American Association of Diabetes Educators 33rd Annual Meeting 2006: Highlights and Perspectives

Jacqueline Wood, LCSW
Behavioral Medicine Consultant, Region 2 and 3
I was very fortunate to be able to attend the 33rd Annual Meeting and Exhibition of the American Association of Diabetes Educators in Los Angeles this past August! The message throughout the conference was very clear: Encourage our patients to self-manage their diabetes through listening and support!

Such seminars included “Overcoming Psychological Insulin Resistance” which focused on patients as well as providers reluctance to initiate and/or delay insulin. This topic was of particular interest due to research that showed women and minority groups, especially the Hispanic population, are less willing to take insulin than their counterparts. William Polonsky, PhD, CDE discussed utilizing the BAT (Behavioral Avoidance Test) to assess barriers to insulin initiation as well as assisting the patients with overcoming barriers by providing them with a sense of control or using behavior techniques as systematic desensitization to treat patients with needle phobias.

There was a strong presence of cultural sensitivity among the diabetes population. Aida Gianchello, PhD presented a seminar on “What Works in Diabetes Education and Care among Minorities.” She shared such statistics as 60-70% of Latinos and African Americans have more diabetes complications than other races. Furthermore, people of minority groups will only seek out care if they are ill rather than attending routine health care appointments. They are more likely to receive care at public health facilities or the emergency department of hospitals. Dr. Gianchello reinforced the importance of rapport building and using people of ones community, such as a promotora, to improve patient participation at diabetes management clinics.

A gentleman with type 1 diabetes shared his very personal story of his diagnosis and the process he went through, at times feeling very demeaned and helpless, to learn how to self-manage his diabetes. He continued to emphasize the importance for diabetes educators to listen to their patients and start where the patient is.

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2006: Highlights and Perspectives

Molly Gee, MEd, RD demonstrated the benefits Motivational Interviewing while teaching meal planning to a patient with diabetes. Dr. Gee role played with the patient, asking her what brought her to the appointment and what the patient wanted to discuss today. Again, here is an example of starting where the patient is, rather than starting the appointment with an agenda. Finally, Doriane Miller, MD shared her experience in her own practice on depression management in management in diabetes. She uses the PHQ-9 (Patient Health Questionaire-9), a self-administered questionnaire which tracks the DSM-IV criteria for depression. Dr. Miller emphasized the importance of managing depression in order to improve diabetes self-management.

Vicki Rubio, BS, PHN
Nurse Consultant, Region 8

I attended the AADE conference for the first time on August 11 and 12th in Los Angeles. I was quite surprised at the size of the gathering, having never attended a “national” conference before.

Memorable moments include:

- The general session speaker from Friday, David Bornstein “Remembering the Human Element of Change: Lessons from Social Entrepreneurs”. Dr. Bronstein spoke about how organizations from all over the world are implementing creative processes to be able to provide low cost health care services for socioeconomic impoverished people. He used examples from Africa, South America and Asia to demonstrate the “grass roots” efforts and their effect on overcoming cultural, social and behavioral resistance. This presents a very optimistic view, which could be empowering for those of us in CDAPP who are having difficulties securing funding/reimbursement for clinics.
- Dr. Thomas Buchanan’s presentation on “Detection and Medical Management of Gestational Diabetes” was, as usual, very direct and concise with emphasis on the follow up of women with GDM. He presented information about the ongoing Type 2 Diabetes study for Mexican-American women who have/have had GDM.
- “Partnering for Results: using Data for Quality Improvement” presented by Karen L. Boyer and Patricia Dudek was somewhat of a disappointment for me. It seems that just establishing a database was the conundrum that this group was faced with. With CDAPP it seems that our issues are not necessarily with data collection, but more in interpretation and comparison to other meaningful databases. I was not impressed with this presentation.
- The last session that I attended, “Want to Write a Book? From a Dream to Reality” was an especially great way to end the day. I not only learned quite a bit about the publishing business, but thought of some creative ways to spin what we do with our affiliates.

