically busy all day. So as these things have slowed down, it's been hard. One of the schools has developed a thing called a walking school bus. So all the women can come out with their children and actually walk to and from school in the form of a walking school bus, rather than taking cars. So those are things that would appeal within the community for ways of having movement. And for the elders, just getting up and down and walking, talking together and things that are appropriate for what they like to do. Certainly going to a Jazzercise class wasn't working.

Cap Radio News: Research shows that immigrants have a higher risk of diabetes than the rest of the population. Can you tell us some of the reasons for that?

Dr. Baker: Partially, I think it gets back to what we discussed before. It's the change in lifestyle, dramatic changes in diet, new access to fast food which, face it, tastes good for a reason, it's fat and salt. Lack of opportunity to exercise, and I think some perceptions that neighborhoods aren't safe. So that's one of the reasons why this idea of the walking school bus, because there's safety in numbers, can work. Just being out by yourself walking around may not feel particularly safe in some neighborhoods. And then the stress. The depression, the sense of isolation makes it more difficult to take care of your health.

One of the things that I hear a lot from Hmong families is that they're very busy. They're often working two jobs, trying to take care of six to ten kids, going here or going there, and they don't have time to take that step back and say wow, am I healthy? What should I be doing for myself about my health? And it all adds up to a stressful lifestyle, which is a pretty good recipe for developing diabetes.

Cap Radio News: You mentioned depression. Fi Dan Lo says that depression is rampant in the Hmong community, and this also is a problem with other Southeast Asian groups who are coming from war-torn countries. How does this affect their diabetes management?

Dr. Baker: It's hard to take care of yourself when you're depressed, and there's a direct relationship between depression and diabetes. It also is difficult because when the depression is treated, now you've added another layer of medication onto the regime for diabetes. So you have a population that's somewhat distrustful of western medicine, they're not wanting to take all these pills, and now there's even more medication and more pills. I was talking with one of the nurse practitioners that works at Hmong New Life, and she said that the average client that comes into their clinic is taking eight to twelve medications. Some of the depression medications actually directly impact glucose, and so you have something that's kind of counteracting something else that you're trying to treat. Then you have diabetes and then you get complications from your diabetes and you have your foot amputated and you're going blind and you're on dialysis. So of course you're going to have a tendency towards being depressed, and you can see the impact on your family. You're no longer able to work, you're not able to provide for your family, and all those things act together to create this problem with depression in an already at-risk group.

So care for diabetes has to be multi-faceted. We have to improve our cultural competency and outreach. We have to look at these co-morbid conditions such as the relationship between depression and diabetes if

we're going to be effective in making a difference. I think the example you gave with Fi Dan, who has his master's degree in public health and is bringing the richness of what he's learned back to his family is that it begins with the family and the home. And until we can see that system, it's going to be a little difficult.

Cap Radio News: So what does this community need to combat the diabetes epidemic? If you could wave a magic wand in terms of successful solutions, whether through policy or community-based programs, what would that look like?

Dr. Baker: At the policy level, I think we need to start with disaggregating the way we collect healthcare data so that we can see individually what's happening. Because if you're going to provide intervention and make those differences, you have to have a way of measuring them as well. The taxpayer doesn't want to spend money on things unless they know they work, and how are we going to know they work if we can't disaggregate the data? So that would be one thing, to start with that as a legislative or policy issue. S.B. 65 (1999), and it was a piece of legislation that said that healthcare organizations and insurers must provide diabetic medication care and education. However, we haven't monitored how well that's being rolled out and it's missing a key piece, and that was the cultural sensitivity piece. So I think that we need to update that legislation and actually talk about these outreach and prevention into the community and culturally sensitive care. So that's at the policy level.

I think at the community level, community health navigators, train the trainers, health-literacy outreach programs would go a long way. Again, it needs to be sustained. So not just a one-year effort, but a five- to ten-year effort. Then thirdly I think we need to educate our healthcare providers. Just things like the amount of herbs that are being used, how to go beyond language, using cultural brokers and not just translators during those healthcare visits, and importantly adding more time. So right now, a healthcare provider can bill what's called an add-on or a complex time if translation is provided. But that doesn't necessarily translate into what's really needed, which is more time for the visit, and more reimbursement for follow-up and again making those linkages to foot care, eye care, blood pressure management and those kinds of things. So if I had my magic wand, that's what I'd do.

Cap Radio News: Great insights. Dr. Dian Baker, thank you.

Dr. Baker: Thank you.