



Estimation of HIV incidence in the United States

Context: Incidence of human immunodeficiency virus (HIV) in the United States has not been directly measured. New assays that differentiate recent vs long-standing HIV infections allow improved estimation of HIV incidence.

Objective: To estimate HIV incidence in the United States.

Design, Setting, And Patients: Remnant diagnostic serum specimens from patients 13 years or older and newly diagnosed with HIV during 2006 in 22 states were tested with the BED HIV-1 capture enzyme immunoassay to classify infections as recent or long-standing. Information on HIV cases was reported to the Centers for Disease Control and Prevention through June 2007. Incidence of HIV in the 22 states during 2006 was estimated using a statistical approach with adjustment for testing frequency and extrapolated to the United States. Results were corroborated with back-calculation of HIV incidence for 1977-2006 based on HIV diagnoses from 40 states and AIDS incidence from 50 states and the District of Columbia.

Main Outcome Measure: Estimated HIV incidence.

Results: An estimated 39,400 persons were diagnosed with HIV in 2006 in the 22 states. Of 6864 diagnostic specimens tested using the BED assay, 2133 (31%) were classified as recent infections. Based on extrapolations from these data, the estimated number of new infections for the United States in 2006 was 56,300 (95% confidence interval [CI], 48,200-64,500); the estimated incidence rate was 22.8 per 100,000 population (95% CI, 19.5-26.1). Forty-five percent of infections were among black individuals and 53% among men who have sex with

men. The back-calculation (n = 1.230 million HIV/AIDS cases reported by the end of 2006) yielded an estimate of 55,400 (95% CI, 50,000-60,800) new infections per year for 2003-2006 and indicated that HIV incidence increased in the mid-1990s, then slightly declined after 1999 and has been stable thereafter.

Conclusions: This study provides the first direct estimates of HIV incidence in the United States using laboratory technologies previously implemented only in clinic-based settings. New HIV infections in the United States remain concentrated among men who have sex with men and among black individuals.

Hall HI, Song R, Rhodes P, Prejean J, An Q, Lee LM, Karon J, Brookmeyer R, Kaplan EH, McKenna MT, Janssen RS; HIV Incidence Surveillance Group. Estimation of HIV incidence in the United States. *JAMA*. 2008 Aug 6;300(5):520-9. <http://www.ncbi.nlm.nih.gov/pubmed/18677024>

OB/GYN CCC Editorial

The above study was undertaken utilizing new technology that allows differentiation of recently acquired HIV infection from longstanding infection. By testing serum from recently diagnosed patients collected in 22 states in 2006, the authors were able to provide a more accurate estimate of the number of newly acquired cases of HIV per year in the United States than had previously been available. Sadly, where the previous estimate of new infections was approximately 40,000 per year in the United States, this study demonstrates that the number of newly acquired cases in 2006 was closer to 56,300 and the incidence rate was 22.8 per 100,000 population. 45% of new cases were in African-Americans and 53% were in men who have sex with men.

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New CCC Corner Editor: Jean Howe, MD, MPH

Dr. Jean Howe became the Chief Clinical Consultant for Ob/Gyn on June 1st. She is now also the editor of the CCC Corner. Dr. Howe works at Chinle Hospital on the Navajo Nation. If you have suggestions or contributions for the CCC Corner, or queries for the Ob/Gyn CCC, please contact her at jean.howe@ihs.gov.

Dr. Neil Murphy, former Ob/Gyn CCC, continues his clinical work at Alaska Native Medical Center and remains involved in efforts to maximize the health of Native women, including several contributions to this CCC Corner. If you have questions for Dr. Murphy, he can be reached at nmurphy@scf.cc.

Also on-line....

Subscribe to the listserv and receive reminders about this service. If you have any questions, please contact me at jean.howe@ihs.gov

Jean Howe, MD, MPH
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.”

—Chinese Proverb

Quote of the month

My country right or wrong is something no true patriot would say...It is like saying, ‘My mother, drunk or sober’”

—G. K. Chesterton

Article of Interest

Prevention and Control of Influenza

Recommendations of the Advisory Committee on Immunization Practices (ACIP)

July 17, 2008 (Early Release);1-60

This report updates the 2007 recommendations by CDC’s Advisory Committee on Immunization Practices (ACIP) regarding the use of influenza vaccine and antiviral agents. Principal updates and changes include 1) a new recommendation that annual vaccination be administered to all children aged 5–18 years, beginning in the 2008–09 influenza season, if feasible, but no later than the 2009–10 influenza season; 2) a recommendation that annual vaccination of all children aged 6 months through 4 years (59 months) continue to be a primary focus of vaccination efforts because these children are at higher risk for influenza complications compared with older children; 3) a new recommendation that either trivalent inactivated influenza vaccine or live, attenuated influenza vaccine (LAIV) be used when vaccinating healthy persons aged 2 through 49 years (the previous recommendation was to administer LAIV to person aged 5–49 years

The age at which LAIV can be administered has been expanded include children ages 2–5 years of age. LAIV can be administered to persons with minor acute illnesses (e.g., diarrhea or mild upper respiratory tract infection with or without fever). However, if nasal congestion is present that might impede delivery of the vaccine to the mucosa, deferral of administration should be considered until resolution of the illness.

