NATIONAL COUNCIL OF CHIEF CLINICAL CONSULTANTS

# CCC CORNER

Focus on the Health of American Indian and Alaska Native Women and Children

Vol 5, No 02
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# Low hanging fruit—Less DM

## Promotion of healthy lifestyles during and after pregnancy

Gestational diabetes mellitus (GDM) affects approximately 2% to 4% of all pregnant women in the United States each year. Women who have had GDM are at high risk for developing nongestational diabetes. The objective of this study was to assess the prevalence of modifiable risk factors for developing diabetes among women with previous GDM only.

METHODS: Cross-sectional data for nonpregnant women from the 2003 Behavioral Risk Factor Surveillance System were used to estimate and compare the prevalence of modifiable risk factors among three groups: nonpregnant women with previous GDM only, nonpregnant women with current diabetes, and nonpregnant women without diabetes.

RESULTS: In 2003, 7.6% of nonpregnant women aged 18 years and older in the United States had current self-reported physician-diagnosed diabetes, and 1.5% had previous GDM only. Compared with women without diabetes, women with previous GDM only had higher prevalence of no leisure-time physical activity (32.0% vs 25.7%), overweight (62.2% vs 49.0%), and obesity (29.4% vs 20.0%). After adjusting for sociodemographic variables, women with previous GDM only were more likely to have no leisure-time physical activity (prevalence odds ratio [POR], 1.4; 95% confidence interval [CI], 1.2–1.7) and more likely to be overweight (POR, 1.8; 95% CI, 1.6–2.2) or obese (POR, 1.7; 95% CI, 1.4–2.1), compared with women with no diabetes.

CONCLUSION: Women with previous GDM are more likely to have modifiable risk factors for developing diabetes than women without diabetes. More attention to this issue is needed from health care providers and public health officials to encourage the promotion of healthy lifestyles during and after pregnancy.

*Yun s et al Modifiable risk factors for developing diabetes among women with previous gestational diabetes. Prev Chronic Dis. 2007 Jan;4(1):A07*

## OB/GYN CCC Editorial

### Women with previous GDM more likely to have modifiable risk factors for developing DM

In GDM, many times the chance to make changes in postpartum life style is squandered. Russell et al, below, report that the glucose often goes unchecked. One successful model has been the utilization of intense case management. Here is a model to consider.

EXERCISE COUNSELING: consists of aerobic activities such as walking or stationary cycling. Frequency: 3 days per week. Duration: 20-45 minutes per session. Moderate intensity: The "talk-sing test" may be used (the patient should be able to talk while exercising but not sing) or rating of perceived exertion (RPE) of "fairly light" to "somewhat hard".

INITIAL EXERCISE CONSULT: Assessment of current physical activities and level of readiness for exercise education/information on exercise and GDM, and individualized exercise plan.

### Goals

The goals of the currently proposed program are to improve maternal and fetal outcomes of patients with diabetes in pregnancy through more effective use of existing resources. One key element to maximizing the utilization of those resources is the coordination by effective Diabetes in Pregnancy case management.

*(continued on page 15)*

THIS MONTH



### What is ALSO®?

Advanced Life Support in Obstetrics (ALSO®) is a two-day course for all maternity care providers and any who provides care to pregnant women. Using an evidence-based curriculum, the course provides many interactive workstations utilizing pelvic mannequins, etc.... The ALSO Refresher Course is a one-day course that is a curriculum on treating emergencies during pregnancy for those who have successfully completed a provider course. who are ending their 5-year provider status. **In my opinion, as OB/GYN CCC, every Indian Health maternity care provider should either be up to date in ALSO, or faculty.** Contact dwinslow@aafp.org

### Also on-line....

Subscribe to the listserv and receive reminders about this service. If you have any questions, please contact me at nmurphy@scf.cc.

Neil J. Murphy

Dr. Neil Murphy
Ob/Gyn Chief
Clinical Consultant (C.C.C.)

# IHS Child Health Notes

*"It doesn't matter if the cat is black or white as long as it catches mice."*
—Deng Hsaio P'ing (1904–1997)

## Quote of the month

*"A radical is a man with both feet planted firmly in the air. A conservative is a man with two perfectly good legs, however, who has never learned to walk forward."* —Franklin Roosevelt

## Article of Interest

**Effect of needle size on immunogenicity and reactogenicity of vaccines in infants: randomized controlled trial.**

*BMJ. 2006 Sep 16;333(7568):571.*

### Editorial Comment

A cliché is that sometimes "less is more". In this case the British demonstrate that "more is less" when it comes to needle size and vaccinations.

Infants receiving intramuscular vaccinations with a long needle (25mm) had fewer local reactions, and especially had fewer severe local reactions, when compared with infants vaccinated with a short (16mm) needle. The width of the needle did not affect the reactogencity and immune response did not differ between groups.

While we often choose the smallest needle in an effort to decrease pain, this study suggests that a longer needle may be the better choice to minimize local reactions after vaccinations.

## Infectious Disease Updates

**Rosalyn Singleton, MD, MPH**

**2007 Childhood and Adolescent Immunization Schedules: Evolution or Intelligent Design?**

The recent expansion of the recommended vaccines includes 14 additional vaccine doses as follows:

- Meningococcal vaccine (one dose at 11 or 12 years of age)
- Tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccine (one dose at 11 or 12 years of age)
- Hepatitis A vaccine (two doses six months apart at one to two years of age)
- Three additional doses of influenza vaccine (starting at six months of age; two doses in the first season, then one dose annually through 59 months of age)
- Rotavirus vaccine (three doses at two, four, and six months of age)
- Human papillomavirus vaccine (three doses at 11 or 12 years of age)
- Second dose of varicella vaccine (at four to six years of age)

Such changes present a challenge to the clinically active primary care provider; the complicated array of antigens and timing for administration can make one's head swim. Fortunately, this expansion also has shaped the evolution of the recommended schedules. This is where the recommended immunization schedules become essential clinical tools.

http://www.aafp.org/afp/20070101/practice.html

## Recent literature on American Indian/ Alaskan Native Health

**Doug Esposito, MD**

I would like to direct the reader's attention to several excellent articles in the December issue of the American Journal of Public Health. This entire issue is devoted to "Embracing a Common Destiny: Health for All." It is impossible not to be consumed by the subjects of health disparities and inequities in access to health care when considering issues facing Native American and First Nations populations in North America. As regular readers of this column know, the thrust of my comments have centered on these topics since I began writing for Dr. Holve nearly one and a half years ago. Imagine my excitement whenever I come across an entire journal issue devoted to Health for All!

**Health and health care for the 21st century: for all the people.**

*Am J Public Health. 2006 Dec;96(12):2090-2. Epub 2006 Oct 31.*

### Editorial Comment

The December issue of the American Journal of Public Health begins with this excellent editorial by the much celebrated former Surgeon General of the United States, Dr. C. Everett Koop. Just to set the tone, here is a wonderful quote by this dedicated and outspoken public health advocate and leader: "Our capability to prevent and treat disease seems to exceed our willingness to apply our interventions." Truer (and sadder) words have not been written on the subject! We certainly have the technological and economic means to advance the health status of every American to a point far beyond the current level. The only thing lacking is the resolve. Dr. Koop further elaborates: "I am concerned, however, that the difference between the "haves" and the "have-nots" will worsen. It is in vogue to blame problems on the victims of disease and disability, on laziness, on immigration, on those who hold opposing political points of view, or even—and perhaps most incredibly in this most wealthy of all nations—on lack of resources. Consider just 2 telling facts: 80% of people without

health insurance are from working families and nearly 20% of them are children. Can we blame their lack of access to health care on them?"

