



## Social Change... Might Save More Lives Than Medical Advances

The basic notion that more lives would be saved by eliminating education-associated excess mortality than by medical advances is sufficiently robust to justify a change in policy priorities. In the past few decades, there have been heavy investments in technological advances intended to reduce morbidity and increase life expectancy. However, the pace of progress has been modest.

Minority groups have higher mortality rates than whites, and people of low socioeconomic status have higher mortality rates and poorer health status than the general population. This article explores the possibility that addressing social determinants of health might do more to save lives than the incremental advancements in the technology of care that consume the bulk of societal investments in health. The authors examined death rates among adults with inadequate education, a group known to have excess mortality rates.

The authors examined mortality data for 1996 through 2002 reported by the National Center for Health Statistics. They compared (1) the maximum number of deaths averted by the downward secular trend in mortality and

(2) the number of deaths that would have been averted had mortality rates among adults with less than a high-school education (LHS adults) been the same as those among adults with some college education.

The authors found that

- The downward secular trend in age-adjusted mortality rates in the United States saved an average of 25,456 lives per year during 1996 through 2002.
- Each year, an average of 195,619 deaths would have been averted if mortality rates among LHS adults had been the same as mortality rates among college-educated adults.
- Disparities in education-associated excess mortality were more acute among LHS adults

than among those with a high-school education (but no college diploma). Nonetheless, because high-school graduates outnumber LHS adults, a majority of the lives saved by eliminating education-associated excess mortality — 870,286 (63.6%) of the 1,369,335 averted deaths — would involve adults with a high-school diploma.

This data suggests that correcting the conditions that cause people with inadequate education to die in greater numbers will do far more to save lives than making incremental improvements in the technology of medical care.

*Wolf SH, Johnson RE, Phillips, RL, et al. 2007.*

*Giving everyone the health of the educated: An examination of whether social change would save more lives than medical advances. American Journal of Public Health. Am J Public Health. 2007 Apr;97(4):679-83.*

### OB/GYN CCC Editorial

The United States, the richest country in the world, currently ranks 27th in the health of its citizens<sup>1</sup>. Lagging behind not only most of the rich countries, but a few poor ones as well. Fifty years ago, the US was among the top five. What happened in the past five decades to cause this decline?

Stephen Bezruchka<sup>2</sup> in his lecture 'Womb to Tomb' explains that an increasing stratification between the rich and the poor plays a major role. Life spans and infant mortality rates depend very much on the hierarchal structure of a society. And new research shows that half of what influences our health as adults is largely determined before the age of five. What can we learn from other countries whose citizens live longer and healthier lives?

In Indian Country we should use our expertise as public health advocates to improve the whole of Indian 'health', not just direct health care.

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### THIS MONTH

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### 2007 Native Women's Health and MCH Conference

Interested in the latest program/clinical updates? You should attend the Native Women's Health and MCH Conference in Albuquerque, August 15-17, 2007. This meeting is triennial. It has internationally known speakers and benchmarks, e. g., Institute for Healthcare Improvement.

[nmurphy@scf.cc](mailto:nmurphy@scf.cc)

This is different from than the ACOG/IHS Postgraduate course, held every September in Denver to rave reviews. The Denver meeting is an excellent 4.5 day primer on basic obstetrics, gynecology, and neonatal care, plus a clinical update.

[YMalloy@acog.org](http://YMalloy@acog.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](mailto:nmurphy@scf.cc)

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

# Indian 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

*"I find that a great part of the information I have was acquired by looking up something and finding something else along the way."*

—Franklin P. Adams

## Articles of Interest

### Infant deaths associated with Cough and Cold Medications—2005, *MMWR* 2007;56:1–4

Cough and cold medications that contain decongestants, antihistamines and cough suppressants are often used to relieve symptoms of upper respiratory infection in children < 2 years of age. During the 2004–2005 winter season 1,519 children were treated in US emergency departments for adverse events relating to cough medications. In response, the CDC and the National Association of Medical Examiners investigated deaths in US infants < 12 months associated with the use of cough medications. 3 such infants were identified, all in which high levels of pseudoephedrine were found. None of the deaths were felt to be intentional and none of the infants had underlying cardiac anomalies.

### Editorial Comment

In children < 2 years of age systematic reviews of controlled trials of over the counter cough medications have concluded that such medications are no more effective than placebo in reducing acute cough. The American Academy of Pediatrics issued a policy statement in 1996 advising parents be informed of the lack of anti-tussive effect and the potential for adverse events of cough medication use in young children. In 2006 the American College of Chest Physicians released clinical practice guidelines that health providers refrain from using cough suppressants and over the counter medications for young children because of associated morbidity and mortality.

Pseudoephedrine has been removed from many cough medications since 2006 because of the federal Combat Methamphetamine Epidemic Act. This may lessen the risk of adverse events as pseudoephedrine was implicated in all 3 deaths reviewed from 2005.

In summary, cough medications should be avoided in children < 2 years. If used at all caregivers need to be aware of the correct dosage and risk for adverse effects with these medications.

serotype disease) and for possible emergence of disease caused by serotypes not contained in PCV7, so-called replacement disease with non-vaccine serotypes. Before PCV7 introduction, vaccine serotypes accounted for 68% and 74% of IPD in Navajo and Alaska Native children < 2 years old, respectively, thus we expected that overall IPD rates could only go down by this amount at most.

Since PCV7 was first used 9 years ago among Navajo and Apache, and 6 years ago among Alaska Natives, vaccine serotype IPD has virtually disappeared among those less than 2 years of age. However there are significant differences in these populations with respect to non-vaccine type IPD. Among Navajo and Apache children there has been no overall increase in the rate of non-vaccine serotype IPD through 2005. Some non-vaccine serotypes have become slightly more common and some have become less common for no change overall. Alaska's experience with non-vaccine serotype disease was similar during the first 3 years after PCV7 introduction; however, in the past 3 years (i.e. 2004–2006) IPD of non-vaccine serotypes has emerged among the Alaska Native children less than 2 years of age and is now more common than it was prior to the introduction of PCV7. Since 2004, the IPD rate caused by nonvaccine serotypes (especially 19A) has increased 140% compared with the prevaccine period, while there has been a 96% decrease in PCV7 serotype disease. Compared with the pre-vaccine era, the rate of IPD from all pneumococcal serotypes among Navajo children < 5 years of age has gone down by 56% in 2001–2005, while the reduction in overall IPD in 2004–2006 for Alaska Native children < 2 years of age is 39%.

Whether replacement disease will start to erode the impact of PCV in populations other than Alaska is unclear. The good news is that expanded-valence vaccines (13-valent and 10-valent) are in clinical trials and should be licensed in the US by 2010. These vaccines include the most common serotypes (especially 19A) which are causing IPD. Although replacement disease is limiting the effect of PCV7 in Alaska, we should remember that hundreds of cases of IPD have been prevented. The pneumococcal experience has similarities the Hib vaccine story. While the first Hib vaccine was licensed in 1985, it wasn't until 1990 that the current effective Hib vaccines were licensed, which have led to a 96% decline in Hib disease.

*Singleton et al. Invasive pneumococcal disease caused by nonvaccine serotypes among Alaska Native children with high levels of 7-valent pneumococcal conjugate vaccine coverage. JAMA 2007 (in press)*

*O'Brien et al. Replacement invasive pneumococcal disease 9 years after introduction of PCV among a population at high risk for IPD: the Navajo experience. In: Program and Abstracts of the 5th Annual International Symposium on Pneumococcus and Pneumococcal Disease; April 2006; Alice Springs, Australia. Abstract P04.17:189.*

## Infectious Disease Updates.

Rosalyn Singleton, MD, MPH

### Prevention of Childhood Pneumococcal Invasive Disease with Pneumococcal Conjugate Vaccine: Contrasting Experiences in Alaska Natives and Navajo/Apaches

With routine use of 7-valent pneumococcal conjugate vaccine (Prevnar®, PCV7) we have monitored invasive pneumococcal disease (IPD) in Alaska and Navajo/Apache children to look for the impact on prevention of disease from the 7-serotypes in the vaccine (vaccine

## Recent literature on American Indian/Alaskan Native Health

Doug Esposito, MD

### Meeting the needs of regional minority group

The authors describe a multifaceted program at the University of Washington School of Medicine (UWSOM) designed to increase the number of minority physicians in the U.S. This report specifically focuses on a description of the program and its successes with regard to Native Americans.