The effectiveness or safety of LAIV is not known for the following groups, and these persons should not be vaccinated with LAIV:

- persons with a history of hypersensitivity, including anaphylaxis, to any of the components of LAIV or to eggs.
- persons aged <2 years or those aged >50 years;
- persons with any of the underlying medical conditions that serve as an indication for routine influenza vaccination, including asthma, reactive airways disease, or other chronic disorders of the pulmonary or cardiovascular systems; other underlying medical conditions, including such metabolic diseases as diabetes, renal dysfunction, and hemoglobinopathies; or known or suspected immunodeficiency diseases or immunosuppressed states;
- children aged 2–4 years whose parents or caregivers report that a health-care provider has told them during the preceding 12 months that their child had wheezing or asthma, or whose medical record indicates a wheezing episode has occurred during the preceding 12 months;
- children or adolescents receiving aspirin or other salicylates (be-

cause of the association of Reye syndrome with wild-type influenza virus infection);

- persons with a history of GBS after influenza vaccination; or
- pregnant women.

Editorial Comment

These latest recommendations from ACIP make flu vaccination nearly universal. For those caring for children this means that the VFC program will cover flu vaccine for all children ages 6 months through 18 years. They also expand the use of LAIV to children between the ages of 2 to 5 years and practitioners may wish to consider the use of LAIV in this age group. Practitioners may wish to consider alternative ways of delivering vaccine to their patients; this could include walk-in flu vaccine clinics and the use of schools or community centers outside of usual health care settings to administer flu vaccines.

A model school program is described in this article:

A pilot study of the effectiveness of a school-based influenza vaccination program.

Pediatrics. 2005 Dec;116(6):e868-73.

Infectious Disease Updates.

Rosalyn Singleton, MD

Rotavirus activity decreased in the U.S. in 2007–8

Rotavirus is the leading cause of severe acute gastroenteritis among infants and young children, accounting for an estimated 55,000–70,000 hospitalizations and 250,000 emergency department visits in the United States annually. In winter months, approximately 50% of hospitalizations and ED visits and 30% of outpatient visits for acute gastroenteritis among children aged <3 years are caused by rotavirus. In February 2006, a human-bovine rotavirus vaccine, RotaTeq® (RV5, rota-pentavalent, Merck & Co., Inc.) was recommended for routine use among U.S. infants. To summarize rotavirus activity during the 2007–08 season, CDC analyzed data from the National Respiratory and Enteric Virus Surveillance System and New Vaccine Surveillance Network. When compared with the 15 previous seasons spanning 1991–2006, rotavirus activity during the current season appeared delayed in onset by 2–4 months and diminished in magnitude by >50%.

Rotarix® licensed in the U.S.

A new rotavirus vaccine (Rotarix®, RV1, rota-monovalent, Glaxo-SmithKline) was licensed on April 3, 2008. On June 25, 2008, the ACIP voted on new recommendations for the use of rotavirus vaccine:

www.cdc.gov/vaccines/recs/provisional/downloads/rota-7-1-08-508.pdf

Routine administration

- RotaTeq (rota-pent) is a 3-dose series recommended at 2, 4, and 6 months of age
- Rotarix® (rota-mono) is a 2-dose series recommended at 2 and 4 months of age
- The first dose of either vaccine should be administered between age 6 weeks and age 14 weeks 6 days (new maximum age of first dose)
- Minimum interval between each dose is 4 weeks
- All doses should be administered by age 8 months 0 days.

Interchangeability of Rotavirus vaccines

- ACIP prefers completion of series with same vaccine, but any combination of 3 doses is allowed.