## The persistence of American Indian health disparities.

*Am J Public Health. 2006 Dec;96(12):2122-34. Epub 2006 Oct 31.*

### Summary and Editorial Comment

This paper chronicles the 500-year history of health disparities for American Indian populations. It explores the diverse explanations proposed over time that have been used to rationalize, and sometimes address, the presence and persistence of these disparities. Beginning with theories of providence of God and working through to more contemporary ideas emphasizing environment, behavior, biology, and socioeconomics, the author takes the reader on a wonderful post-Columbian journey, presenting a novel, interesting, and important approach to answering some key contemporary questions. "Do American Indians have intrinsic susceptibilities to every disease for which disparities have existed? Or does the history of disparity after disparity suggest that social and economic conditions have played a more powerful role in generating Indian vulnerability to disease?" Yet again, the issue of biology vs. society rears its ugly head (please see the "Additional Reading" section below)!

In reading this article, I wonder how far we really have come since the late 1800s; "Medical campaigns, for example, suffered from inadequate funding. Commissioner of Indian Affairs T. J. Morgan compared the salaries paid to government physicians in the Army, Navy, and IHS and divided these sums by the populations served. He then calculated a crude estimate of how the government valued people: $21.91 per soldier, $48.10 per sailor, and $1.25 per Indian." Now, doesn't this sound frighteningly similar to contemporary estimates of disparities in per capita health expenditures? As reported in a study done by the United States Commission on Civil Rights in April 2004: "HHS estimates the FY 2003 annual per capita health care spending for the general population at $5,065. In contrast, IHS spent $1,914 per eligible user, or 38 percent of that spent by the general population." What rightfully stirs the ire of Native Americans, though, is this: the U.S. spends $3,803 per year per federal prisoner, almost twice as much as it spends for an American Indian or Alaska Native. Ouch!!

I believe it is absolutely critical for our society to acknowledge and come to grips with the true etiology of the health disparities endured by minority populations. Society needs to take responsibility for the existence of these deplorable realities. The fallacy that there exists a real biologic cause, conveniently reflected by skin color and body habitus alone, only serves to divert attention away from the true problem; that being disparities in wealth and power, or more simply, racism and unequal access and opportunity. But please, don't take my word for it, go to the article and deliberate for yourselves...then let's all work together as a society on a solution!

### Additional Reading

On the issue of genomics, please see the March 2006 issue of the IHS Child Health Notes on Race, Genetics, and the Biologic Versus Social Determinants of Health and Health Disparities:
**www.ihs.gov/MedicalPrograms/MCH/M/documents/ICHN306.doc**

Broken Promises: Evaluating the Native American Health Care System. U.S. Commission on Civil Rights, April 2004.
**www.usccr.gov/pubs/nahealth/nabroken.pdf**

## Infant mortality trends and differences between American Indian/Alaska Native infants and white infants in the United States, 1989-1991 and 1998-2000.

*Am J Public Health. 2006 Dec;96(12):2222-7. Epub 2006 Oct 31.*

### Summary and Editorial Comment

In another article highlighting the "Health for All" theme, this study offers a detailed analysis of measurable disparities in infant and neonatal mortality suffered by Native Americans. In the October issue of the IHS Child Health Notes, I discussed an MMWR QuickStats showing that infant mortality for American Indian/Alaska Native mothers ranks second highest in the U.S., surpassed only by the rate for non-Hispanic blacks. The paper appearing in the December issue of the American Journal of Public Health is a much more detailed and relevant analysis.

The authors analyzed linked birth/infant-death data in order to generate birthweight-specific and cause-specific neonatal and infant mortality rates for white and AI/AN infants born at ≥20 weeks' gestation in the U.S. in 1989-1991 compared with 1998-2000. Although some definite and significant gains have been made over the period, presumably preventable disparities still do exist. Of note is that decreases in disparities between AI/AN and White infants were identified in some measures while increases were found in others.

On a slightly more cheery note, the authors found that AI/AN infant mortality overall was only 1.7 times that of White infants. This compares favorably with historical data. Infant mortality rates once were several-fold higher for Native Americans than for the general U.S. population. However, although real progress has been made, it has been impossibly (and perhaps unforgivably) slow. As a result of the disparity in infant mortality, countless and needless infant deaths have occurred over the centuries exacting a terrible toll on the wellbeing of the afflicted populations through chronic, unrelenting emotional trauma. This situation will certainly have a lasting negative impact that can be expected to persist perhaps generations beyond the time the disparity is finally eliminated.

The authors offer a very thoughtful analysis of the troubles and the achievements in infant mortality over a ten-year period. This article is well worth a look by any practitioner delivering care to AI/AN infants or by anyone seeking to assist in the reduction

*(continued on page 15)*

# From your colleagues

## Sunnah Kim, AAP

**Do you plan to attend the 2nd International Meeting on Indigenous Child Health in Montreal on April 20-22, 2007? If so, and if you are an IHS/federal employee, an important deadline is approaching. . .**

Due to the Canadian location, all US federal employees will need to obtain a travel order and a federal passport (ie. red passport) to receive reimbursement. It is noted that one requirement for obtaining a federal passport is to have a current US passport. The IHS has developed resource materials outlining the necessary steps to obtain the special federal passport. While the process is not difficult, it does take about 3 months to process (meaning the deadline is January 20!!). Therefore, federal employees are encouraged to begin this process ASAP, if you plan to attend! For instructions on obtaining this passport and a travel order, visit www.aap.org/nach/2InternationalMeeting.htm

FOR ALL US ATTENDEES: As of January 1, 2007, those traveling by air or sea to and from Canada will be required to have a passport or other secure, accepted document to enter or re-enter the United States. Therefore, it is strongly recommended that all potential International Meeting attendees obtain a US passport if they do not already have one. Additional information on obtaining a US passport, including application materials, can be found at the link above.

The International Meeting will be a great opportunity for health professionals working with or interested in AI/AN child health to learn from the experiences of others who work with indigenous populations in both the US and Canada. The theme of this conference will be "Solutions, Not Problems". Additional information about the conference will be forthcoming via a conference brochure which will be sent to all IH-SIG members. Information can also be found on the conference Web pages (via the link above).

**We hope to see you in Montreal!**

Sunnah

SKim@AAP.ORG

## Judy Thierry, HQE

**Consumer Reports: Only 2 out of 12 infant car seats tested performed well in crash tests**

Consumer's Union, publisher of Consumer Reports, conducted crash tests on 12 infant car seats at 35 mph (frontal crash) and 38 mph (side-impact crash), the speeds currently used to crash test most new cars and minivans. Base-mounted, rear-facing seats, suitable for children under one year and 22 lbs according to the manufacturers, were found to detach from their bases or twist violently, damaging test dummies in some cases. While the federal New Car Assessment Program scores crash safety in the form of highly publicized "star" ratings, no similar for score is used to rate infant and child safety seats. Manufacturers have improved car designs based on star ratings but there is no such incentive for car seat manufacturers. The tests also highlighted on-going problems with the federally-mandated LATCH system, where most car seats performed less well using LATCH than when attached with vehicle safety belts. A NHTSA report issued late last month stated that 40% of parents use safety belts instead of the LATCH system because of confusion about the system.

**AI/AN SIDS kits from CJ foundation available through Jan 07**

Produced by the CJ foundation in collaboration with Aberdeen Area Tribal Chairman's Health Board (AATCHB) and the Great Lakes Inter Tribal Council (GLITC) these kits provide videos, posters, pamphlets for patient and community education. Training materials, PSA's are included. Kits focus on sensitive risk reduction messages for moms, cover infant sleep positioning and 'back to sleep' messaging, use intergenerational messages, integrate parent and father focus, cover teen pregnancy psychosocial aspects. Materials are based on stages of change theory. Materials are derived from the communities themselves and can be adapted (with acknowledgement of CJfoundation). Katproductions provided the technical aspects of production, filming and hard print materials.