Currently, minority populations comprise slightly more than one quarter of the U.S. population. By 2010, minorities are projected to represent 32% and by 2050, nearly 50% of the total population. However, only 12% of the students enrolled in allopathic medical programs in the U.S. are minority and only 0.9% are AI/AN. This is important when considering the issue of health disparities since minority physicians are more likely than white physicians to work with underserved and underrepresented minority populations, to practice in poor communities, and to accept patients covered by Medicaid. Additionally, minority patients report greater satisfaction when their physicians are of the same ethnic or racial background.

In an effort to rectify this problem, several institutions have developed pipeline programs. These programs are designed to boost the number of practicing minority physicians through increased recruitment into the profession. In addition to pipeline programs, the UWSOM has developed other programs that focus on enhanced retention of students through to graduation and on career development of minority faculty members. The authors describe the specific programs as they function at the UWSOM, their structure, their successes, and the issues going forward.

UWSOM serves a five state region, including Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI). Approximately 24% of the AI/AN population in the US inhabit this region, representing 41 of the more than 550 federally recognized Tribes. As such, the UWSOM consid-

ers itself to be well positioned to address AI/AN physician under-representation both regionally and nationally.

In 1992, the Native American Center of Excellence (NACOE) was established. Together with the UWSOM, they have created several innovative and effective pipeline programs. Funded by HRSA, UDOC is a program that exposes high school juniors and seniors to college life and the health professions, and encourages applications from underrepresented minority students. Since 1994, 99 AI/AN students have completed the UDOC program. In the Summer Medical and Dental Education Program (SMDEP), disadvantaged college students are enrolled in a six-week course designed to enhance their competitiveness in gaining entrance to dental or medical school. This program, funded through the Robert Wood Johnson Foundation, has enrolled 358 AI/AN students since 1989. During the period, 54% of these students applied to medical school and 61% were accepted.

The Prematriculation Program focuses on medical student retention through to graduation by helping successfully transition students into the rigors of medical school. Funded by HRSA, students are enrolled into an intensive six-week summer course that condenses the first quarter histology course into just five weeks. Also offered are courses in study skills, test taking, and stress and time management. Since 1986, 42 Native American students have been enrolled, 100% of who passed the histology course, thereby reducing their course load during the first regular quarter of medical school. Several other programs, including a mentorship program and a program allowing students to expand their first or second years of medical school, have been developed that have had a positive impact on retention of AI/AN students and their rate of successful completion of their medical education.

The Indian Health Pathway (IHP) is an innovative curriculum that seeks to provide students with knowledge and experience that better prepares them to address the health needs of AI/AN

*(continued on page 15)*

## MCH Headlines

### Do you walk around your vehicle before getting in it? You should

Pedestrian child fatalities kids and cars website eliminating deaths due to backing out know your blind spots :

[www.kidsandcars.org/](http://www.kidsandcars.org/)

Links for child safety—videos  
"Don't Back Blind"

Know your vehicles blind spots—visual aid to instruct parents

- NBC today show – 7 minute spot story, consumer report 'walk through' on REAL blind spots and what automakers are designing as 'parking assists' i.e. video, sonar or radar AND making a habit of "WALKING AROUND THE VEHICLE".

- Don't Back Blind – PSA's

Short PSA videos compelling visual stories and informational

- "Driving blind"
- Making cars safer for children – windows, doors, etc.
- View Point — The Consumers Union Perspective—"Cars should be made safer for children." October 2003
- 'Back up systems' – pdf at this site

[www.consumerreports.org/cro/cars/safety-recalls/mind-that-blind-spot-1005/overview/index.htm](http://www.consumerreports.org/cro/cars/safety-recalls/mind-that-blind-spot-1005/overview/index.htm)

## From Your Colleagues Amy Groom, Albuquerque

### New HPV Brochures for Clinicians, CDC

CDC recently updated their HPV brochure for clinicians and posted four sets of counseling messages to assist providers in their HPV-related discussions with patients. The counseling messages address (1) information for parents about the HPV vaccine, (2) information for women about the Pap and HPV tests, (3) information for women who receive a positive HPV test result, and (4) information for patients receiving a genital warts diagnosis.

These materials are now available online as separate PDF files at the link below. They are also being printed as a package (brochure with counseling insert cards) for free online ordering. We will let you know as soon as they are available in print.

In the meantime, they hope you find these resources useful and ask that you please share them with other providers in the field.

As always, they welcome your feedback and thank you for your continued efforts in HPV education and the prevention of HPV-associated diseases.

[www.cdc.gov/std/hpv/hpv-clinicians-brochure.htm](http://www.cdc.gov/std/hpv/hpv-clinicians-brochure.htm)

# Hot Topics

## Obstetrics

### More stillbirths after previous cesarean delivery

**CONCLUSIONS:** Pregnancies in women following a pregnancy delivered by caesarean section are at an increased risk of stillbirth. In our study, the risk appears to be mainly concentrated in the subgroup of explained stillbirths. However, there are sufficient inconsistencies in the developing literature about stillbirth risk that further research is needed.

Gray R; Quigley MA; Hockley C; Kurinczuk JJ; Goldacre M; Brocklehurst P *Caesarean delivery and risk of stillbirth in subsequent pregnancy: a retrospective cohort study in an English population.* *BJOG.* 2007; 114(3):264-70

## Gynecology

### Young women with CIN: Any treatment increases the risk of preterm delivery—LEEP

**CONCLUSION:** Any treatment for CIN, including loop electrosurgical excision procedure, increases the risk of preterm delivery. It is important to emphasize this when treating young women with CIN. **LEVEL OF EVIDENCE:** II.

Jakobsson M *et al* *Preterm delivery after surgical treatment for cervical intraepithelial neoplasia.* *Obstet Gynecol.* 2007; 109(2 Pt 1):309-13

## Child Health

### Public Opinion vs. Science Concerning Sex Education

**RESULTS:** The study population included 1,096 participants with a mean age of 46.8 years. The race/ethnicity of the respondents was similar to other nationally representative surveys. The percentage of individuals supporting a combined abstinence and contraception educational program was 82 percent. Support for teaching of proper condom use was about 68 percent. An abstinence-only program was supported by 36 percent of the respondents and received the highest level of opposition. Most individuals in each political ideology group supported abstinence plus contraception programs, with the conservative group agreeing 70.0 percent of the time, the moderate group 86.4 percent, and the liberal group 91.6 percent.

**CONCLUSION:** Public opinion supports the combination of abstinence plus contraception education programs in schools. This support demonstrates that the scientific community and the public do not support the federal policy of abstinence-only programs.

Bleakley A, *et al.* *Public opinion on sex education in US schools.* *Arch Pediatr Adolesc Med* November 2006;160:1151-6.

## Chronic Illness

### New Guideline for Screening Mammography for Women 40 to 49 Years of Age

#### Recommendations encourage women to become part of the decision-making process

The American College of Physicians (ACP) released a new clinical practice guideline for screening mammography for women 40 to 49 years of age.

Breast cancer is one of the most common causes of death for women in their 40s in the United States. Individualized risk assessment plays an important role when making decisions about screening mammography, especially for women 49 years of age or younger. The purpose of this guideline is to present the available evidence for screening mammography in women 40 to 49 years of age and to increase clinicians' understanding of the benefits and risks of screening mammography.

Qaseem A *et al* *Screening mammography for women 40 to 49 years of age: a clinical practice guideline from the American College of Physicians.* *Ann Intern Med.* 2007 Apr 3;146(7):511-5

# Features

## ACOG, American College of Obstetricians and Gynecologists

### Premature Rupture of Membranes

Practice Bulletin, NUMBER 80, APRIL 2007

#### Summary of Recommendations and Conclusions

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

- For women with PROM at term, labor should be induced at the time of presentation, generally with oxytocin infusion, to reduce the risk chorioamni-onitis.
- Patients with PROM before 32 weeks of gestation should be cared for expectantly until 33 completed weeks of gestation if no maternal or fetal contraindications exist.
- A 48-hour course of intravenous ampicillin and erythromycin followed by 5 days of amoxicillin and erythromycin is recommended during expectant management of preterm PROM remote from term to prolong pregnancy and to reduce infectious and gestational age-dependent neonatal morbidity.
- All women with PROM and a viable fetus, including those known to be carriers of group B streptococci and those who give birth before carrier status can be delineated, should receive intrapartum chemo-prophylaxis to prevent vertical transmission of group B streptococci regardless of earlier treatments.
- A single course of antenatal corticosteroids should be administered to women with PROM before 32 weeks of gestation to reduce the risks of RDS, perinatal mortality, and other morbidities.