Contraindications

- History of anaphylaxis after previous dose or vaccine component.
- Latex rubber is contained in Rotarix® (rota-mono) applicator – infants with anaphylactic allergy to latex should not receive Rotarix®

Recent literature on American Indian/Alaskan Native Health

Michael L. Bartholomew, MD

Rutman S., Park A, Castor M, ATaualii M, Forquera R. Urban American Indian and Alaska Native Youth: Youth Risk Behavior Survey 1997-2003. Matern Child Health J. 2008 May 16. [Epub ahead of print] http://www.ncbi.nlm.nih.gov/pubmed/18483839

Urban American Indian and Alaska Native Youth: Youth Risk Behavior Survey 1997–2003

Studies to date of American Indian and Alaska Native (AI/AN) youth behavior and health status tend to focus on non-urban youths. Studies that specifically address urban Indians tend to be regionally specific and their results cannot be extrapolated to a national level. The number of AI/AN people living in urban areas continues to grow. In the 2000 U.S. Census, 2.8 million of the 4.1 million persons reporting AI/AN race resided in urban areas. With a large percentage of this population being less than 18 years, it is important to understand and examine the health status and health behaviors of this group.

The purpose of this study is to identify and examine the health risk behaviors in urban AI/AN youth by analyzing aggregate data from 4 survey years (1997, 1999, 2001, 2003) of the YRBS.

The Youth Risk Behavior Survey (YRBS) is a self reported questionnaire administered to high school students (grades 9–12) biennially by the Centers for Disease Control and Prevention (CDC) to monitor the health risk behaviors. The survey divides behaviors that lead to morbidity and mortality in 6 risk areas: behaviors that result in unintentional injuries and violence; tobacco use; alcohol and drug use, behaviors that contribute to unintended pregnancy and sexually transmitted diseases; physical inactivity; and dietary behaviors including weight status.

Of the behaviors that measure unintentional injury, safety, and violence, eleven of the sixteen measures were found to be higher in urban AI/AN youth than white youth including school-related safety

and violence. Urban AI/AN youth were more likely to be in a physical fight, requiring medical treatment for injuries related to a physical fight, physically hurt by a boy/girlfriend, physically forced to have unwanted sex, carrying a weapon in the past year and carrying a gun in the past month. Of the 5 suicidal ideation and related behavior measurements, four were higher in the urban AI/AN youth than their white counterparts including attempted suicide (threefold higher) and injury from suicide attempt (fivefold higher).

In regards to tobacco use only 2 of the 16 measures were significantly higher in the AI/AN youth: smoking a cigarette before age 13 (33.1% vs. 18.4%) and smoking cigarettes at school in the last month (20.7% vs. 12.9%).

AI/AN youth were more likely to have consumed alcohol prior to age 13 and have had alcohol at school in the past month. Of the 15 questions addressing illegal drug use (including marijuana, cocaine, heroin, steroids, and injection drugs), AI/AN youth had higher reported use than their white counterparts. There was no difference between AI/AN and white youth in the reported use (lifetime or current) of glue, methamphetamines, hallucinogens and ecstasy.

American Indian/Alaska Native youth had a higher percentage sexual intercourse, first sexual intercourse before age 13, sexual intercourse with multiple partners (>4), sexual intercourse with greater than or equal to 1 person in the past three months and having been pregnant or making someone pregnant.

Lastly, in regards to physical activity and dietary behaviors, urban AI/AN adolescents watched at least 3 hours of television on an average school day (45.1% AI/AN vs. 31.7% white) and 38.7% of urban AI/AN youth described themselves as slightly or very overweight as compared to 28.8% of white youth.

The authors cite five limitations to their study. First, there were small numbers of AI/AN in the study (513 AI/AN youths of the 52,364 urban sample), thus making trend analysis difficult. Second, YRBS questions have not been validated on AI/AN populations, allowing for interpretation of the questions to possibly affect the responses. Third, underreporting of unhealthy behaviors (illegal drug use, alcohol consumption) and over-reporting of healthy behaviors such as exercise may occur in self-reported surveys. Fourth, the survey is not representative to each metropolitan area thus making generalizations of the results unreliable. Lastly, the results are of those youth that attend school and does not taking into account high school dropouts, thus possibly underestimating the prevalence of high-risk behaviors.

Few studies explore the health status of urban AI/AN youth on a national level. Most studies focus solely on AI/AN youth that reside on reservations or rural areas of the country. This study illustrates the high-risk health behaviors that are specific to urban AI/AN youth. By identifying and focusing on these behaviors, health promotion and disease prevention programs as well as intervention programs can be tailored to address the needs of this population.

Additional information and resources on Urban Indian Health:

1. Indian Health Service: Urban Health Programs. www.ihs.gov/NonMedicalPrograms/Urban/Urban_index.asp
2. National Council of Urban Indian Health. www.ncuih.org/index.html

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From Your Colleagues

Lois Goode, Whiteriver, AZ

Chief Clinical Consultant-IHS Rehab Services

Scott Gaustad named next Physical Rehabilitation Services Chief Clinical Consultant

It has been a pleasure and a distinct honor to serve with you on the NC4. The time has now come for me to “pass the baton”.