A mass mail-out in 2003 to distributed kits to all tribes, federal and urban programs.

**KITS WILL ONLY BE AVAILABLE THROUGH JANUARY 2007!**

The American Indian & Alaska Native SIDS Risk Reduction Resource Kit—order in as small or large a quantity as needed (and while supplies last). To place your order, please email: David Mayer with subject line: AI KITS. Include name, complete mailing address and the number of kits to be delivered. Emails with incomplete mailing addresses will not be processed. The kits and shipping are offered free of charge through the CJ Foundation for SIDS. Please allow 3-4 weeks for delivery.

http://www.cjsids.com

# Hot Topics

## Obstetrics

### Teamwork Training: Decision to incision times significantly improved

Conclusion: Training, as was conducted and implemented, did not transfer to a detectable impact in this study. The Adverse Outcome Index could be an important tool for comparing obstetric outcomes within and between institutions to help guide quality improvement. LEVEL OF EVIDENCE: I.

*Nielsen PE, et al Effects of Teamwork Training on Adverse Outcomes and Process of Care in Labor and Delivery: A Randomized Controlled Trial. Obstet Gynecol. 2007 Jan;109(1):48-55*

**OB/GYN CCC Editorial**

### Put innovation into motion: National Indian Health MCH and Women's Health meeting

Another successful example is the 100,000 Lives Campaign, which is an initiative to engage US hospitals in a commitment to implement changes in care proven to improve patient care and prevent avoidable deaths. The Institute for Healthcare Improvement estimates that the lives saved as of June 14, 2006 was 122,300.

To that end, the National Indian Health MCH and Women's Health meeting, August 15-17, 2007 in Albuquerque will highlight speakers from the Institute for Healthcare Improvement and others that have evaluated and treated various health care systems. The meeting has individual facility program review as well as many hours of CME/CEUs.

Your facility should send a team of staff to the above meeting, e. g., you and 2-3 other colleagues from different disciplines should start planning now.

### National Indian Health MCH and Women's Health meeting

August 15- 17, 2007 Albuquerque, NM

**www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07**

### Physical activity in pregnancy: Important determinant of birth weight

Infants born to women in the highest quartile of physical activity weighed 608 g less than infants born to women in the lowest quartile. The inverse relationship between physical activity and fetal growth ratio was moderated by maternal height; virtually all the effect was seen in mothers taller than the sample median (1.65 m). Similar relationships were found across methods of physical activity measurement. CONCLUSION: Aerobic physical activity in pregnancy may be an important determinant of birth weight within the normal range, especially in taller mothers. LEVEL OF EVIDENCE: II. Perkins CC, et al Physical Activity and Fetal Growth During Pregnancy. Obstet Gynecol. 2007 Jan;109(1):81-87

## Gynecology

### Outreach workers should follow women with the most severe PAP abnormalities

A health care system in which many women fail to get follow-up care for an abnormal Pap smear, outreach workers were more effective than usual care (mail or telephone reminders) at increasing follow-up rates. The results suggest that outreach workers should manage their effort based on the degree of abnormality; most effort should be placed on women with the most severe abnormality (high-grade squamous intraepithelial lesion).

*Wagner TH, Engelstad LP, McPhee SJ, Pasick RJ. The costs of an outreach intervention for low-income women with abnormal Pap smears. Prev Chronic Dis 2007 Jan*

### Pelvic Floor Muscle Therapy May Be Best Option for Urinary Incontinence

Conclusions: In women who have already had simple behavioural therapies (including advice on PFM exercises) for urinary dysfunction, the continuation of these behavioural therapies can lead to further improvement. The addition of vaginal cone therapy or intensive PFMT does not seem to contribute to further improvement. The improvement in pelvic floor function was significantly greater in the PFMT arm than in the control arm although this did not translate into changes in urinary symptoms.

*Williams KS, et al A randomized controlled trial of the effectiveness of pelvic floor therapies for urodynamic stress and mixed incontinence. BJU Int. 2006 Nov;98(5):1043-50*

### Closing the vaginal cuff vertically is superior to horizontal closure for vaginal length

Results: Preoperatively mean vaginal lengths in the horizontal and vertical groups were statistically similar (7.76 +/- 1.23 cm versus 8.28 +/- 1.39 cm, respectively; P = .21). Postoperatively the groups statistically differed (6.63 +/- 1.02 cm versus 7.93 +/- 1.18 cm, P < .001). The mean change in vaginal length was -1.13 +/- 1.15 cm and -0.35 +/- 0.91 cm, respectively (P = .01). CONCLUSION: Closing the vaginal cuff vertically is superior to horizontal closure for the purpose of preserving vaginal length.

*Vassallo BJ et al A randomized trial comparing methods of vaginal cuff closure at vaginal hysterectomy and the effect on vaginal length Am J Obstet Gynecol. 2006; 195(6):1805-8*

## Child Health

### Are you interested in acquiring HPV vaccine to provide to 9–18 year olds?

Please see note below from CDC regarding the entitlement for all VFC eligible females 9 – 18 years of age to receive HPV vaccine. This email was sent to all state immunization program managers and IHS Immunization coordinators.

If your Area/facilities are interested in acquiring HPV vaccine to provide to 9 – 18 year olds, but you are unable to get the vaccine through your state VFC program or are limited to certain age groups, please let Amy Groom, at amy.groom@ihs.gov, know so she can follow up with CDC.

Response requested: From Amy Groom, IHS Immunization Program Manager/CDC Field Assignee: As you begin planning for implementation of the new HPV vaccine, please keep in mind that VFC is an entitlement program. In the case of HPV vaccine, this means that all VFC-eligible females 9 through 18 years of age are entitled to the vaccine. It also means that VFC-enrolled providers must have access to the vaccine and may provide it to all VFC-eligible females between 9 through 18 years of age. While you may target your outreach efforts to certain age groups or types of providers, requests for the vaccine from VFC-enrolled providers must be honored. A copy of the VFC resolution is attached for your reference.

### South Dakota becomes 2nd State in the Nation to Offer Girls Free Cancer Vaccine

Governor Rounds his plan to provide the HPV vaccine, Gardasil to every girl in South Dakota between the ages of 11-18. SOUX FALLS, SD.—January 9, 2007—The Women's Cancer Network —the breast and cervical cancer statewide coalition—applauded the Governor's decision today to make South Dakota the 2nd state in the nation to offer the new cervical-cancer vaccine free to girls. The vaccine against the human papilloma virus, or HPV, will be available to all girls ages 11 through 18 as part of a state program that offers immunizations to youth at no cost. FOR MORE INFORMATION, COTACT:
Jill Ireland, Women's Cancer Network
Jill.Ireland@cancer.org

## Chronic disease and Illness

### Sleepiness and sleep deprivation are associated with injury

Results: Better sleep quality in the past 7 days was associated with a lower risk of injury (odds ratio (OR) 0.88, 95% confidence interval (CI) 0.80 to 0.97). Self-reported sleepiness just before injury compared with control time was associated with a lower risk of injury, with ORs of 0.82 per unit on a 0-to-12 scale (95% CI 0.78 to 0.86) in case-control analysis and 0.76 (0.73 to 0.80) in case-crossover analysis. In case-crossover analysis, additional sleep in the 24 hours before injury compared with the 24 hours before that was associated with an increased risk of injury (OR 1.06 per hour, 95% CI 1.03 to 1.09), but this effect disappeared when we controlled for activity, location, and recent alcohol consumption. Conclusions: Better recent sleep quality was associated with a lower risk of injury, but surprisingly, feeling sleepy was also.