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

- Delivery is recommended when PROM occurs at or beyond 34 weeks of gestation.
- With PROM at 32–33 completed weeks of gestation, labor induction may be considered if fetal pulmonary maturity has been documented.
- Digital cervical examinations should be avoided in patients with PROM unless they are in active labor or imminent delivery is anticipated.

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

- A specific recommendation for or against tocolysis administration cannot be made.
- The efficacy of corticosteroid use at 32–33 completed weeks is unclear based on available evidence, but treatment may be beneficial particularly if pulmonary immatu-

rity is documented.

- For a woman with preterm PROM and a viable fetus, the safety of expectant management at home has not been established.

*Premature Rupture of Membranes. ACOG Practice Bulletin No. 80. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007;109:1007–19.*

## American Family Physician

### Prevention and Management of Postpartum Hemorrhage

Postpartum hemorrhage, the loss of more than 500 mL of blood after delivery, occurs in up to 18 percent of births and is the most common maternal morbidity in developed countries. Although risk factors and preventive strategies are clearly documented, not all cases are expected or avoidable. Uterine atony is responsible for most cases and can be managed with uterine massage in conjunction with oxytocin, prostaglandins, and ergot alkaloids. Retained placenta is a less common cause and requires examination of the placenta, exploration of the uterine cavity, and manual removal of retained tissue. Rarely, an invasive placenta causes postpartum hemorrhage and may require surgical management. Traumatic causes include lacerations, uterine rupture, and uterine inversion. Coagulopathies require clotting factor replacement for the identified deficiency. Early recognition, systematic evaluation and treatment, and prompt fluid resuscitation minimize the potentially serious outcomes associated with postpartum hemorrhage.

*Am Fam Physician 2007;75:875-82.*

[www.aafp.org/afp/20070315/875.html](http://www.aafp.org/afp/20070315/875.html)

## Ask a Librarian

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

### Quick Check for Drugs and Lactation

When you need to know if a drug you prescribe is safe for breastfeeding mothers, here is a new and easy to use database to check.

LactMed is a peer-reviewed database of drugs to which breastfeeding mothers may be exposed. LactMed is part of the National Library of Medicine's Toxicology Data Network (TOXNET) and contains over 450 drug records. Data include information on the levels of drugs in the breast milk and infant blood, and possible adverse effects on the nursing infant. There are suggested alternatives to those drugs when available. All data are derived from the scientific literature and fully referenced.

LactMed can be accessed using the Health Services Re-

search Library website at <http://hsrl.nihlibrary.nih.gov>

- Find PubMed in the left panel and click.
- Once you are in PubMed, click on TOXNET located on their left panel.
- Next, select LactMed from the list. In the search box, enter the drug you are interested in.

### Sample Record for Prozac (abbreviated for space)

#### DRUG LEVELS AND EFFECTS:

##### Summary of use during lactation:

The average amount of drug in breastmilk is higher with fluoxetine than with most other ssris and the active metabolite, norfluoxetine, is detectable in the serum of most breastfed infants during the first 2 months postpartum and a few thereafter....

##### Drug levels:

Fluoxetine is metabolized to norfluoxetine which has antidepressant activity that is considered to be equal to fluoxetine. In a pooled analysis of serum levels from published studies and unpublished case, the authors found that 20 mothers taking an averagedaily dosage of 28 mg (range 10 to 80 mg) had an average milk fluoxetine level of 76 mcg/l (range 23 to 189 mcg/l)....

##### Effects in breastfed infants:

Colic, decreased sleep, vomiting and watery stools occurred in a 6-day-old Breastfed infant probably caused by maternal fluoxetine....

##### Possible effects on lactation:

Fluoxetine has caused increased prolactin levels and galactorrhea in nonpregnant, nonnursing patients. The clinical relevance of these findings in nursing mothers is not known ....

##### AAP category

##### (comment from the American Academy of Pediatrics)

Effect on nursing infant is unknown but may be of concern.

##### Alternate drugs to consider:

Nortriptyline

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1. Weissman AM, Levy BT, Hartz AJ et al. Pooled analysis of antidepressant levels in lactating mothers, breast milk, and nursing infants. *Am J Psychiatry*. 2004;161:1066-9.

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2. Kristensen JH, Ilett KF, Hackett LP et al. Distribution and excretion of fluoxetine and norfluoxetine in human milk. *Br J Clin Pharmacol*. 1999;48:521-7

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LactMed can be accessed using the Health Services Research Library website at <http://hsrl.nihlibrary.nih.gov>

## Breastfeeding

Suzan Murphy, PIMC

### Breastfeeding—it's all about synergy

Research has found that adults who breastfed as infants appear to have less risk of type 2 diabetes. Now there is evidence that breastfeeding can also reduce maternal risk. In November 2005, JAMA published, Duration of Lactation and Incidence of Type 2 Diabetes, by Stuebe et al. The studies described in this article associated longer duration of breastfeeding with reduced incidence of type 2 diabetes for mothers.

Stuebe et al examined 2 Nurses's Health Studies (NHS and NHS II) to determine the impact of feeding choice upon subsequent maternal risk of diabetes. In 1976, NHS began by enrolling 121,700 women (30-55 years old) from 11 states. In 1989, NHS II began with 116, 671 women (25-42 years old) from 14 states. In each group, participants completed similar, detailed baseline questionnaires. Every 2 years, participants completed follow-up questionnaires about medical diagnosis and related topics like pregnancy history, breastfeeding history, diet, exercise, medication, and smoking.

Until 1997, the standards used to confirm reported diagnosis of type 2 diabetes were the National Diabetes Data Group criteria. After 1997, the standards were updated as the American Diabetes Association clinical practice recommendations were implemented.

In each study, the covariates were family history of diabetes, activity level, diet, multi-vitamin use, smoking history, and BMI at 18 years and for each biannual reporting period.

#### Results:

- In general, for each year of breastfeeding for women with births 15 years prior, there was a decrease in risk of diabetes of 15% (NHS) and 14% (NHS II).
- Both cohorts consistently indicated a reduction in the incidence of type 2 diabetes with each year of breastfeeding. Controlling for diet, exercise, smoking, and multi-vitamin use did not significantly change the association of breastfeeding reducing risk.
- Maternal BMI did not appear significantly altered by lactation, suggesting that the reduced maternal risk for diabetes is related to improved maternal glucose homeostasis.
- Exclusivity was associated with greater benefit. After controlling for age and parity, the NHS II cohort data showed that each year of lifetime exclusive breastfeeding was associated with a 37% type 2 diabetes risk reduction compared to 24% for each year of any breastfeeding.
- Longer continuous breastfeeding appeared to have greater risk reduction benefit than the same amount of lifetime breastfeeding shared by 2 or more children. To clarify, 1 year of continuous breastfeeding with one child was associated with greater risk reduction when compared to two children breastfed for 6 months each.
- In NHS II, higher BMI at age 18 was linked with shorter breastfeeding duration. In both cohorts, the duration of

breastfeeding was inversely related to family history of diabetes. Gestational diabetes did not appear to impact duration.

- For women with a history of gestational diabetes (NHS II only), the covariates of lactation history, present activity level and diet did not appear to effect diabetes risk. The consistent predictors of diabetes risk were BMI at age 18, current BMI and family history of diabetes.
- For women who did not breastfeed, the use of medication to suppress lactation was associated with increased risk of diabetes compared to those women who did not receive lactation suppression medication.

### Editorial Comment: Suzan Murphy

The questions and answers noted in my April CCC Corner Breastfeeding column are short phone call answers to sometimes complex issues.