I am very pleased to announce CDR Scott Gaustad as the next Physical Rehabilitation Services Chief Clinical Consultant as appointed by Dr. Chuck North. CDR Gaustad brings to the Indian Health Service a wealth of clinical experience and knowledge. He has been at Whiteriver IHS since October 2006. He is a team-player and his leadership skills are exceptional. I am confident that you will enjoy meeting and working with Scott.

Lois.Goode@ihs.gov

David Gahn, Kabul, Afghanistan

Afghanistan Update: Assistant Secretary for Health ADM Joxel Garcia, MD, FACOG visits Kabul

In July, our Assistant Secretary for Health, ADM Joxel Garcia, spent four days in Kabul with the Indian Health Service team. Dr. Garcia spent an entire day at Rabia Balkhi Hospital, the primary focus of our efforts, and also spent time at other health care facilities in Kabul to get a close-up view of the obstacles and opportunities HHS faces. Dr. Garcia, a board certified Ob/Gyn, got a good look at the systems in place and spent time interacting with the patients and hospital staff.

Dr. Garcia’s primary objective is to coordinate HHS’ efforts in Afghanistan as many of our agencies our involved. Through meetings with the Afghanistan Ministry of Public Health, the U.S. Ambassador to Afghanistan, the U.S. Department of Defense, and the U.S. Agency for International Development Mission Director, Dr. Garcia has brought all the players to the table as together the U.S. Government completes a comprehensive health strategy for supporting our health diplomacy and humanitarian missions in Afghanistan.

The IHS Clinical Team, composed of CDR David Gahn (Ob/Gyn, Tahlequah), CAPT Pat O’Connor (Peds, Tuba City), CDR. Mei Castor (Med Epi, Seattle), and LCDR James Dickens (FNP, Dallas CMS), spent 6 weeks working with the hospital staff in various aspects of clinical care. CDR Gahn and LCDR Dickens focused on surgical skills with the physicians and nurses and CAPT O’Connor focused on newborn care. CDR Castor completed a preliminary Patient Outcome Assessment (POA) where, with a team of Rabia Balkhi physicians, she tracked 26 patients from admission to discharge with further follow-up post discharge pending. Her work is in preparation for a comprehensive POA schedule for the month of October where the team will track every obstetrics patient that presents at Rabia Balkhi for the entire month collecting data on all the systems involved in patient care. This data will continue to guide

us as we develop the Ob/Gyn Residency Program and work on the other hospital systems.

The team is scheduled for another 6 week deployment in September with the addition of CAPT Robert Branche (Anesthesia, Phoenix) to the team. Anesthesia services are a major contributor to the maternal and perinatal morbidity and mortality occurring at Rabia Balkhi and this will be the first comprehensive analysis performed by a U.S. trained anesthesiologist.

The Afghanistan Health Initiative appears to be secure in its funding for FY 09, and with the Dr. Garcia’s involvement in the project things are moving in a very positive direction. For information, please feel free to contact me at David.Gahn@IHS.gov.

Brigg Reilley, Albuquerque, NM Indian Health Service Prenatal HIV Screening: Gaps and Best Practices

Background: Prenatal HIV screening is an important part of prenatal care. IHS Prenatal HIV testing rates in 2005 were 54%.

Methodology: We reviewed 598 charts that had GPRA ‘misses’ (woman in prenatal care who did not receive HIV screening) in 27 sites across IHS to determine the cause of the ‘miss’. RESULTS: Most women (52%) were not screened for HIV. While some women did not need to be screened (declined test, or had a miscarriage), 167 (70%) of this group were missed opportunities. In nearly half (48%) the misses the woman was screened for HIV but the data was not recorded.

Conclusions: Most sites were unaware of the clinical and data gaps. Service Units with the highest screening rates showed distinct ‘best practices’ such as: 1) pregnant women were tested for HIV on the first visit they had an HCG+, 2) HIV was bundled into a standardized prenatal lab screening panel, and 3) not requiring written consent for HIV testing. Many other data and clinical practices and tips were provided during interviews with medical staff and recommendations are listed in the article.

CCC Editorial Comment:

This is just one example of the Indian Health Service-specific information found in the IHS Primary Care Provider. You can subscribe to The Provider electronically.