*Edmonds JN, Vinson DC.Three measures of sleep, sleepiness, and sleep deprivation and the risk of injury: a case-control and case-crossover study. J Am Board Fam Med. 2007 Jan-Feb;20(1):16-22.*

### Discourage scheduled work beyond 16 consecutive hours

Companies today glorify the executive who logs 100-hour workweeks, the road warrior who lives out of a suitcase in multiple time zones, and the negotiator who takes a red-eye to make an 8 A.M. meeting. But to Dr. Charles A. Czeisler, the Baldino Professor of Sleep Medicine at Harvard Medical School, this kind of corporate behavior is the antithesis of high performance. In fact, he says, it endangers employees and puts their companies at risk. In this interview, Czeisler describes four neurobiological functions that affect sleep duration and quality as well as individual performance. When these functions fall out of alignment because of sleep deprivation, people operate at a far lower level of performance than they would if they were well rested. Czeisler goes on to observe that corporations have all kinds of policies designed to protect employees- rules against smoking, sexual harassment, and so on-but they push people to the brink of self-destruction by expecting them to work too hard, too long, and with too little sleep. The negative effects on cognitive performance, Czeisler says, can be similar to those that occur after drinking too much alcohol: "We now know that 24 hours without sleep or a week of sleeping four or five hours a night induces an impairment equivalent to a blood alcohol level of .1%. We would never say, 'This person is a great worker! He's drunk all the time!' yet we continue to celebrate people who sacrifice sleep for work." Czeisler recommends that companies institute corporate sleep policies that discourage scheduled work beyond 16 consecutive hours as well as working or driving immediately after late-night or overnight flights. A sidebar to this article summarizes the latest developments in sleep research.

*Czeisler CA. Sleep deficit: the performance killer. Harv Bus Rev. 2006 Oct;84(10):53-9, 148*

### Making and Keeping New Year's Resolutions: Nine Modifiable Cancer Risk Factors

More Than One Third of Cancer Deaths May Be Attributable to Nine Modifiable Risk Factors

Interpretation: Reduction of exposure to key behavioural and environmental risk factors would prevent a substantial proportion of deaths from cancer.

*Danaei G, et al Causes of cancer in the world: comparative risk assessment of nine behavioural and environmental risk factors. Lancet. 2005 Nov 19;366(9499):1784-93*

# Features

## ACOG

### Guidelines Recommend Universal Screening for Down Syndrome: Regardless of age

**Summary of Recommendations and Conclusions**

**The following recommendations are based on good and consistent scientific evidence (Level A):**

- First-trimester screening using both nuchal translucency measurement and biochemical markers is an effective screening test for Down syndrome in the general population. At the same false-positive rates, this screening strategy results in a higher Down syndrome detection rate than does the second-trimester maternal serum triple screen and is comparable to the quadruple screen.
- Measurement of nuchal translucency alone is less effective for first-trimester screening than is the combined test (nuchal translucency measurement and biochemical markers).
- Women found to have increased risk of aneuploidy with first-trimester screening should be offered genetic counseling and the option of CVS or second-trimester amniocentesis.
- Specific training, standardization, use of appropriate ultrasound equipment, and ongoing quality assessment are important to achieve optimal nuchal translucency measurement for Down syndrome risk assessment, and this procedure should be limited to centers and individuals meeting these criteria.
- Neural tube defect screening should be offered in the second trimester to women who elect only first-trimester screening for aneuploidy.

**The following recommendations are based on limited or inconsistent scientific evidence (Level B):**

- Screening and invasive diagnostic testing for aneuploidy should be available to all women who present for prenatal care before 20 weeks of gestation regardless of maternal age. Women should be counseled regarding the differences between screening and invasive diagnostic testing.
- Integrated first- and second-trimester screening is more sensitive with lower false-positive rates than first-trimester screening alone.
- Serum integrated screening is a useful option in pregnancies where nuchal translucency measurement is not available or cannot be obtained.
- An abnormal finding on second-trimester ultrasound examination identifying a major congenital anomaly significantly increases the risk of aneuploidy and warrants further counseling and the offer of a diagnostic procedure.
- Patients who have a fetal nuchal translucency measurement of 3.5 mm or higher in the first trimester, despite a negative aneuploidy screen, or normal fetal chromosomes, should be offered a targeted ultrasound examination, fetal echocardiogram, or both.
- Down syndrome risk assessment in multiple gestation using first- or second-trimester serum analytes is less accurate than in singleton pregnancies.
- First-trimester nuchal translucency screening for Down syndrome is feasible in twin or triplet gestation but has lower sensitivity than first-trimester screening in singleton pregnancies.

**The following recommendations are based primarily on consensus and expert opinion (Level C):**

- After first-trimester screening, subsequent second-trimester Down syndrome screening is not indicated unless it is being performed as a component of the integrated test, stepwise sequential, or contingent sequential test.
- Subtle second-trimester ultrasonographic markers should be interpreted in the context of a patient's age, history, and serum screening results.

*Screening for fetal chromosomal abnormalities. ACOG Practice Bulletin No. 77. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007;109:217–27.*

## OB/GYN CCC Editorial

**Shift in ACOG recommendations: First trimester screening**

Implementation of these recommendations will require rethinking of Indian Health MCH resources. This topic will be discussed in depth at the National Indian Health MCH and Women's Health meeting, August 15-17, 2007 in Albuquerque, NM.

The National Indian Health MCH and Women's Health meeting, August 15-17, 2007 will highlight speakers from the Institute for Healthcare Improvement and others that have evaluated and treated various health care systems. The meeting has individual facility program review as well as many hours of CME/CEUs.

Your facility should send a team of staff to the above meeting, e. g., you and 2-3 other colleagues from different disciplines should start planning now.

**National Indian Health MCH and Women's Health meeting**

August 15- 17, 2007 Albuquerque, NM

www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07

## Family Planning

### Continuous Contraceptive Therapy Safely Abolishes Menstrual Cycles

CONCLUSIONS: Continuous daily regimen of levonorgestrel (LNG) 90 mug/ethinyl estradiol (EE) 20 mug demonstrated a good safety profile and efficacy similar to cyclic OCs. The regimen continuously inhibited menses, increased the incidence of amenorrhea over time and, except for a subset of women, decreased the number of bleeding and spotting days.

*Archer DF, et al Evaluation of a continuous regimen of levonorgestrel/ethinyl estradiol: phase 3 study results. Contraception. 2006 Dec;74(6):439-45*

## Ask a Librarian

**Diane Cooper, M.S.L.S./NIH**

### Diet of Pregnant American Indians: Different than Whites?

A pregnant woman's diet can influence the outcome of her pregnancy. Is the diet of pregnant American Indians different than whites? A Harvard team sought to find the answer using data from the North Dakota WIC (Women, Infants and Children) program.

They found that the diets of the two groups were not much different. There was a statistical difference in the sample of over 5,000 women, but it was "minimal." Both groups needed improvement, the researchers said. Increases in iron and folate intake were specially recommended. And, as expected, both groups would benefit from eating less fat and more grains and vegetables. AI women had "greater diet diversity," which was a plus.

Comment: The conclusions were flawed because the study did not include the effect of dietary supplements such as prenatal vitamins. Iron and folate are usually in prenatal supplements. Generalizability is weak since the sample was limited to one state. While the study was published in December, 2006, the data reach back to 1996, another reason results are not generalizable. A finding that may be more important was that smoking among AI women was much higher than whites: 46% vs. 28%.

*Watts V, et al.: Assessing Diet Quality in a population of low-income pregnant women. Maternal Child Health Journal, 2006; Dec 27*

*"Informationists help find the information you need."