[www.ihs.gov/MedicalPrograms/MCH/M/obgyn0407\\_Feat.cfm#breast](http://www.ihs.gov/MedicalPrograms/MCH/M/obgyn0407_Feat.cfm#breast)

**For more in-depth information, please consider the following:**

#### Regarding alcohol:

- When moms plan for a 12 oz of beer with pizza next weekend or a standard mixed drink or 5 oz of wine at the annual office party, the "2 hours for every drink" has clinical support.
- Often moms will choose to not drink alcohol rather than worry about timing feedings.
- Choosing to drink non-alcoholic beverages is the safest choice, for breastfeeding and driving home. Alcohol goes into the breast milk and until is metabolized out, safe levels have not been determined. Drinking extra water, more coffee, or pumping have not been shown to make the breast milk have less alcohol, like the rest of the body, the milk glands have to wait for the liver to do its job.
- Sometimes moms ask or call after drinking alcohol and need to know when it is safe to resume breastfeeding – it helps to "do the math" with moms – count the drinks, review portion size, multiple by 2 hours, –also consider when the last drink was.
- If the moms describe risky drinking patterns (defined by ACOG as more than 7 drinks per week or more than 3 drinks at a time) – consider using this opportunity to ask more questions, offer resources and information, and provide pathways for moms and families to healthier lives. ACOG link below
- Sometimes it is hard to find behaviors to praise with those who have risky or serious drinking issues.

For those moms who are seeking sobriety and choose to use formula to keep their baby safe, it can be a difficult and painful choice. It may help them to acknowledge the wisdom of their decision.

#### Regarding tobacco, chewed or smoked:

- Mom/families often call about using (legal) tobacco. They ask if they should stop breastfeeding if they smoke or chew.
- Exposure to the baby can be from the mom smoking or smoking/chewing and breastfeeding, from 2nd hand smoke, or 2nd hand to mother and then to the baby by way of environmental exposure or breast milk. The tobacco by products that appear in breast milk and infant's urine are cotinine and nicotine. Cotinine and nicotine are associated with SIDS and colic. There are no known safe levels. In one study, the urinary cotinine levels were higher babies breastfed by smoking moms than babies formula fed by smoking moms. (Becker AB et al 1999)
- However, study results vary. A recent study reported that babies breastfed by mothers who smoked had lower cotinine and nicotine urine levels than babies whose mothers smoked, but were formula fed. (Bajanowski T et al 2007)
- Regarding nicotine patches for smoking cessation: A recent study found use of nicotine patches to be safer option than continued smoking. When mothers were smoking almost 1 ppd, the nicotine and cotinine levels their breast milk were similar to those mothers using the 21-mg/day patch. But when the patch strength was tapered to 14-mg and 7-mg, the nicotine and cotinine concentrations decreased significantly. There was also no significant influence on the milk supply when the patch was used. (Ilett KF et al 2003)
- When a family does not use tobacco, it greatly reduces the risk of exposing new life to known problem agents. There is more to be learned. Currently, the American Academy of Pediatrics (AAP) states that the benefits of breastfeeding are greater than known risks of tobacco by products in breast milk.

References: *Online*

## Gynecology

### One-Visit Screening for Cervical Cancer May Be Feasible in Developing Countries

**CONCLUSION:** A single-visit approach using visual inspection of the cervix with acetic acid wash and cryotherapy proved to be safe, acceptable, and feasible in an urban African setting.

*Blumenthal PD, et al Cervical cancer prevention: safety, acceptability, and feasibility of a single-visit approach in Accra, Ghana. Am J Obstet Gynecol. 2007 Apr;196(4):407.e1-8; discussion 407.e8-9*

## Family Planning

### Oral Contraception Regimen and Breakthrough Bleeding

**RESULTS:** Women who had a heavier daily flow rate during the 21/7 cycle before the extended regimen were significantly more likely to have heavier flow and earlier breakthrough bleeding during the extended regimen. The average daily flow rating during the extended period was 0.21 (on the 0 to 4 scale), which improved over time. Participants who had breakthrough bleeding or spotting for seven consecutive days had a better response to a hormone-free interval than those randomized to the other treatment strategy.

**CONCLUSION:** The authors conclude that a 168-day extended oral contraception regimen resulted in an acceptable rate of breakthrough bleeding or spotting and had a high rate of continuation. The best strategy for managing bleeding during the extended cycle was a three-day hormone-free interval.

*Sulak PJ, et al. Prospective analysis of occurrence and management of breakthrough bleeding during an extended oral contraception regimen. Am J Obstet Gynecol October 2006;195:935-41.*

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## Featured Website

**David Gahn**

**IHS MCH Portal Web Site Content Coordinator**

### Must See Website:

#### Indian Health Service HIV-AIDS Program

CDR Scott Giberson, MPH, Pharm.D, PH-C has developed a website dedicated to the IHS HIV-AIDS Program. As most of us have seen, HIV/AIDS continues to pose a serious risk to American Indians and Alaskan Natives (AI/AN). This new, robust website contains a variety of useful information including:

- A complete description of the IHS HIV/AIDS Program
- Useful CDC Fact Sheets
- Details of the support IHS receives from the Minority AIDS Initiative
- Current HIV/AIDS research initiatives and results involving AI/AN
- Clinical information including HIV/AIDS CE/CME and Clinical Guidelines for testing and treatment (including post-exposure prophylaxis)
- ARV Corner – a description of the various antiretrovirals available and the clinical trials involving these drugs
- FAQs

While the website is not yet complete, the information included is useful and reliable. It will be a valuable resource for those of us involved in testing for and treating HIV.

[www.ihs.gov/medicalprograms/hiv aids/](http://www.ihs.gov/medicalprograms/hiv aids/)

## International Health Update

**Claire Wendland, Madison, WI**

### Ethics of medicine with economically vulnerable populations: Second in the series

Last month I wrote about current controversies in the recruitment of clinical trials subjects from impoverished international sites. This month's focus is another ethical controversy in international health: the global organ trade.

In most countries where organ transplantation is done, the list of patients waiting for kidney transplants is far longer than the number of donors. The shortage of organs, the desperation of those waiting for transplants, and the money to be made in transplantation combine to produce a situation in which ethical rules get broken, or at least bent, frequently. At least one government times prisoner executions to maximize organ harvest; rumors of organ stealing, though not substantiated, course through the Third World. In fact, though selling a kidney is almost universally illegal (it is legal in Iran, quasi-legal in India), and is widely condemned by medical societies and professional organizations, there is a well-documented black-market trade in kidneys sold by poor "donors" for cash. Some ethicists, health economists, and transplant surgeons argue that since this trade is happening anyway, it should be legalized and regulated – in part to protect would-be kidney sellers from surgery done in unsafe conditions. Others believe this is one ethical line that should not be crossed: that selling a kidney is substantially different than selling semen or plasma, and that the potential for exploitation of the poor by the rich is too great.

Tarif Bakdash, a Syrian bioethicist, and Nancy Scheper-Hughes, an American anthropologist (and director of an NGO that monitors the organ trade), debate the question of whether kidney sales should be made legal in a thought-provoking recent article in *PLoS Medicine*. Bakdash believes that poor people often sell their kidneys for altruistic reasons, as a last-ditch effort to provide basic needs for their families (and the social science literature backs him up on this point). It is arrogance, even hypocrisy for the wealthy to try to "protect" the poor from selling their organs, he argues: poor people "are always exploited from the day they are born, and in all avenues of life. The only thing of value left for some of them is their bodies." Scheper-Hughes believes that such sales make human life itself the ultimate commodity, dehumanizing everyone who comes in contact with the organ trade. She sees the polarization of the world that allows some people to be seen as sources of spare parts for others as "a medical, social, and moral tragedy of immense and not yet fully recognized proportions." Readers may be left with a disturbing conundrum: is it possible that a poor person's sale of a kidney may be an ethical act, while a rich person buying one is unethical?

*Bakdash T, Scheper-Hughes N. Is it ethical for patients with renal disease to purchase kidneys from the world's poor? PLoS Medicine 3(10):e349, October 2006 [www.plosmedicine.org](http://www.plosmedicine.org)*



## MCH Headlines

Judy Thierry HQE

### Do HIV Testing Rates Improve When Written Consent Is No Longer Required?

Written informed consent is a barrier to testing and to identifying infected individuals.