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Hot Topics

Obstetrics

Highlights from the International Workshop Conference on Gestational Diabetes Diagnosis and Classification held June 11–13, 2008

209 registrants from the International Association of Diabetes and Pregnancy Study Groups convened in Pasadena, California to review the results of the HAPO study (Hyperglycemia and Pregnancy Outcomes) published May 8 2008 in the NEJM (citation below). The Indian Health system sent two representatives to the Workshop/Conference.

The primary focus of the conference was to review the population-based data which link maternal glucose levels to fetal, neonatal, childhood, and maternal outcomes. The purpose of the conference was to analyze these data with a view to developing a world-wide consensus on the diagnosis of GDM or glucose intolerance of pregnancy.

A total of 25,505 pregnant women at 15 centers in nine countries underwent 75-g oral glucose-tolerance testing at 24 to 32 weeks of gestation. Data remained blinded if the fasting plasma glucose level was 105 mg per deciliter or less and the 2-hour plasma glucose level was 200 mg per deciliter or less. Primary outcomes were birth weight above the 90th percentile for gestational age, primary cesarean delivery, clinically diagnosed neonatal hypoglycemia, and cord-blood serum C-peptide level above the 90th percentile. Secondary outcomes were delivery before 37 weeks of gestation, shoulder dystocia or birth injury, need for intensive neonatal care, hyperbilirubinemia, and preeclampsia.

Results: For the 23,316 participants with blinded data, we calculated adjusted odds ratios for adverse pregnancy outcomes associated with an increase in the fasting plasma glucose level of 1 SD (6.9 mg per deciliter [0.4 mmol per liter]), an increase in the 1-hour plasma glucose level of 1 SD (30.9 mg per deciliter [1.7 mmol per liter]), and an increase in the 2-hour plasma glucose level of 1 SD (23.5 mg per deciliter [1.3 mmol per liter]). For birth weight above the 90th percentile, the odds ratios were 1.38 (95% confidence interval [CI], 1.32 to 1.44), 1.46 (1.39 to 1.53), and 1.38 (1.32 to 1.44), respectively; for cord-blood serum C-peptide level above the 90th percentile, 1.55 (95% CI, 1.47 to 1.64), 1.46 (1.38 to 1.54), and 1.37 (1.30 to 1.44); for primary cesarean delivery, 1.11 (95% CI, 1.06 to 1.15), 1.10 (1.06 to 1.15), and 1.08 (1.03 to 1.12); and for neonatal hypoglycemia, 1.08 (95% CI, 0.98 to 1.19), 1.13 (1.03 to 1.26), and 1.10 (1.00 to 1.12). There were no obvious thresholds at which risks increased. Significant associations were also observed for secondary outcomes, although these tended to be weaker.

Conclusions: The results indicate strong, continuous associations of maternal glucose levels below those diagnostic of diabetes with increased birth weight and increased cord-blood serum C-peptide levels.

Some interesting findings: C-peptide was selected as a primary outcome variable because in theory the higher the cord insulin the more likely it is that mother had high glucose concentrations which crossed to the fetus. Insulin levels were not used because hemolysis lowers plasma insulin concentrations, whereas it does not affect c-peptide. About 15% of cord specimens will hemolyze. There is a strong correlation between c-peptide (the part of the insulin molecule that links the a-chain with the b-chain) and insulin. Therefore, cord c-peptide levels serve as a proxy for fetal insulinemia.

There was a strong association between increasing maternal OGTT results at all three times; fasting, 1-hr, and 2 -hr and cord c-peptide levels in the neonate but the highest correlation was with fasting and the 1hour after the load.

The high c-peptide production was associated with neonatal hypoglycemia following birth.

There appeared to be agreement that the 75 gm (rather than the 100 gm) OGTT may be preferred for GDM diagnosis through out the world and that only 1 abnormal result maybe needed to diagnose GDM.

There was no consensus on whether the diagnostic test should include the fasting and 1-hr or fasting and 1-hr and 2-hr. (i.e. whether the test should be 1 or 2 hours after the glucose load)

Pregnant Fasting Plasma Glucose (FPG) less than 80 mg/dl had the least correlation with adverse outcomes but still had some correlation. Pregnant FPG > 90 had the highest correlation with adverse outcomes.

One hour after a 75 gm load greater than 179 was associated with a significantly increased risk of adverse outcomes. Two hours after the 75 gm load greater than 140 was also associated with a significantly increased risk of adverse outcomes.

There was also a majority opinion that within the definition of GDM there should be a designation of those who have overt DM (eg FPG >126). Thus we should be able to diagnose type 2 (and rarely type 1) during pregnancy.

Special thanks to David Sacks for this thoughtful recap of the Workshop/Conference

Editorial Comment (Neil Murphy, Southcentral Foundation; ANMC):

Still waiting for translation into practice guidelines

A writing committee will convene to determine how to translate these research findings into a draft of clinical recommendations. Also, the calculations will be redone, using the mean or median glucose value rather than the lowest category of glucose results as the reference group.