## Primary Care Discussion Forum

**Adolescent with knee pain**

February 1, 2007
Moderator: Terry Cullen, MD
Web M + M

**We will explore these issues**

- A 12 year old male presents to a busy outpatient clinic complaining of knee pain after football practice
- How do you approach the provision of patient care with limited access to services and consultants?
- Is medical diagnostic decision making different in a rural setting? Do we tolerate increased ambiguity?
- When do you 'start over' to find a different diagnosis?

**How to subscribe/unsubscribe to the Primary Care Discussion Forum?**

Subscribe to the Primary Care listserv
www.ihs.gov/cio/listserver/index.cfm?module=list&option=list&num=46&startrow=51

## Office of Women's Health, CDC

### I have to go really far just to exercise… er…actually no you don't

Results: No statistically significant relationships were found between activity and perceived or objectively measured proximity to parks. Pearson correlation coefficients for perceptions of distance and objectively measured distance to physical activity resources ranged from 0.40 (gyms, schools) to 0.54 (parks). Perceived distance to gyms and objective number of schools within 1-mile buffers were negatively associated with activity. No statistically significant relationships were found between activity and perceived or objectively measured proximity to parks

*Jilcott SB, Evenson KR, Laraia BA, Ammerman AS. Association between physical activity and proximity to physical activity resources among low-income, midlife women. Prev Chronic Dis 2007 Jan*

## Frequently asked questions

### Are varicella titers necessary prior to immunization?

Some providers and/or nurses are ordering varicella titers on patients during pregnancy, if they do not have a clear history of having had the disease, with the purpose of vaccinating those with negative titers postpartum. Is that is a reasonable approach? Or would it be better to assume that all without a history of the disease are susceptible and immunize them postpartum without doing titers?

**Answer**

For individuals with a reliable history of varicella, it can be assumed that they are immune and vaccination is unnecessary. The vast majority of adults (70 to 90 percent) without a reliable history of varicella are also immune. In light of these data, the American Academy of Pediatrics has suggested that it may be cost effective to perform serologic testing on persons 13 years of age and older and immunize those who are seronegative. This requires that serologic results will be tracked and susceptible patients will be immunized. However, serologic testing is not required because the vaccine is well tolerated in patients with immunity; thus in some situations, universal immunization may be more practical and preferable.

Health care and child care workers who do not have a history of varicella should be tested serologically, and those who are seronegative, and without a contraindication, should be immunized. (more Background below)

**….so…. my suggestion is that unless you want to develop a specific tracking system for this issue**

1 ask the patient if she has had chickenpox or been immunized
2 if not, then treat with vaccine

**…if you have a robust infrastructure, then**

1 ask the patient if she has had chickenpox or been immunized
2 if not, then test and vaccinate the sero-negative patients postpartum

### OB/GYN CCC Editorial

**The Perinatology Corner offers a module on this topic**

The Chickenpox (varicella) in Pregnancy module presents other resources, as well as free CME/CEUs if desired http://www.ihs.gov/MedicalPrograms/MCH/M/VC01.cfm

## Menopause Management

### Life After WHI: Postmenopausal Symptoms and Use of Alternative Therapies After HRT

Results: Reasons why the women discontinued therapy and any nonhormonal alternative therapies that they may have used to manage subsequent menopausal symptoms were recorded. The primary investigator contacted the 78 women to complete a telephone survey. In most women, at least one menopausal symptom recurred. Vasomotor symptoms (hot flashes) were most common and occurred in 41 (53%) women. In addition, 59 (76%) women reported using nonhormonal alternative therapies, and 40 (68%) of this group deemed the alternatives helpful. CONCLUSION: We strongly believe that health care providers, including pharmacists, must continue to communicate with and educate women regarding treatment options for menopausal symptoms. Clinical pharmacists are ideally suited to contribute to ongoing research in this area.

*Shrader SP, Ragucci KR. Life after the women's health initiative: evaluation of postmenopausal symptoms and use of alternative therapies after discontinuation of hormone therapy. Pharmacotherapy. 2006 Oct;26(10):1403-9*

### Conjugated Equine Estrogen Treatment May Not Increase Breast Cancer Risk

Conclusions: Treatment with CEE alone for 7.1 years does not increase breast cancer incidence in postmenopausal women with prior hysterectomy. However, treatment with CEE increases the frequency of mammography screening requiring short interval follow-up. Initiation of CEE should be based on consideration of the individual woman's potential risks and benefits.

*Stefanick ML, et al Effects of conjugated equine estrogens on breast cancer and mammography screening in postmenopausal women with hysterectomy. JAMA. 2006 Apr 12;295(14):1647-57*

## International Health Update

**Claire Wendland, Madison, WI**

### What does the future hold in store?

Important news in the world of international health is the recent update of the Global Burden of Disease (GBD) study. The original and groundbreaking 1990 GBD project gathered data from around the world to provide the first truly global estimates of morbidity and mortality due to various causes. Researchers at Harvard University and the WHO, funded by the World Bank, also used their data to make projections of global death rates through 2020. These GBD projections have been used extensively by policymakers at national and international levels to guide resource allocation; however, some of the predictions have already proven to be badly off. In particular, the original report gravely underestimated the impact of HIV/AIDS.

The researchers used 2002 WHO disease prevalence data to model patterns of illness and death under three scenarios of socioeconomic change: a baseline scenario, a pessimistic scenario (in which economic growth is less than expected) and an optimistic scenario (projecting a faster rate of economic growth). In all three cases, they predict that the risk of death for children below 5 will drop substantially by 2030. Life expectancy at birth will rise in all regions, and the disparity between life expectancies in rich and poor countries will narrow somewhat, though in both baseline and pessimistic scenarios the gap will remain very large. Death due to non-communicable disease – particularly ischemic heart disease – will rise, as will death from HIV/AIDS and from road traffic accidents, even in the most optimistic projections. (In fact, greater economic growth is expected to result in more road traffic fatalities.) Diabetes and cancer will increase while measles, malaria, and lower-respiratory conditions are projected to decline. By 2015, tobacco will be responsible for 10% of deaths worldwide. The three leading causes of disability are projected to be HIV/AIDS, depression, and coronary artery disease.

Of course it is too much to expect that any such projections can truly accurately forecast the future, and no model, however well constructed, can account for unpredictable events like a world war, pandemic influenza, or the discovery of antibiotics. Two serious and potentially preventable flaws in the study concern me, however. First, the mathematical models assume that future mortality trends in poor countries will respond to economic growth in the same way that they did historically for now-rich countries. There is already evidence to suggest this rosy prediction may not hold true, as overall economic growth in poor countries has in a number of cases been associated with worsening internal inequalities and worsening population health. The second flaw is the failure to address issues of climate change, which researchers believe will have a profound effect on both infectious disease and nutrition. Including some of the climate and disease change models would have added a new level of complexity to an already complicated problem, but omitting them entirely has probably hurt the accuracy of these projections. Even with these two serious caveats, though, this study will be useful and interesting for people who work in health policy, and represents an important update of the now outdated 1990 GBD figures.

*Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Medicine 3(11):e442, November 2006*

## Women's Health Headlines

**Carolyn Aoyama, HQE**

### What Causes Breast Cancer?

The Sister Study must enroll 20,000 more women in 2007 to help find the answers.

**You can help get these 20,000 sisters in 2007 by:**

- Forwarding this to everyone in your contact address list
- Taking Sister Study materials to places where eligible women may be such as doctors' offices, beauty salons, churches/synagogues, meetings, workplaces, conferences, events, etc.
- Make a pledge to personally find 5 eligible women to enroll in the study
- Write a letter to your newspaper editor with a personal story

Help the Sister Study now! Let's put a stop to Breast Cancer!