Day 2 for me was Saturday. We started by again walking through the exhibit hall and “stocking up” on take home goodies, as well as a few apples for the day! Sessions for the day included:

- The general session presentation by Lawrence Wallack, “Talking About Public Health: America’s Second Language” was very positive and empowering. His use of “framing techniques” and use of “story” to change the perception of public health from “the masses” to the individual was very effective, and illustrated how easy it can be to control perception.
- “Creative Teaching Techniques” by Ginger Kanzer-Lewis was very entertaining. I say that because, there was not much new
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content for me, but her style was intended to entertain. I cannot say that I always agree with her in that we need to “entertain” our audiences, but I will agree that we all should periodically review our teaching style and techniques.

- “Stories that Reach, Teach and Heal People with Diabetes” presented by Catherine Feste, was by far the most exciting and upbeat session that I attended during the conference. She reminded us that personal stories and folktales are universal they can be used to bridge the gap between cultures and enhance the patient and healthcare provider relationship. They have been used with all ages and in all cultures for “soothing” hurts, whether physical or psychological. They can also “teach” acceptance and thereby move a patient down the road in their plan of care. Catherine presented the information using these techniques, making her session all the more valuable.

Overall, the AADE conference was very enjoyable, and I think that I brought away tools and perspective that will be useful in my dealing with patients and providers.

Maternal DHA Intake During Pregnancy and Lactation
By Geetha Desai, MS, RD, CDE, CLE
Region 4 Nutrition Consultant

There is increasing evidence to suggest that long chain polyunsaturated fatty acids including docosahexaenoic acid (DHA) have benefits throughout the lifecycle. DHA is an important component of the membranes in the central nervous system; therefore fatty acid may be particularly important during the neonatal development which occurs during pregnancy and lactation.

DHA is a building block in the infant brain and eyes. Brain size increases approximately 260% during the third trimester of pregnancy and 175% during the first year after birth. The brain dry matter is 50-60% lipid with DHA representing 33% of total fatty acids of specific phospholipids within the gray matter. In utero, the high demand for DHA is met by the transfer of long chain polyunsaturated fatty acids through the placenta with DHA being preferentially transferred to the fetus over all other fatty acids.

It is well accepted that breast milk is the gold standard for infant feeding and should be utilized whenever possible. DHA is a component in breast milk; however, the actual levels vary widely and have been strongly associated with DHA content of the maternal diet.

**IMPORTANCE OF MATERNAL DIET**

Because differences in blood levels and functional outcomes are seen with different DHA levels in breast milk, some experts believe it is important to optimize DHA in the maternal diet. In cultures and communities where intake of fish and seafood is higher, breast milk DHA levels tend to be higher as well. On average, DHA intake in the United States is low compared to other countries. An expert panel convened by The International Society for the Study of Fatty Acids and Lipids (ISSFAL) made
the recommendation that pregnant and lactating women should consume 300 mg DHA daily. One study found that the average daily intake of DHA of pregnant and lactating women in the US is approximately 54 mg. Fatty fish and seafood are the best sources of DHA while poultry and eggs contain much smaller amounts. However, there has been increasing attention in the media about the content of methylmercury and other environmental contaminants in fish and seafood in their diets, impacting the amount of DHA available to the growing fetus and breast-feeding infant. In order to allow women and children to include fish in their diets while minimizing the risks, the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA) have jointly issued specific guidelines. FDA advises that pregnant and lactating women avoid the large ocean fish such as shark, swordfish, king mackerel, and tile fish due to their higher mercury content but can safely consume up to 12 ounces per week of shellfish or smaller ocean and farm-raised fish (such as salmon), as well as canned light tuna up to 6 ounces per week. Additionally, DHA-enriched eggs are now available which may provide up to 150 mg of DHA per egg.

### New Regional and State Staff

**Welcome to Kathleen Nettesheim-Engel, M.P.H., B.S., R.N.** Our new California Nurse Consultant over all of the Diabetes and Pregnancy Program. She is replacing Mary Goldberg. Everyone truly will miss Mary and was sad to see her go. She is a tough act to follow but Kathleen is already stepping in.

**Denise M. Osselto, RNC, NP, CDE** joined the Region 6.2 staff as the CDAPP nurse educator. She comes to the position with 30+ years of experience working in public health, family planning, OB/GYN, community outreach and health care management. She is a graduate of the Harbor-UCLA Women's Health Care Nurse Practitioner Training Program and has been a practicing OB/GYN nurse practitioner since 1990. Denise recently retired from the Los Angeles County Department of Health Services and now chooses to keep her skills current by contributing to CDAPP her knowledge of both pregnancy care and diabetes, an area very close to her heart. We are pleased to welcome her to our Region 6.2 family.