Our hope is the screening/diagnosis process will be made as simple as possible. One possible scenario would have a one step test composed of a fasting and either a one or a two hour determination. Stay tuned!

Resources:

HAPO Study Cooperative Research Group. Hyperglycemia and adverse pregnancy outcomes. N Engl J Med. 2008 May 8;358(19):1991-2002.

Ecker JL, Greene MF. Gestational diabetes--setting limits, exploring treatments. N Engl J Med. 2008 May 8;358(19):2061-3.

Gynecology

Health and economic implications of HPV vaccination in the United States

BACKGROUND: The cost-effectiveness of prophylactic vaccination against human papillomavirus types 16 (HPV-16) and 18 (HPV-18) is an important consideration for guidelines for immunization in the United States.

METHODS: We synthesized epidemiologic and demographic data using models of HPV-16 and HPV-18 transmission and cervical carcinogenesis to compare the health and economic outcomes of vaccinating preadolescent girls (at 12 years of age) and vaccinating older girls and women in catch-up programs (to 18, 21, or 26 years of age). We examined the health benefits of averting other HPV-16-related and HPV-18-related cancers, the prevention of HPV-6-related and HPV-11-related genital warts and juvenile-onset recurrent respiratory papillomatosis by means of the quadrivalent vaccine, the duration of immunity, and future screening practices.

CONCLUSIONS: The cost-effectiveness of HPV vaccination will depend on the duration of vaccine immunity and will be optimized by achieving high coverage in preadolescent girls, targeting initial catch-up efforts to women up to 18 or 21 years of age, and revising screening policies.

Kim JJ, Goldie SJ. Health and economic implications of HPV vaccination in the United States. N Engl J Med. 2008 Aug 21;359(8):821-32.

Editorial: Haug CJ. Human papillomavirus vaccination--reasons for caution. N Engl J Med. 2008 Aug 21;359(8):861-2.

Recurrent dysplasia as high as 7% after hysterectomy for cervical dysplasia

OBJECTIVE: Hysterectomy with concomitant cervical intraepithelial neoplasia (CIN), is often considered a definitive treatment for CIN, but development of subsequent vaginal intraepithelial neoplasia (VAIN) is known to range from 0.9% to 6.8%.

RESULTS: Thirty-one patients (24.8%) were lost to follow-up. Seven of the 94 women in the follow-up group (7.4%) developed VAIN2+, of which 2 were invasive vaginal cancers. Median interval between hysterectomy and diagnosis of VAIN2+ was 35 months (5-103 months). Women with recurrence were significantly older (P = .003).

CONCLUSION: Hysterectomy may not be considered as a definitive therapy for CIN2+ because the incidence rate of subsequent VAIN2+ is as high as 7.4%.

Schockaert S, Poppe W, Arbyn M, Verguts T, Verguts J. Incidence of vaginal intraepithelial neoplasia after hysterectomy for cervical intraepithelial neoplasia: a retrospective study. Am J Obstet Gynecol. 2008 Aug;199(2):113.e1-5. Epub 2008 May 23.

Child Health

Association between Maternal Diabetes in Utero and Age of Offspring's Diagnosis with Type 2 Diabetes

OBJECTIVE: To examine age of diabetes diagnosis in youth, who have a parent with diabetes, by diabetes type and whether the parent's diabetes was diagnosed before or after the youth's birth.

RESEARCH DESIGN AND METHODS: SEARCH for Diabetes in Youth Study participants (diabetes diagnosis 2001-2005) with a diabetic parent. SEARCH is a multicenter survey of youth with diabetes diagnosed before age 20 years.

CONCLUSIONS: Type 2 diabetes was diagnosed at younger ages among those exposed to hyperglycemia in utero. Among youth with type 1 diabetes, when controlled for the mother's age of diagnosis, the effect of the intrauterine exposure was not significant. This study helps explain why other studies have found higher age-specific rates of type 2 diabetes among offspring of women with diabetes.

Pettitt DJ, Lawrence JM, Beyer J, Hillier TA, Liese AD, Mayer-Davis B, Loots B, Imperatore G, Liu L, Dolan LM, Linder B, Dabelea D. Association between Maternal Diabetes In Utero and Age of Offspring's Diagnosis with Type 2 Diabetes. Diabetes Care. 2008 Aug 11. [Epub ahead of print]

Duration of intrapartum prophylaxis and concentration of penicillin G in fetal serum at delivery

OBJECTIVE: Intrapartum penicillin G prophylaxis aims to prevent early-onset group B streptococci (GBS) sepsis by interrupting vertical transmission. We examined the relationship between duration of prophylaxis and fetal serum penicillin G levels among fetuses exposed to fewer than 4 hours of prophylaxis compared with longer durations.