**For questions or more information:**

Call toll-free telephone number 1-877-474-7837

Or log on to **www.sisterstudy.org**

**A woman is eligible to join this landmark national breast cancer study which looks at how environment and genes may affect the chances of getting breast cancer if:**

- Your sister (living or deceased), related to you by blood, had breast cancer
- You are between the ages of 35 and 74
- You have never had breast cancer yourself
- You live in the United States or Puerto Rico

Conducted by National Institute of Environmental Health Sciences one of the National Institutes of Health of the U.S. Department of Health and Human Services

## Medical Mystery Tour

### A boy has been born in Chile with a fetus in his stomach

**To recap from last month…**

A boy had been born in Chile with a fetus in his stomach in what doctors said was a rare case of "fetus in fetu" in which one twin becomes trapped inside another during pregnancy and continues to grow inside it.

Doctors noticed the 4-inch-long fetus inside the boy's abdomen. It had limbs and a partially developed spinal cord but no head and stood no chance of survival, doctors said.

After the birth, doctors operated and removed the fetus from the boy's stomach. The boy, who has not been named, was recovering at Temuco's Hernan Henriquez hospital.

**Background**

Fetus in fetu is a malformed parasitic monozygotic diamniotic twin that is found inside the body of the living child or adult. Thirty one cases have been published before 1900 and only 11 have been published from 1900 to 1956. This pathology is rare and the incidence is 1 per 500 000 births.

The living children with fetus in fetu were <18 months except in 11 cases: 20 months (1 case), 5 years (2 cases), 7 years (1 case), 9 years (2 cases), 10 years (1 case), 12 years (1 case) and >15 years (3 cases). Sex ratio was 47 boys to 35 girls (the sex of 5 other cases was undetermined). In 70% of cases, the chief complaint was an abdominal mass. As far as location was concerned, it was predominantly retroperitoneal in 80% of cases, but could be atypical including the skull as in 6 cases, the sacrum as in 6 cases, the scrotum as in 1 case, and the mouth as in 1 case.

In almost all cases (88%), there was a single parasitic fetus apart from 5 reports in which the number of the fetus ranged from 2 to 5. The size and weight of the fetus varied, from 4 cm to 24.5 cm, respectively, and from 1.2 g to 1.8 kg, respectively.

The organs present in the fetus in fetu were as follows: vertebral column, 91%; limbs, 82.5% (number varied from 1 to 4); central nervous system, 55.8%; gastrointestinal tract, 45%; vessels, 40%; and genitourinary tract, 26.5%.

The fetus was always anencephalic, the vertebral column and the limbs were present in the fetus in fetu in almost all cases (91% and 82.5%, respectively). The lower limbs were more developed than the upper limbs. Fetus in fetu was rarely found in the central nervous system, gastrointestinal tract, vessels, or the genitourinary tract; however, it was found in 55.8%, 45%, 40% and 26.5% of cases, respectively. It was rarer still to find fetus in fetu in the lungs, adrenal glands, pancreas, spleen, and lymph nodes. The heart was very rarely found in fetu.

The absence of cardiovascular system almost led to misdiagnosis of acardiac fetus in 1 case as the morphology is otherwise similar with findings of anencephaly, absent or rudimentary limbs, absent lungs, short intestine, and single umbilical artery. However, in the case of acardiac twin fetus, the karyotype is abnormal in at least 50% of cases including both trisomy or triploidy whereas the karyotype of fetus in fetu is normal and similar to his host's.

Eighty-nine per cent of fetus in fetu lesions were noted before 18 months of age. In reviewing literature most case reports up to 1980 showed the preoperative diagnosis of fetus in fetu was made only in 16.7% of cases because CT scan was not performed. Nowadays, CT scan has proven very helpful in suggesting the preoperative diagnosis. Magnetic resonance imaging was also used in 4 cases.

The differential radiologic diagnoses were teratoma and meconium pseudocyst. Indeed, these masses often had calcified components, so they were sometimes difficult to differentiate with fetus in fetu.

Treatment was complete resection of the mass except when it was adherent to the host's organs. Relapse was observed in 1 case (out of 87 cases) with recurrent right abdominal mass 4 months after surgery. This was a teratoma, which contained cystic, solid, and calcified components. It measured 13 cm in diameter and 5% of the tumor was yolk sac carcinoma. After surgical excision, the patient was treated with chemotherapy and recovered at 2 years of age.

**PS:**

Which venerable medical resource was the original source of this story?

While I did not spend enough time in the grocery check out line this month to definitively say if the venerable medical journal, the National Enquirer, also covered this story, I did ask our readers who regularly subscribe the National Enquirer to peruse their personal subscription to National Enquirer. 'Hearing few replies, I will say I first saw this story on Reuters, before I launched my literature review in Pediatrics, PubMed, Journal of Pediatric Surgery, etc….though the Yeti who ate Portland article sounded quite promising when I was standing in line to buy milk.

*Hoeffel CC, et al. Fetus in fetu: a case report and literature review. Pediatrics. 2000 Jun;105(6):1335-44.*

*Brand A et al Fetus in fetu--diagnostic criteria and differential diagnosis--a case report and literature review. J Pediatr Surg. 2004 Apr;39(4):616-8*

## Menopause Management

### Local estrogen just as effective for vaginal atrophy in postmenopausal women

Authors' conclusions: Creams, pessaries, tablets and the oestradiol vaginal ring appeared to be equally effective for the symptoms of vaginal atrophy. One trial found significant side effects following cream (conjugated equine oestrogen) administration when compared to tablets causing uterine bleeding, breast pain and perineal pain.

Another trial found significant endometrial overstimulation following use of the cream (conjugated equine oestrogen) when compared to the ring. As a treatment choice women appeared to favour the oestradiol-releasing vaginal ring for ease of use, comfort of product and overall satisfaction.

*Suckling J, Lethaby A, Kennedy R. Local oestrogen for vaginal atrophy in postmenopausal women. Cochrane Database of Systematic Reviews 2006, Issue 4. Art. No.: CD001500. DOI: 10.1002/14651858. CD001500.pub2.*

## Midwives Corner

**Lisa Allee, CNM, Chinle**

### The Blessed Perineum: PubMed

As I went hunting for an article to review for this month, I started playing around on PubMed and found an amazing array of articles about the blessed perineum. I encourage you to go looking when you have a spare moment at a computer. However, for the reality that you may only read this, here is a smattering of what I found:

- Leah Albers, et al, our esteemed sisters at UNM, did an awesome study (N=1211) of perineal techniques and found that it made no difference if the midwives used warm compresses, perineal massage, or hands off 'til crowning. But they did find that a sitting upright position and delivering the head between contractions did lower the risk of perineal trauma.
- Terry, et al, (N=198) found that nonsupine positions (defined as sitting, squatting, or kneeling/hands and knees) led to less perineal tearing, less vulvar edema, and less blood loss. They also found that the length of second stage was shorter in nonsupine positions, but this wasn't statistically significant.
- Soong and Barnes (N=3756) found that the semi-recumbent position was associated with more need for perineal suturing and all-fours with less, especially with first births and babies over 3500g. With regional anesthesia they again found the semi-recumbent position associated with more suturing and found that the lateral position caused less need for perineal suturing. The authors suggest that women be given the choice to find the most comfortable position to give birth in and that providers should inform women of the likelihood of perineal trauma in the preferred birth position.
- Shorten, et al, (N=2891) found that the lateral position was the best (66.6% intact perineums) and squatting the worst (42% intact), especially for primiparas. They also found a difference by accoucheur. Intact perineum was achieved by 56-61% of women attended by midwives and 31.9% of women attended by obstetricians, who also had a five times higher rate of episiotomies. (OK I'm bragging for us just a little…)
- Aikins and Feinland (N=1068) studied planned home births and found 69.6% of the women gave birth with an intact perineum! (Way to go home birth midwives and mothers!) In multiparous women, low socioeconomic status and higher parity were associated with intact perineum, whereas older age (>/= 40 yr), previous episiotomy, weight gain of over 40 pounds, prolonged second stage, and the use of oils or lubricants were associated with perineal trauma. Among primiparas, low socioeconomic status, kneeling or hands-and-knees position at delivery, and manual support of the perineum at delivery were associated with intact perineum, whereas perineal massage during delivery was associated with perineal trauma.