Secular trends in implementing routine HIV testing in healthcare settings could explain some of the testing increase seen in this study. However, the rapidity with which the testing rate increased after the policy change, and the increased number of patients identified, are impressive. This report lends further evidence that written informed consent is a barrier to testing and to identifying infected individuals. *AIDS Clinical Care*, Volume 4, Number 6

*Zetola NM et al. Association between rates of HIV testing and elimination of written consents in San Francisco. JAMA 2007 Mar 14; 297:1061-2*

### OB/GYN CCC Editorial

As you are aware, the IHS removed IHS Form 509 (which previously required separate and specific written informed consent for an HIV Test) in October 2006. There are ongoing and completed studies that support this type of policy action and implementation of more routinized testing – for one example, see below. However, also as noted above, states still have jurisdiction to mandate that HIV testing be accompanied by specific written consent for an HIV test. Many states are now revisiting this issue with CDC and are continually discussing potential changes in by-laws, policies, etc. Please contact your state if you have questions and do not rely on internet/online reports of ‘current’ state HIV testing requirements since they have potential to be out-of-date. Also, ask your state specifically if it is possible to acquire verbal consent and document in the chart vice separate written consent.

## Medical Mystery Tour

### Which Indian Health facilities lead the entire U.S. in national obstetric benchmarks?

And better yet, how can we translate that success to other Indian Health sites?

#### About Benchmarking

Benchmarking is a method for comparing your facilities care processes to those of the practices in the field that demonstrate the best outcomes. Identifying “best practices” through benchmarking allows all who participate in the process to improve and adapt the care they provide in order to obtain superior outcomes: high satisfaction, patient safety, effectiveness and efficiency.

#### One Example: ACNM

The purpose of the American College of Nurse-Midwives

(ACNM) Benchmarking Program is to provide a midwifery-specific mechanism to improve and maintain the superior quality of midwifery care provided to women and children by promoting member awareness of “best practices.” To facilitate this, members are encouraged to participate in benchmarking their practice against other midwifery practices in the country.

#### In the meantime

The answers will be discussed in the next edition of the CCC Corner. In the meantime, if your facility is not one of facilities I am going to announce next month, then you should attend the **2007 National Indian Women’s Health and MCH Conference**. The Conference will be in Albuquerque, NM August 15- 17, 2007.

The theme of the meeting is “Improve the System: Improve the Outcome” so it will explore how we can all work together to raise the AI/AN health status to the highest possible status.

There will be national benchmark organizations (Institute for Healthcare Improvement, American College of Nurse-Midwives, American College of Obstetricians and Gynecologists, Kaiser Family Foundation, etc...), internationally known speakers, and a rather extensive clinical Program.

The meeting is only every 3 years, so you and a team from your facility should try your best to attend. You can either use your local facility funds, because there is a program review function, or use your CME /CEU funds. In addition, limited scholarships are available.

### 2007 National Indian Women’s Health and MCH Conference

[www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07](http://www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07)

#### Resources

*Collins-Fulea C, et al Improving midwifery practice: the American College of Nurse-Midwives’ benchmarking project. J Midwifery Womens Health. 2005 Nov-Dec;50(6):461-71.*

#### ACNM Benchmarking Program

[www.acnm.org/education.cfm?id=842](http://www.acnm.org/education.cfm?id=842)

## STD Corner

### HIV/AIDS among AI/AN

#### Fact Sheet

#### CDC Fact sheet—updated from previous version.

[www.cdc.gov/hiv/resources/factsheets/aian.htm](http://www.cdc.gov/hiv/resources/factsheets/aian.htm)

HIV-related risk behaviors, perceptions of risk, HIV testing, and exposure to prevention messages and methods among urban American Indians and Alaska Natives

The goal of this study was to describe HIV risk behaviors, perceptions, testing, and prevention exposure among urban American Indians and Alaska Natives (AI/AN). Interviewers administered a questionnaire to participants recruited through anonymous peer-referral sampling. Chi-square tests and multiple logistic regression were used to compare HIV testing by perception of risk and risk behavior status. Of 218 respondents with seronegative or unknown HIV status, 156 (72%, 95% confidence interval [CI]: 66-78%) reported some HIV risk behavior: 57 (26%, 95% CI: 20-32%) high-risk behavior, and 99 (45%, 95% CI: 39-52%), potentially high-risk.

Addressing inaccurate perception of risk may be a key to improving uptake of HIV testing among high-risk urban AI/AN.

Lapidus JA, Bertolli J, McGowan K, Sullivan P HIV-related risk behaviors, perceptions of risk, HIV testing, and exposure to prevention messages and methods among urban American Indians and Alaska Natives. *AIDS Education & Prevention*. 18(6):546-59, 2006 Dec.

## Menopause Management

### Early Estrogen Therapy May Reduce Cardiovascular Risks

Secondary analyses of findings from the Women's Health Initiative (WHI) suggest that women who begin hormone therapy within 10 years of menopause may have less risk of coronary heart disease (CHD) due to hormone therapy than women farther from menopause.

The analysis of both estrogen and estrogen plus progestin data from the Women's Health Initiative (WHI) hormone trials shows a 24 percent reduction in risk for coronary heart disease events in women starting hormone therapy less than 10 years after menopause. The analysis also showed a 30 percent reduction in overall deaths among women aged 50 to 59 using hormone therapy. However, the new study also found that hormone therapy increased coronary heart disease events by 28 percent in older women, and that deaths increased by 14 percent in women aged 70 to 79. There was a slightly elevated risk of stroke at all ages studied.

Rossouw JE, et al Postmenopausal Hormone Therapy and Risk of Cardiovascular Disease by Age and Years Since Menopause *JAMA*. 2007 Apr 4;297(13):1465-77

## Midwives Corner

### Lisa Allee, CNM, Chinle

#### Ultrasound affects mice brains in negative ways: First, do no harm

I was flipping through the November/December issue of *Mothering* magazine and found a citation of an interesting research article on the effects of ultrasound on mice brains. It has scary findings for an intervention that is often considered routine and benign by providers and patients.

Eugenius, et al\*, found that when fetal mice are exposed to 30 minutes or more of ultrasound that "a small but statistically significant number of neurons fail to acquire their proper position and remain scattered within inappropriate cortical layers and/or in the subjacent white matter. The magnitude of dispersion of labeled neurons was variable but systematically increased with duration of exposure to USW." Yikes! This means that cells in the brain are not all in the right place. Okay, you're saying these are mice, not humans. In their discussion the authors discuss this—it might not apply to humans, but then again it might in a big way:

First it may not be applicable because "...the distance between the exposed cells and transducer in our experiments is shorter than in human. Furthermore, the duration of neuronal production

and the migratory phase of cortical neurons in the human fetus lasts 18 times longer than in mice (between 6 and 24 weeks of gestation, with the peak occurring between 11 and 15 weeks), compared with the duration of only 1 week (between E11 and E18) in the mouse. Thus, an exposure of 30 min represents a much smaller proportion of the time dedicated to development of the cerebral cortex in human than in mouse and, thus, could have a lesser overall effect, making human corticogenesis less vulnerable to USW" (ultrasound mwaves.)

But on the other hand, "There are also some reasons to think that the USW may have a similar or even greater impact on neuronal migration in the human fetal brain. First, migrating neurons in the human forebrain are only slightly larger than in the mouse, and, with the acoustic absorption provided by the tissue stand-off pad, the amount of energy absorbed within a comparable small volume of tissue during the USW exposure was in the same general range. Second, the migratory pathway in the convoluted human cerebrum is curvilinear and at least an order of magnitude longer. Thus, the number of neurons migrating along the same radial glial fascicle, particularly at the later stages of corticogenesis, is much larger and their routes are more complex, increasing the chance of a cell going astray from its proper migratory course. Third, the inside-to-outside settling pattern of isochronously generated neurons in primates is more precise than in rodents and thus, the tolerance for malpositioning may be smaller. In addition, different functional areas in the primate cortex are generated by different schedules so that exposure to USW may potentially affect selective cortical areas and different layers, depending on the time of exposure, potentially causing a variety of symptoms."

These effects of ultrasound are hard to study in humans because the testing to find ectopic cells in the brain cannot be done in humans according to the authors. There are some things that are known and are concerning: "even a small number of ectopic cells might, as a result of specific position and inappropriate connectivity, be a source of epileptic discharge or abnormal behavior. Although we have not as yet generated behavioral data, previous studies in rodents and primates indicate that prenatal exposure to USW may affect higher brain function of the offspring. Furthermore, there are numerous human neuropsychiatric disorders that are thought to be the result of misplacement of cells as a consequence of abnormal neuronal migration." The authors go on to say that their research supports

the recommendation by the FDA that medically non-indicated commercial ultrasound videos should not be done.