RESULTS: Fetuses exposed to fewer than 4 hours of prophylaxis had higher penicillin G levels than those exposed to greater than 4 hours (P=.003). In multivariable linear regression analysis, fetal penicillin G levels were determined by duration of exposure, time since last dose, dosage, and number of doses, but not maternal body mass index. Penicillin G levels increased linearly until 1 hour (R(2)=.40) and then decreased rapidly according to a power-decay model (R(2)=.67). All subgroups analyzed were above the minimal inhibitory concentration (MIC) for

GBS (0.1 micrograms/mL)(P<.002). Individual samples were 10-179-fold above the MIC. In patients receiving maintenance dosing, penicillin G did not accumulate in the cord blood and returned to baseline after each 4-hour interval.

CONCLUSION: Short durations of prophylaxis achieved levels significantly above the MIC, suggesting a benefit even in pre-cipitous labors. The designation of infants exposed to fewer than 4 hours of prophylaxis as particularly at risk for GBS sepsis may be pharmacokinetically inaccurate.

Barber EL, Zhao G, Buhimschi IA, Illuzzi JL. Duration of intrapartum prophylaxis and concentration of penicillin G in fetal serum at delivery. Obstet Gynecol. 2008 Aug;112(2 Pt 1):265-70.

Care of the adolescent sexual assault victim

Sexual assault is a broad-based term that encompasses a wide range of sexual victimizations including rape. Since the American Academy of Pediatrics published its last policy statement on sexual assault in 2001, additional information and data have emerged about sexual assault and rape in adolescents and the treatment and management of the adolescent who has been a victim of sexual assault. This report provides new information to update physicians and focuses on assessment and care of sexual assault victims in the adolescent population.

Kaufman M; and the Committee on Adolescence. Care of the adolescent sexual assault victim. Pediatrics. 2008 Aug;122(2):462-70.

Chronic disease and illness

Naltrexone alone and with sertraline for the treatment of alcohol dependence in Alaska natives and non-natives residing in rural settings: a randomized controlled trial

BACKGROUND: Access to specialty alcoholism treatment in rural environments is limited and new treatment approaches are needed. The objective was to evaluate the efficacy of naltrexone alone and in combination with sertraline among Alaska Natives and other Alaskans living in rural settings. An exploratory aim examined whether the Asn40Asp polymorphism of the mu-opioid receptor gene (OPRM1) predicted response to naltrexone, as had been reported in Caucasians. **METHODS:** Randomized, controlled trial enrolling 101 Alaskans with alcohol dependence, including 68 American Indians/Alaska Natives. Participants received 16 weeks of either (1) placebo (placebo naltrexone + placebo sertraline), (2) naltrexone monotherapy (50 mg naltrexone + sertraline placebo) and (3) naltrexone + sertraline (100 mg) plus nine sessions of medical management and supportive advice. Primary outcomes included Time to First Heavy Drinking Day and Total Abstinence. **RESULTS:** Naltrexone monotherapy demonstrated significantly higher total abstinence (35%) compared with placebo (12%, p = .0027) and longer, but not statistically different, Time to First Heavy Drinking Day (p = 0.093). On secondary measures, naltrexone compared with

placebo demonstrated significant improvements in percent days abstinent (p = 0.024) and drinking-related consequences (p = 0.02). Combined sertraline and naltrexone did not differ from naltrexone alone. The pattern of findings was generally similar for the American Indian/Alaska Native subsample. Naltrexone treatment response was significant within the group of 75 individuals who were homozygous for OPRM1 Asn40 allele. There was a small number of Asp40 carriers, precluding statistical testing of the effect of this allele on response. **CONCLUSIONS:** Naltrexone can be used effectively to treat alcoholism in remote and rural communities, with evidence of benefit for American Indians and Alaska Natives. New models of care incorporating pharmacotherapy could reduce important health disparities related to alcoholism.

O'Malley SS, Robin RW, Levenson AL, GreyWolf I, Chance LE, Hodgkinson CA, Romano D, Robinson J, Meandzija B, Stillner V, Wu R, Goldman D. Naltrexone alone and with sertraline for the treatment of alcohol dependence in Alaska natives and non-natives residing in rural settings: a randomized controlled trial. Alcohol Clin Exp Res. 2008 Jul;32(7):1271-83.