So, from the research it sounds like getting women up on their knees, hands and knees, sitting, or lying on their sides is probably a good idea and using the oils and massage for other parts of the body rather than the perineum may be good, too. Soong and Barnes' suggestion to talk with women about the relationship between birth positions and perineal trauma risk is a great suggestion, but starting the conversation during prenatal care or birth classes would be advisable rather than waiting until second stage.

Over the years I have noticed that my previous enthusiasm for perineal massage and stretching has waned greatly—now I rarely do more than a little pressure just inside the introitus to help the woman focus where to push, if she needs that. I only use warm compresses if I can tell the perineum is so taut that it needs any help I can give it to melt. Most of the time, though, I have noticed that if I can help the whole woman (and everyone else in the room, too) relax, then her perineum melts just fine (I figure that hormone relaxin is doing it's thing!) I also have noticed that I don't say much at all anymore about how she should push and I have noticed the absolute brilliance of women shine through—they push perfectly—letting up when I would have suggested it and pushing when I would have said push…..women know how to give birth in the best way for themselves and their babies—have faith.

## STD Corner

**Lori de Ravello, National IHS STD Program**

### First Indian Health Special Issue on Methamphetamine is now available online

The Indian Health Service Primary Care Provider's December 2006 issue is dedicated to the problems and solutions for Methamphetamine abuse in Indian Country. There are 2-3 more planned installments. If you have questions, or want to contribute contact Lori.deRavello@ihs.gov

### Key Trainers for Rural HIV Providers

The National Rural Health Association (NRHA) has developed several new documents on delivery of HIV care in rural settings. The first two documents listed below identify AIDS EDUCATION & TRAINING CENTERS (AETCs) as crucial resources for training providers on delivery of HIV care. NRHA's work was sponsored by the HHS Office of HIV/AIDS Policy, with input from HRSA/HAB and other Federal agencies.

"Provider Training Techniques" discusses barriers to training providers in rural areas and offers strategies on how to effectively train rural providers.

### Webcast Explores Partnerships between Community Health Centers and AIDS SERVICE ORGANIZATIONS (ASO)

A Web-Based In-Service Training, sponsored by the AETC Network, HRSA's Bureau of Primary Health Care (BPHC), and the National Association of Community Health Centers, explores opportunities and strategies for partnership across community health centers and other providers of HIV-related care. BPHC-supported health centers are a major component of America's health care safety net. Community health centers care for people regardless of their ability to pay and status of health insurance coverage. They provide primary and preventive health care, as well as services such as transportation and translation. Many community health centers also offer dental, mental health, and substance abuse care. The training provides an overview of the community health centers role in HIV care and treatment. It also discusses the capacity of health centers in HIV prevention and testing.

## Perinatology Picks

**George Gilson, MFM, ANMC**

### Planned cesarean delivery doubles rate of NICU and the risk for pulmonary disorders

Results: Compared with planned vaginal deliveries, planned cesarean delivery increased transfer rates to the neonatal intensive care unit from 5.2% to 9.8% (P < .001). The risk for pulmonary disorders (transient tachypnea of the newborn infant and respiratory distress syndrome) rose from 0.8% to 1.6% (P = .01). There were no significant differences in the risks for low Apgar score and neurologic symptoms. Conclusion A planned cesarean delivery doubled both the rate of transfer to the neonatal intensive care unit and the risk for pulmonary disorders, compared with a planned vaginal delivery.

*Kolas T, et al Planned cesarean versus planned vaginal delivery at term: comparison of newborn infant outcomes. Am J Obstet Gynecol. 2006 Dec;195(6):1538-43.*

### Fish Oil Supplements During Pregnancy Are Safe and Beneficial

Conclusion: Maternal fish oil supplementation during pregnancy is safe for the fetus and infant, and may have potentially beneficial effects on the child's eye and hand coordination. Further studies are needed to determine the significance of this finding.

*Dunstan JA, et al Cognitive assessment at 21/2 years following fish oil supplementation in pregnancy: a randomized controlled trial. Arch Dis Child Fetal Neonatal Ed. 2006 Dec 21*

## Oklahoma Perspective Greggory Woitte

**Hastings Indian Medical Center**

### What do patients recall from our counseling?

In scanning over the journals this month I ran across this article from the British Medical Journal

Quick synopsis was that providing mothers of babies in the neonatal ICU audiotaped conversations between the mothers and the neonatalogists helped improve the mother's recall of the diagnosis, treatment plan and, prognosis.

Although we certainly can not provide every patient with a tape recorded conversation, it is important to remember that despite us as providers giving a clear description and recommendations for treatment plans, there are times of stress that the patients do not understand our plan. Fetal demise and missed abortions are two prominent examples where it is probably better to inform the patient of your findings and schedule follow up appointment when the patient can have their social support system available and have had time to let the diagnosis register.

*Koh TH, et al Provision of taped conversations with neonatologists to mothers of babies in intensive care: randomised controlled trial. BMJ. 2007 Jan 6;334(7583):28*

## Alaska State Diabetes Program

**Barbara Stillwater**

### Diabetic Moms' Babies Have Impaired Sucking Reflexes

Immature sucking patterns are often seen in infants whose mothers developed diabetes during pregnancy and had to be treated with insulin, new research indicates.

On the other hand, babies of mothers with diabetes that was managed with a careful diet do not seem to have impaired sucking reflexes. The findings suggest that the nervous system of newborns of insulin-treated diabetic mothers is less mature than that of babies born to healthy mothers. CONCLUSION: Poorer sucking patterns were found among infants of insulin-managed mothers with diabetes. The present findings indicate some degree of neurologic immaturity during the early neonatal period.

*Bromiker R, et al Immature sucking patterns in infants of mothers with diabetes. J Pediatr. 2006 Nov;149(5):640-3*

### Routine HIV Screening Deemed Cost-Effective in Average-Risk Populations

CONCLUSIONS: Routine, rapid HIV testing is recommended for all adults except in settings where there is evidence that the prevalence of undiagnosed HIV infection is below 0.2%.

*Paltiel AD, et al Expanded HIV screening in the United States: effect on clinical outcomes, HIV transmission, and costs. Ann Intern Med. 2006 Dec 5;145(11):797-806*

## Breastfeeding

**Suzan Murphy, PIMC**

### Supporting employee breastfeeding is easier than it sounds

The Indian Health Services" Lactation Support Circular is part of a new national wave of improvements to the work environment.