I find this research concerning for more than just ultrasound videos offered in malls. I wonder about repeated ultrasounds for medical indications, dating ultrasounds during the most vulnerable periods of cell migration in the brain, antenatal testing that has never been shown to improve outcomes, and, the biggest of all, continuous fetal monitoring during labor for hours on end. Remember: the ultrasound to create pictures is pulsed—only 1/100th of the time is actual exposure to ultrasound—whereas the fetal monitor on L & D is a continuous deluge of ultrasound—it is not pulsed, the whole time is exposure to ultrasound and the effects these researchers found increased with time. Yes, most monitoring is after the time of migration of neurons cited above, but we do know that the human brain continues to develop in a big way for the rest of intrauterine life and a long time after, so there may be other effects on the brain cells. Anyone heard tell of increased rates of autism, depression, bipolar disease, behavioral problems, etc. in the current crop of young 'ens?? Food for thought.....

#### For more on the indications and safety of ultrasound

- Physics and safety of diagnostic ultrasound in obstetrics and gynecology, UpToDate
- Indications for diagnostic obstetrical ultrasound examination, UpToDate

\*Eugenius, et al citation available from

Lisa.Alee@ihs.gov

## Nurses Corner

Sandra Haldane, HQE

### Two summer programs for high school students

**July 21-28, 2007**—The Cornell Association for the Technological Advancement of Learned Youth in Science and Technology (CATALYST) program is a one-week summer residential program for rising high school sophomores, juniors, and seniors from underrepresented backgrounds.

**July 21-28, 2007**—The CURIE Academy is a one-week residential program for high school girls who excel in math and science and want to learn more about careers in engineering.

[www.engineering.cornell.edu/diversity/office-diversity-programs/summer-programs/highschool-programs/catalyst/index.cfm](http://www.engineering.cornell.edu/diversity/office-diversity-programs/summer-programs/highschool-programs/catalyst/index.cfm)

## Perinatology Picks George Gilson, MFM, ANMC

### Preconception counseling for women with diabetes and hypertension: What should the primary care provider do about their prescription medications?

#### Case #1

AD is a 25 y/o nullipara with newly diagnosed type 2 diabetes mellitus and moderate essential hypertension. She also has been trying to become pregnant. Her blood sugars have been fairly well controlled with diet and exercise, but her blood pressure is persistently greater than 140/90. Because of her dual problem, would it be appropriate to start an angiotensin converting enzyme (ACE) inhibitor? Could we then discontinue it when she becomes pregnant? Or would it be safer to start another medication that would be safer in pregnancy since she is not using any form of contraception?

#### Case #2

RYC is a 34 y/o G3P3 with known type 2 diabetes mellitus. Her blood sugars have been fairly well controlled with diet and metformin. She has recently remarried and is trying to conceive. On her most recent evaluation she is found to have the new onset of significant, but not nephrotic syndrome range, proteinuria (1.5 g/24 h). Would it be wise to start her on an ACE inhibitor, or an angiotensin receptor blocker (ARB), at this time?

#### Case #3

IN is a 22 y/o nullipara who hyperlipidemia. There is a strong family history of coronary artery disease, and her cholesterol has not been able to be brought below 250 mg/dL despite diet and exercise. Her triglycerides and LDL are also elevated, but her HDL is normal. Her BMI is 34 kg/M<sup>2</sup>. She desires to become pregnant within the year and does not wish to use any method of contraception. Would it be appropriate to start her on an HMG-CoA reductase inhibitor (a “statin”) at this time?

#### Discussion

The women in the above case vignettes are commonly encountered in primary care practice, and present somewhat of a management dilemma. Good guidelines for the use of common primary care therapies in women of child-bearing age with diabetes, hypertension, and hyperlipidemia, are not readily available. Nevertheless, such problems are being more commonly encountered as the “obesity epidemic” progresses, especially in our population. Is the risk of adverse cardiovascular events the same

## Obstetrics

### Pregnant Moms' Weight Affects Toddlers

**RESULTS:** Greater weight gain was associated with higher child body mass index z-score (0.13 units per 5 kg [95% CI, 0.08, 0.19]), sum of subscapular and triceps skinfold thicknesses (0.26 mm [95% CI, 0.02, 0.51]), and systolic blood pressure (0.60 mm Hg [95% CI, 0.06, 1.13]). Compared with inadequate weight gain (0.17 units [95% CI, 0.01, 0.33]), women with adequate or excessive weight gain had children with higher body mass index z-scores (0.47 [95% CI, 0.37, 0.57] and 0.52 [95% CI, 0.44, 0.61], respectively) and risk of overweight (odds ratios, 3.77 [95% CI: 1.38, 10.27] and 4.35 [95% CI: 1.69, 11.24]). **CONCLUSION:** New recommendations for gestational weight gain may be required in this era of epidemic obesity.

Oken E, et al Gestational weight gain and child adiposity at age 3 years. *Am J Obstet Gynecol.* 2007 Apr;196(4):322.e1-8

## Menopause Management

### Emergence of a range of nonhormonal treatments for vasomotor symptoms

**CONCLUSION:** The availability of centrally active therapies for menopausal vasomotor symptoms with risks and benefits clearly defined by results from well-designed clinical trials has the potential to allay safety concerns that are associated with the treatment of these common symptoms.

*Rapkin AJ Vasomotor symptoms in menopause: physiologic condition and central nervous system approaches to treatment. Am J Obstet Gynecol. 2007; 196(2):97-106*

in these young women as it is in their over 50 year old counterparts? What is the risk of teratogenicity if they should become pregnant on the various medicines we prescribe?

The angiotensin converting enzyme inhibitors (ACE) such as lisinopril, enalapril, etc., are contraindicated in pregnancy. Because they relax the glomerular afferent arteriole, they enhance glomerular blood flow and thus reduce the incidence and severity of proteinuria and hypertension in diabetic and hypertensive patients, a desirable effect. However, in the fetus, they can create a situation of such persistent glomerular high flow that destruction of the delicate fetal glomerular capillary network may result. This can then result in fetal renal failure and oligohydramnios. This may be seen during the latter half of pregnancy, or in the newborn period. While this situation may be reversible if the ACE is stopped, that cannot be assured. These same effects have unfortunately also been described with the angiotensin receptor blockers (ARB), such as candesartan. More recent data have now demonstrated that ACE are also first trimester teratogens, and are associated with congenital defects of the cardiovascular (atrial and ventricular septal defects) and central nervous system and skeleton (spina bifida, microcephaly, calvarial hypoplasia). Their use in the peri-conceptional period is therefore no longer recommended. ACE also appear in small quantities in breast milk. While I could not find any evidence of adverse neonatal effects in breastfed infants whose mothers were on ACE, I could likewise not find any pediatricians who were comfortable with that situation....

### OB/GYN CCC Editorial

#### Is the glass ½ empty or ½ full?

The fact that so many of our AI/AN patients have diabetes and/or hypertension at younger ages is one of our greatest challenges. On the other hand, their diabetes and hypertension are well controlled enough that they can successfully pursue pregnancy. The above discussion is a helpful first step. We will develop this discussion further, so keep your eyes peeled for an upcoming Perinatology Corner module on this topic.

In the meantime, I think you will find the link below helpful as it combines risks and benefits beginning with rare events such as Rhabdomyolysis, moving on to myalgia, and other systems effects and the overall benefits to statin's use as indicated in risk reduction of CVD which is the number one killer of AIAN women.

*References: Online*

## STD Corner

Lori de Ravello, National IHS STD Program

### HIV/AIDS protective factors among urban American Indian youths

This research examined how family and individual factors influence 3 HIV/AIDS risk behaviors: having more than 1 sexual partner in the last 3 months, substance use at last sexual intercourse, and condom non-use at last sexual intercourse. The sample includes 89 sexually active American Indian adolescents living in a large Southwestern U.S. city. Logistic regression results revealed that family communication acts as a protective factor against HIV risk through a lower reported substance use during last sexual intercourse, but it did not appear to affect the number of multiple recent sex partners. Family and personal involvement in American Indian cultural activities, both low on average in this urban sample, had no effect on outcomes.