Region 7 has two new staff. **Sara Corder, RD, MPH** and **Suzanne Sparks, RN, CDE.** Both come from clinical affiliates in region 7.

Region 5’s new behavioral medicine specialist is **Vince Hernandez, LCSW.**

### Maternal DHA Intake During Pregnancy and Lactation

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DHA Dietary Sources: Fatty fish, Meat, Eggs

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<tr>
<td>3 oz pink salmon filet, baked/broiled</td>
<td>638</td>
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<tr>
<td>3 oz white tuna, canned in water</td>
<td>535</td>
</tr>
<tr>
<td>3 oz smoked salmon</td>
<td>227</td>
</tr>
<tr>
<td>3 oz crab, steamed</td>
<td>196</td>
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<tr>
<td>12 large shrimp, steamed</td>
<td>96</td>
</tr>
<tr>
<td>3 oz tuna salad</td>
<td>47</td>
</tr>
<tr>
<td>2 pieces chicken, fried</td>
<td>37</td>
</tr>
<tr>
<td>1 large egg, hard-boiled</td>
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For those mothers who do not consume fish and seafood regularly, the use of DHA supplements may become important. By providing nutrition education for pregnant and lactating mothers, healthcare providers can assist in improving maternal intake of DHA, which in turn could have important effects.

Source: Pediatrics Perspectives newsletter, Volume 3, Series 7, 2004

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Diabetes and insulin resistance has been associated with pregnancy induced hypertension (PIH), preeclampsia and eclampsia. Multiple theories have appeared in the literature. Some of these theories are (1):

- Insulin stimulates the sympathetic nervous system and increases systolic blood pressure.
- Insulin causes smooth muscle hypertrophy and endothelial dysfunction, which leads to vasoconstriction.
- The transmembrane electrolyte pump with calcium, Na+, and K+ are affected and result in an increased vascular tone and hypertension.
- Genetic components
- Insulin resistance impairs glucose tolerance leading to abnormal lipid metabolism and it is associated with obesity. All of these affect the handling of salt in the kidneys and lead to hypertension.
- Chronic vascular damage from overt diabetes, pre-diabetes and hypertension.
- Pregnancy increasing overall insulin resistance.

In women with overt diabetes we have always known that there is an increased incidence of PIH, preeclampsia and eclampsia. In this group there is also an increased incidence of hypertension (HTN) preexisting the pregnancy. HTN alone increases the rate these conditions. With overt diabetes the relative rate of these conditions is 3.56 or it nearly quadruples PIH, preeclampsia and eclampsia (3). Of course, pre-existing HTN and or nephropathy has the strongest association with complications. Ekbom et al studied just albuminuria and they found even without albuminuria (< 30mg/24 hours) the incidence of preeclampsia was 6% in women with pre-existing diabetes (4). With albuminuria >30 and < 300 mg/24 hours, the incidence of preeclampsia jumped to 42%. With albuminuria > 300 mg/24 hours, the preeclampsia rate jumped to 64%. As would be expected, rates were shadowed by increased rates of preterm delivery and stillbirth (3).

Actually women with GDM have a higher rate of chronic HTN and PIH, then the women that screen without GDM. In a study by Bryson, et al, they found that in their normal control population they had a gestational hypertension rate of 2.7%. In their GDM group they saw a prevalence rate of 3.9% eclampsia, 4.5% severe preeclampsia, 4.4% prevalence in mild preeclampsia and PIH (2). They categorized these women using the WHO criteria to categorize their women. Even correcting for age and obesity they still saw an increased prevalence.

All the studies corrected for BMI and age. An increased BMI increased the rate of preeclampsia and PIH. Age also increased these complications.