**Establishing guidelines that support moms to work and breastfeed benefits many parts of the work environment.**

- When new moms can keep breastfeeding their infants, their children have half the clinic visits for diarrhea and otitis media and dramatically lower rates of hospitalizations rates for lung and gastrointestinal illnesses. (1,2,3)
- Breastfeeding moms need less leave for sick infants, reducing the burden to their co-workers for unexpected absences.
- Breastfed babies are cheaper to care for medically. Ball et al found significantly less health care/insurance dollars spent for illness with breastfed babies compared to formula fed babies.
- Aetna Life and Casualty, Hartford CT is a forerunner in supporting breastfeeding. They established a employee breastfeeding center in the 1996s because those families required employee sick leave and lower insurance claims. Their return on investment is $2.18 for every $1.00 spent. (5)
- Research on employee and management satisfaction indicates that supporting the choice to breastfed improves job satisfaction and productivity. (6)

**So what is the easy part about supporting employee breastfeeding ?**

- It is mom-driven. Once the work place adapts the Circular's suggestions that fit the local needs, it is almost a turn-key operation. Moms use the available resources to continue breastfeeding. Available resource will vary depending on the location – for example, in some work environments, this may mean more flexible schedules, in others it could mean using existing hospital electric breast pumps or encouraging employees to rent their own.

**Want some ideas/options about pumps, tips for employees to store their milk, ideas for breastfeeding room etiquette, policy and procedures, etc?**

- Watch for Tool Kit to be released soon.
- For more information, check the I.H.S. MCH Breastfeeding website sections, Going back to work or school and Staff Resources.

The Lactation Support Circular can be found at **www.ihs.gov/MedicalPrograms/MCH/M/bf.cfm**

*References online*

*(Low hanging fruit…, continued from page 1)*

**Methods**

Key elements that are currently available, but in some cases under utilized

- Exercise counseling and follow-up
- Diet counseling and follow-up

Additional element often not currently utilized

- Group care sessions/Support groups

**The Program**

There will be pre-assessment of dietary and exercise levels with standardized dietary and exercise evaluation instruments. If there is glucose intolerance then all patients will be counseled on monitoring blood sugar, diet, and exercise. The program will involve voluntary enrollment and approval by a prenatal healthcare provider. Candidates will be excluded if they have medical, obstetric, skeletal, or muscular disorders that would contraindicate physical exercise in pregnancy.

**Exercise Intervention**

Participants in the lifestyle intervention could receive instruction in group-session exercises and in home based exercise. In addition to counseling, patient education and equipment, patients will receive an appointment with an Exercise Physiologist. Blood glucose is tested at the start of each session. Each woman then exercises for 5-20 minutes under supervision culminating in post-exercise blood sugar tests. Painful movements are addressed by Physical Therapy. Blood glucose continues to be monitored at prenatal appointments.

Recommended activities include walking, swimming, mild aerobics, and strength exercise (such as lifting a 500 g food can in each hand). Group sessions will be held weekly. Floor aerobics, stretching, and strength exercises will be led by professional trainers for ~45 minutes/session. The participants will be instructed to use a pedometer, self monitor their heart rate, and record daily activities in a diary before and after the sessions. Exercise 3-5 times per week for 30 -45 minutes per session will be recommended for AI participants. The AI participants will also be given videos and DVD(s) for exercise instruction to assist in home based exercise. Daily diary information will be gathered, collected, and analyzed.

**The supervised exercise component will include:**

- Measurement of blood glucose pre- and post exercise
- Exercise on treadmill and/or recumbent cycle
- Monitored perceived exertion
- Monitored blood pressure and/or heart rate

**Dietary intervention**

After the initial dietary assessment, dieticians will provide a personalized diet plan for participants including recommended changes in food choice, frequency, portion size, and pattern of intake. Participants will be evaluated weekly for body weight, total energy intake, and macronutrient intake in interviews with dieticians.

**Follow-up and data collection**

The post-gestation visit will consist of an evaluation of the general health of the mothers and infants. Additional information on delivery mode, gestational weeks, newborn weight, and birth weight related obstetric interventions (induction, maneuvers, operative vaginal deliveries, or cesarean delivery) will be obtained from the patient charts after delivery. Diagnosis of gestational diabetes mellitus (GDM) or impaired glucose tolerance (one abnormal 3 hr OGTT result) will be made by both NDDG criteria. Excess weight gain will be assessed based on pre-pregnant body mass index (BMI).

*References Online*

## After Gestational Diabetes, Postpartum Glucose Goes Unchecked

**Only 45% women in the cohort underwent postpartum glucose testing, as recommended.**

CONCLUSION: Although persistent abnormal glucose tolerance was common in our cohort, less than half of the women were tested for it. Our data suggest that to increase rates of postpartum glucose testing, improved attendance at the postpartum visit with greater attention to testing and better continuity between antenatal and postpartum care are required.
LEVEL OF EVIDENCE: II-2.

*Russell MA, et al Rates of postpartum glucose testing after gestational diabetes mellitus. Obstet Gynecol. 2006 Dec;108(6):1456-62.*

*(Child Health Notes, continued from page 3)*

and eventual elimination of health disparities for this population.

**Additional Reading**

October 2006 issue of the IHS Child Health Notes:
**www.ihs.gov/MedicalPrograms/MCH/M/documents/ICHN1006.doc**

## Locums Tenens and Job Opportunities

If you have a short or long term opportunity in an IHS, Tribal or Urban facility that you'd like for us to publicize (i.e. AAP Web site or complimentary ad on Ped Jobs, the official AAP on-line job board), please forward the information to:
**indianhealth@aap.org**
or complete the on-line locum tenens form at:
**www.aap.org/nach/locumtenens.htm Infectious Disease Updates.**

## SAVE THE DATES

**22nd Annual Midwinter Indian Health OB/PEDS Conference**

- For providers caring for Native women and children
- January 26–26, 2007
- Telluride, CO
- Contact Alan Waxman at: awaxman@salud.unm.edu

**2nd International Meeting on Indigenous Child Health**

- April 20–22, 2007
- Montreal, Quebec, Canada
- Solutions, not Problems
- Joint meeting of IHS, AAP-CONACH, First Nations and several other stakeholders
- www.aap.org/nach/2InternationalMeeting.htm

**2007 Indian Health MCH and Women's Health National Conference**

- August 15–17, 2007
- Albuquerque, NM
- THE place to be for anyone involved in care of AI/AN women, children
- Internationally recognized speakers
- Save the dates. Details to follow
- Want a topic discussed? Contact: nmurphy@scf.cc

## *Abstract of the Month*

- Low hanging fruit—Less DM
  Promotion of healthy lifestyles during and after pregnancy

## *IHS Child Health Notes*

- Effect of needle size on immunogenicity and reactogenicity of vaccines in infants: randomized controlled trial.
- Infectious Disease Updates—2007 Childhood and Adolescent Immunization Schedules: Evolution or Intelligent Design?
- Recent literature—Health and health care for the 21st century: for all the people.

## *From your colleagues*

- Sunnah Kim, AAP—Do you plan to attend the 2nd International Meeting on Indigenous Child Health in Montreal…, an important deadline is approaching. . .
- Judy Thierry, HQE—Consumer Reports: Only 2 out of 12 infant car seats tested performed well in crash tests

## *Hot Topics*

- Obstetrics—Teamwork Training: Decision to incision times significantly improved
- Gynecology—Outreach workers should follow women with the most severe PAP abnormalities
- Chronic disease and Illness—Sleepiness and sleep deprivation associated with injury

## *Features*

- ACOG—Guidelines: Universal Screening for Down Syndrome
- Ask a Librarian—Diet of Pregnant American Indians: Different than Whites?
- Primary Care Discussion Forum—Adolescent with knee pain
- Medical Mystery Tour—A boy has been born in Chile with a fetus in his stomach
- Menopause Management—Local estrogen just as effective for vaginal atrophy in postmenopausal women
- Oklahoma Perspective—What do patients recall from our counseling?
- Perinatology Picks—Planned cesarean delivery doubles rate of NICU and the risk for pulmonary disorders
- Breastfeeding—Supporting employee breastfeeding is easier than it sounds

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