This study advances knowledge on sexual health risk and protective factors among American Indian adolescents, an understudied group, and provides implications for prevention intervention with American Indian youths and their families

*Marsiglia FF, Nieri T, Stiffman AR HIV/AIDS protective factors among urban American Indian youths. Journal of Health Care for the Poor & Underserved. 17(4):745-58. 2006 Nov.*



## NAVAJO NEWS

### BTL: Nearly one half of women under 25 years old request information on reversal

It seems that hardly a month goes by without a woman coming in to our clinic asking about how she can “get her tubes untied”. This continues to happen, despite the intensive counseling that we conduct prior to the procedure. Thus I was intrigued by a recent article in the journal *Contraception*, “Consent to Sterilization section of the Medicaid-Title XIX form: is it understandable?” The authors assessed the readability and comprehension characteristics of the current “Consent to Sterilization” form using a tool specifically designed for informed consent documents (Readability and Processability Form or RPF). The current sterilization consent scored in the poor range when assessed with this tool. A Fry reading level assessment corresponded to ninth grade level. The authors also presented a proposal for a revised form, which scored in the excellent range with an RPF assessment and had a Fry reading level of sixth grade.

Of course informed consent for sterilization doesn't involve solely the use of the federal permit. A second operative consent, specific to the planned procedure, is also required. And true informed consent isn't just about signing papers; it must involve a careful and thorough discussion of the planned procedure, the alternatives, and the risk of sterilization failure and the possibility of regret. The permanence of the procedure is emphasized throughout this process. Yet life is unpredictable and a woman's circumstances may change. A woman who is completely sure that she wishes to proceed may return later, asking about sterilization reversal and sharing a compelling story of previous domestic violence or depression or of a new marriage.

Information about the risk of regret is available from the U.S. Collaborative Review of Sterilization (CREST) study, which followed 11,232 women aged 18-44 who had sterilizations between 1978 and 1987 for up to 14 years. One analysis, by Hillis, et al., clearly showed that the risk of regret is highest in the youngest women. As part of the study, follow-up visits were conducted over 14 years and participants were asked at each visit “Do you still think tubal sterilization as a permanent method of birth control was a good choice for you?” and found that, for women under 30 at the time of sterilization, the risk of regret was 20.3%. For women 30 or older at the time of sterilization, the risk of regret was 5.9%. Another study of the same population assessed the likelihood of regret by analyzing who requested information about reversal. In this analysis, Schmidt, et al. again found the highest risk of regret amongst the youngest women. When analyzed by age, 40.4% of women who were under 25 at the time of sterilization requested information about reversal. This decreased with age

as follows: 15.6% for women ages 25-30, 8.2% for women ages 31-35, and 4.4% for women over 35 years old. Non-white race, < 12 years of formal education, unmarried status, a history of induced abortion, and postpartum sterilization, especially after vaginal delivery, were all associated with a higher incidence of regret, as was sterilization performed within 7 years of the birth of the youngest child. Interestingly, the number of living children did not correlate with the risk of regret. In some cases the probability of regret was cumulative, for example women who were both under 25 and unmarried at the time of sterilization had a 49% risk of regret. Ultimately 1.1% of the study population obtained a tubal reversal procedure; this was 8-fold more likely for women who were sterilized at less than 30 then over 30 years of age.

One could view this information from the opposite perspective; 94% of women over 30 and almost 80% of women under 30 did not regret their decision to be sterilized. Even amongst the youngest age cohort, almost 60% of women under 25 did not express regret about sterilization during up to 14 years of follow-up. Yet the fact that almost half of women sterilized at a young age subsequently regretted the procedure is compelling. Sterilization is one of many contraceptive options that we can make available to our patients but it deserves a special status because of its permanence. The same level of protection against unplanned pregnancy can be achieved with an IUD which both avoids the morbidity and risks of surgery and is completely reversible.

I am encouraged by Zite and her colleagues efforts in reassessing the federal sterilization consent form. Although we are unlikely to see new forms anytime soon, this serves as another reminder of the need to both simultaneously respect our patients' autonomy in making contraceptive and sterilization decisions for themselves and their families and to equip them with proper tools to make these decisions. These tools include both well-written and understandable consent forms and extensive pre-procedure education that includes thorough discussions of the alternatives to sterilization, the permanence of the procedure, and the possibility of regret.

*Zite, NB, Philipson, SJ, Wallace, LS, “Consent to Sterilization section of the Medicaid-Title XIX form: is it understandable?”, Contraception, 2007(75):256-260.*

*Hillis, SD, et al., “Poststerilization regret: Findings from the United States Collaborative Review of Sterilization”, Obstetrics and Gynecology, 1999(93)889-95.*

*Schmidt, JE, et al., “Requesting information about and obtaining reversal after tubal sterilization: findings from the U.S. Collaborative Review of Sterilization”, Fertility and Sterilization, 2000(74)892-8.*

### If you work at a rural facility...

Last month I wrote about new recommendations from ACOG for first trimester genetic testing and the challenges that rural facilities face in trying to comply with these recommendations. I had hoped to follow-up this month with some possible solutions to this dilemma but this issue is proving to pose quite a challenge. Again, if you work at a rural facility and have found a way to offer first

trimester screening, or combined first/second trimester screening, please share! Also, if you have created or found a low-literacy patient education sheet for this testing, please let me know.

My e-mail address is: [jean.howe@ihs.gov](mailto:jean.howe@ihs.gov).

## Breastfeeding Follow-up from Judy Thierry on Alcohol and Breast Feeding

I wanted to share key points from the following excerpts on a NOMOGRAM from Alcohol and Breast Feeding: Calculation of Time to Zero Level in Milk. *Biol Neonate* 2001;80:219-222

**Objective:** To create a nomogram that will guide lactating women who drink socially on how to avoid neonatal exposure to ethanol through breast milk. **Design:** Pharmacokinetic modeling of ethanol elimination from milk based on reference values. **Calculation of the time to zero alcohol in breast milk for a range of doses and body weights.** **Results:** The elimination of alcohol and time-to-zero levels in breast milk are described in a nomogram as a function of the amount of alcohol consumed and the body weight of the woman. **Conclusions:** Careful planning of a breast feeding schedule, by storing milk before drinking and/or waiting for complete alcohol elimination from the breast milk, can ensure women that their babies are not exposed to any alcohol.

Per the Nomogram:

- For a 155 pound or 70.3 Kg women: 1 drink takes 2 hr 12 min to reach ZERO level
- For a 110 pound or 49.9 Kg women: 2 drinks takes 5 hr 12 min to reach Zero level
- For a 210 pound or 95.3 Kg women: 1 drink takes 1 hr 51 min to reach Zero level

## Alaska State Diabetes Program Barbara Stillwater

### New recommendations for gestational weight gain may be required in obesity epidemic

As childhood obesity is increasing in prevalence and effective treatment remains elusive, preventing childhood obesity remains critical. The Institute of Medicine might need to re-evaluate its recommendations for weight gain in (pregnancy), considering not only birth outcomes but also risk of obesity for both mother and child. Pregnant women might aim for the lower end of their recommended weight gain **RESULTS:** Greater weight gain was associated with higher child body mass index z-score (0.13 units per 5 kg [95% CI, 0.08, 0.19]), sum of subscapular and triceps skinfold thicknesses (0.26 mm [95% CI, 0.02, 0.51]), and systolic blood pressure (0.60 mm Hg [95% CI, 0.06, 1.13]). Compared with inadequate weight gain (0.17 units [95% CI, 0.01, 0.33]), women with adequate or excessive weight gain had children with higher body mass index z-scores (0.47 [95% CI, 0.37, 0.57] and 0.52 [95% CI, 0.44, 0.61], respectively) and risk of overweight (odds ratios, 3.77 [95% CI: 1.38, 10.27] and 4.35 [95% CI: 1.69, 11.24]).

**CONCLUSION:** New recommendations for gestational weight gain may be required in this era of epidemic obesity.

*Oken E, et al Gestational weight gain and child adiposity at age 3 years. Am J Obstet Gynecol. 2007 Apr;196(4):322.e1-8*

## Women's Health Headlines, Carolyn Aoyama How to Best Get the HPV Vaccine Information Sheets signed?

### Question:

Is it OK for us to send consent forms home to parents, with a letter and Vaccine Information Sheet (VIS) sheet for Gardasil, and have them returned to me at the school and immunize them at the school? Or do I need to have the parent present to sign consent for the immunization. Is there an IHS "rule"? When I ask locally all I get is opinion and they differ.