Recently research has emerged looking at an increased PIH, preeclampsia and eclampsia in women with lower levels of glucose intolerance that are without a diagnosis of GDM. Two studies identified an impaired fasting was the one factor strongly associated with pre-eclampsia. Mclaughlin, et al, found the relative risk with impaired fasting (IFG) was 9.3. They also divided women by diagnosis and found that with GDM the RR was 3.34, only 1 abnormal (IGT) was RR 2.36 (Nordin et al). In a study looking at women with only one abnormal value on their OGTT verses a normal pregnant Continued on page 6
Pregnancy Induced Hypertension, Preeclampsia and Glucose Tolerance

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population they noted 4.4% incidence of preeclampsia and in the one abnormal group, they saw a 6.5% incidence of preeclampsia (5). Nordin et al, had similar results with IFG the relative risk for preeclampsia was 9.3, with OGT RR 2.36, and GDM was 3.34 (6).

Clinically, knowing the risk factors associated with PIH and preeclampsia can alert staff to women that are at risk. It also is the reason we check blood pressures, maternal weight and urine dips for protein, at clinic visits. For women with preexisting HTN or microalbuminuria further lab test, such as uric acid and liver function, are required to distinguish chronic HTN or nephropathy from preeclampsia.

At this point delivery is the only known cure for preeclampsia. But early identification and intervention can prevent the devastating results of preeclampsia to both mother and baby.

REFERENCES


For anyone that has ever asked us about entering data online, it will soon be a reality. The state regional staff is getting trained in early October 2006. New Affiliate data training will follow.

Benefits:
- No lost data sheets
- Better data – the online system will direct you to fields when more data is needed and prompt you to enter missing data.
- Fewer coding mistakes and directions to support complete answers, such as which oral agent a woman was utilizing. This will make our information more accurate and cleaner.
- You will be able to add to data later. For example, if a woman finally went for a postpartum screening you could add those results.
- You can track and briefly analyze your own data, at your clinical site. For example, if I wanted to know how many women had gestational diabetes and were Hispanic, I could sort the data to give me that information.
- You will be able to look at real time data. I won’t have to delay looking at my data until 9 months after the year is completed. I could look at my data right now for this year. You could show your great outcomes, right now.
- Quicker turn around of data

What to expect next. First, affiliates will be invited to attend a data training. Then the fun begins as you enter your own data. I have entered many forms now and it is really easy and it took about 2 minutes. I was thrilled. And, when I forgot to add the stuff on the back, I just called the data center or put a note on the data form. They have been checking my forms. At least I am entering it correctly. This process of entering data and marking the paper copy as entered, will probably continue for a short period of time. This is to see if anyone is having problems entering data.

People at the data center have already entered the 2006 data that has been submitted, get yours in now and you will be able to look at your own data right away.

Questions?
*What if I don’t want to submit on line?
Paper is still an option. We are not stopping this. Plus, you will also have the ability to look at your own data on line, just like everyone else, it will just take a few extra weeks for the data to be accessible. There is no penalty for not submitting on line.

*What if I don’t want anyone looking at my data?
No one but you and state staff can look at your data.

*What If someone wants to publish our data?
If someone wants to publish they must go through their own internal review board (IRB) and submit to the state for data. The data they receive would be de-identified, even more then it is now. The form to use to request data release can be sent to you by the Regional Coordinator or the Data Center.

*What if I go to the data training but when I get back to our office I have trouble or questions?
Call the Data Center (M-F 9 a.m. to 5 p.m.) at (562) 945-6484 or your Regional Coordinator. They will be able to walk you through the system and answer your questions.
**Conferences**

- **December 4 and 5th, 2006.** Diabetes and Pregnancy Affiliate Training. San Diego, CA. For more information please contact Elaine Simon at: 858-536-5090.


- **January 23-26, 2007.** California Childhood Obesity. For information go to: www.cce.csus.edu/conferences


- **June 22-26, 2007.** 67th Scientific Sessions. American Diabetes Association. Chicago, IL. For more information go to: professionaleducation@diabetes.org

**Sweet Success Express** is our sister organization and we offer Affiliate discounts for classes to Associate Members.

Who is Sweet Success Express? They are our national equivalent of the California Sweet Success Program. If you are from outside California they are for you. **Look on the web at:** www.sweetsuccessexpress.com

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**CALIFORNIA DIABETES AND PREGNANCY PROGRAM**

On the Web at [www.llu.edu/llumc/sweetsuccess/](http://www.llu.edu/llumc/sweetsuccess/)