### Answer:

How should we distribute Vaccine Information Sheet (VIS's) when the parent or legal representative of a minor is not present at the time the vaccination is given, for example during a school-based adolescent vaccination program?

### CDC's legal advisors have proposed two alternatives for this situation:

1. Consent Prior to Administration of Each Dose of a Series. With this alternative the VIS must be mailed or sent home with the student around the time of administration of each dose. Only those children for whom a signed consent is returned may be vaccinated. The program must place the signed consent in the patient's medical record.
2. Single Signature for Series. This alternative is permissible only in those States where a single consent to an entire vaccination series is allowed under State law and in those schools where such a policy would be acceptable. The first dose of vaccine may be administered only after the parent or legal representative receives a copy of the VIS and signs and returns a statement that a) acknowledges receipt of the VIS and provides permission for their child to be vaccinated with the complete series of the vaccine (if possible, list the approximate dates of future doses); and b) acknowledges their acceptance of the following process regarding administration of additional doses:
  - prior to administration of each dose following the initial dose, a copy of the VIS will be mailed to the parent (or legal representative) who signs the original consent at the address they provide on this statement, or the VIS will be sent home with the student; and
  - the vaccine information statements for the additional doses will be accompanied by a statement notifying the parent that, based on their earlier permission, the next dose will be administered to their child (state the date), unless the parent returns a portion of this statement by mail to an address provided, to arrive prior to the intended vaccination date, in which the parent withdraws permission for the child to receive the remaining doses.

The program must maintain the original consent signature and any additional dose veto statements in the patient's medical record. A record must be kept of the dates prior to additional doses that the VIS was mailed, or sent home with the adolescent. [www.cdc.gov/nip/publications/VIS/vis-facts.htm#Anc6](http://www.cdc.gov/nip/publications/VIS/vis-facts.htm#Anc6)

*(Social Change..., continued from page 1)*

1– Life expectancy in the US has declined further since the above lecture and now lags behind Cuba.

2– Stephen Bezruchka teaches at the University of Washington and works as an emergency room physician in Seattle. His particular areas of research are population health and societal hierarchy and its application to health. He is author of numerous articles and essays. His most recent contribution is to *Sickness and Wealth*, a collection of essays on the effects of global corporatization on health.

*From Womb to Tomb*, Stephen Bezruchka M.D., University of Washington

<http://www.alternativeradio.org/programs/BEZS002.shtml>

*Deaths: Preliminary Data for 2004*, National Center for Health Statistics

[www.cdc.gov/nchs/products/pubs/pubd/hestats/prelimdeaths04/preliminarydeaths04.htm](http://www.cdc.gov/nchs/products/pubs/pubd/hestats/prelimdeaths04/preliminarydeaths04.htm)

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

communities. Formal courses and preceptorships relevant to Indian health occur throughout the four-year medical education for students enrolled in the IHP. All UWSOM students are required to conduct a research project in order to graduate. However, IHP students must conduct a scholarly project investigating an issue in Indian health. Since its inception in 1992, 39 Indian Health research projects have been supported by the NACOE.

Finally, the UWSOM and the NACOE have created the NACOE Faculty Development Fellowship in an effort to address the tremendous under-representation of AI/AN faculty in medical education. In 1992, there were 114,087 total faculty members in US allopathic medical schools. Of these, 71.9% were white, 12.6% were Asian, and only 7.2% were Hispanic, black, AI/AN, or Native Hawaiian/other Pacific Islander. Only 117 (or 0.1%) of this total were AI/AN! Since the Fellowship was created in 1993, five AI/AN faculty members have completed the program. Four of the five are currently medical school faculty members.

**Here are a few other interesting statistics reported by the authors:**

1. 102 of the 477 (21%) AI/AN students who participated in the UWSOM pipeline programs (UDOC and SMDEP) between 1989 and 2005 entered medical school.
2. The UWSOM has graduated 50 AI/AN medical students between 1993 and 2005.
3. Thirty Nine percent of the UWSOM medical school graduates chose primary care specialties, a statistic which is in accordance with the national statistic that minority students are 2-3 times more likely to choose primary care specialties than whites.
4. Among 35 UWSOM AI/AN graduates in practice as of 2005, 20 work in the IHS, 1 works with a tribal program, 1 is in private practice, 10 practice in urban community health centers, and 3 are in academic medicine.

**Editorial Comment**

A diverse physician workforce is critical to the overall effectiveness and quality of the US health care system. The positive impact of having Native American medical providers working in Native communities is critically important and is borne out in the literature. Enhanced patient satisfaction, improved quality of care, and heightened cultural appropriateness of care occurs as the number of AI/AN physicians and other health professionals practicing in Native communities rises. Unfortunately, the very survival of programs designed to expand the Native American health care workforce such as those described in the above report is in jeopardy. Significant funding issues loom on the horizon as health care costs continue to rise and competition for ever scarcer health care dollars intensifies. Typically, as financial pressures come to bear, programs that specifically benefit minority groups tend to experience the first and deepest cuts. It will be difficult to protect these valuable and necessary educational supports that are so critical to the fight for better health for our Native children and their families. Their loss will be tragic, indeed.

*Acosta D, Olsen P. Meeting the needs of regional minority groups: the University of Washington's programs to increase the American Indian and Alaskan Native physician workforce. Acad Med. 2006;81(10):863-70.*

**Announcements from the AAP Indian Health Special Interest Group****Sunnah Kim, MS****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](mailto:indianhealth@aap.org) or complete the on-line locum tenens form at [www.aap.org/nach/locumtenens.htm](http://www.aap.org/nach/locumtenens.htm)

## SAVE THE DATES

### Training Course in MCH Epidemiology

- June 10–15, 2007
  - Albuquerque, New Mexico
  - Sponsored by HRSA/MCHB and CDC
- [www.crpcorp.info/mchtraining2007.htm](http://www.crpcorp.info/mchtraining2007.htm)

### Weaving it all together:

#### 2007 Behavioral Health Conference

- June 11–14, 2007
  - Albuquerque, New Mexico
  - SAMHSA/IHS
- [www.kauffmaninc.com/2007bhconference/](http://www.kauffmaninc.com/2007bhconference/)

### Native Women's Health and MCH Conference

- August 15–17, 2007
  - Albuquerque, New Mexico
  - DRAFT Brochure
- [www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07](http://www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#Aug07)
- Contact [nmurphy@scf.cc](mailto:nmurphy@scf.cc)

### IHS/ACOG Obstetric, Neonatal, and Gynecologic Care Course

- September 16 – 20, 2007
- Denver, Colorado
- Contact [YMalloy@acog.org](mailto:YMalloy@acog.org) or call 202-863-2580

## Abstract of the Month

- Social Change Might Save More Lives Than Medical Advances

## Indian Child Health Notes

- Infant deaths associated with Cough and Cold Medications
- Prevention of Childhood Pneumococcal Invasive Disease with Pneumococcal Conjugate Vaccine
- Recent literature on American Indian/Alaskan Native Health
- Meeting the needs of regional minority groups: the University of Washington's programs to increase the American Indian and Alaskan Native physician workforce.

## From Your Colleagues

- Amy Groom, Albuquerque—New HPV Brochures for Clinicians, CDC

## Hot Topics

- Obstetrics—More stillbirths after previous cesarean delivery
- Gynecology—Young women with CIN
- Child Health—Public Opinion vs. Science Concerning Sex Education
- Chronic Illness—New Guideline for Screening Mammography for Women 40 to 49

## Features

- ACOG—Premature Rupture of Membranes Practice Bulletin
- Breastfeeding—it's all about synergy
- Family Planning—Oral Contraception Regimen and Breakthrough Bleeding
- International Health Update—Ethics of medicine with economically vulnerable populations: Second in the series
- MCH Headlines—Do HIV Testing Rates Improve When Written Consent Is No Longer Required?
- Medical Mystery Tour—Which Indian Health facilities lead the entire U.S. in national obstetric benchmarks?
- Navajo News—BTL Regret: Nearly half of young women request reversal information
- Midwives Corner—Ultrasound affects mice brains in negative ways: First, do no harm

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