Naltrexone for the Management of Alcohol Dependence

The New England Journal of Medicine has published a case-based article in their Clinical Therapeutics series that covers the use of naltrexone well. The article begins:

A 44-year-old businessman with a history of hypertension presents for evaluation with a report of being under stress at work and home, which has led to "unsatisfactory" sleep. Although there is some despondency, screening for depression is negative. His . . .

Anon RF. Naltrexone for the management of alcohol dependence. N Engl J Med. 2008 Aug 14;359(7):715-21.

FDA MedWatch-Vivitrol (naltrexone)—Serious Injection Site Reactions May Occur

FDA informed healthcare professionals of the risk of adverse injection site reactions in patients receiving naltrexone. Naltrexone is administered as an intramuscular gluteal injection and should not be administered intravenously, subcutaneously, or inadvertently into fatty tissue. Physicians should instruct patients to monitor the injection site and contact them if they develop pain, swelling, tenderness, induration, bruising, pruritus, or redness at the injection site that does not improve or worsens within two weeks. Physicians should promptly refer patients with worsening injection site reactions to a surgeon

Read the entire MedWatch Safety Summary, including a link to the FDA Drug Information Page regarding this issue at: www.fda.gov/medwatch/safety/2008/safety08.htm#naltrexone.

Features

ACOG

American College of Obstetricians and Gynecologists

ACOG Practice Bulletin #96 Alternatives to Hysterectomy in the Management of Leiomyomas

Uterine leiomyomas (also called fibroids) are the most common solid pelvic tumors in women and the leading indication for hysterectomy. Although many women with uterine leiomyomas are asymptomatic and can be monitored without treatment, some will require more active measures. Hysterectomy remains the most common surgical treatment for leiomyomas because it is the only definitive treatment and eliminates the possibility of recurrence. Many women seek an alternative to hysterectomy because they desire future childbearing or wish to retain their uteri even if they have completed childbearing. As alternatives to hysterectomy become increasingly available, the efficacies and risks of these treatments are important to delineate. The purpose of this bulletin is to review the literature about medical and surgical alternatives to hysterectomy and to offer treatment recommendations.

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

- Abdominal myomectomy is a safe and effective alternative to hysterectomy for treatment of women with symptomatic leiomyomas.
- Based on long- and short-term outcomes, uterine artery embolization is a safe and effective option for appropriately selected women who wish to retain their uteri.
- Gonadotropin-releasing hormone agonists have been shown to improve hematologic parameters, shorten hospital stay, and decrease blood loss, operating time, and postoperative pain when given for 2–3 months preoperatively. Benefits of preoperative use of GnRH agonists should be weighed against their cost and side effects for individual patients.
- Several studies suggest that the infiltration of vasopressin into the myometrium decreases blood loss at the time of myomectomy.

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

- The clinical diagnosis of rapidly growing leiomyomas should not be used as an indication for myomectomy or hysterectomy.
- Hysteroscopic myomectomy is an accepted method for the management of abnormal uterine bleeding caused by submucosal leiomyomas.

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

- There is insufficient evidence to support hysterectomy for asymptomatic leiomyomas solely to improve detection of adnexal masses, to prevent impairment of renal function, or to rule

out malignancy.

- Leiomyomas should not be considered the cause of infertility, or significant component of infertility, without completing a basic fertility evaluation to assess the woman and her partner.
- Hormone therapy may cause some modest increase in uterine leiomyoma size but does not appear to have an impact on clinical symptoms. Therefore, this treatment option should not be withheld from women who desire or need such therapy.
- The effect of uterine artery embolization on pregnancy remains understudied.

American College of Obstetricians and Gynecologists. ACOG practice bulletin #96. Alternatives to hysterectomy in the management of leiomyomas. *Obstet Gynecol.* 2008 Aug;112(2 Pt 1):387-400.

ACOG Committee Opinion #411 Routine Human Immunodeficiency Virus Screening

ABSTRACT: The American College of Obstetricians and Gynecologists recommends routine human immunodeficiency virus (HIV) screening for women aged 19–64 years and targeted screening for women with risk factors outside of that age range. Ideally, opt-out HIV screening should be performed, in which the patient is notified that HIV testing will be performed as a routine part of gynecologic and obstetric care, unless the patient declines testing (1). The American College of Obstetricians and Gynecologists recommends that obstetrician–gynecologists annually review patients’ risk factors for HIV and assess the need for retesting.

American College of Obstetricians and Gynecologists. ACOG committee opinion. Routine human immunodeficiency virus screening. *Obstet Gynecol.* 2008 Aug;112(2 Pt 1):401-3.

ACOG Committee Opinion #412 Aromatase Inhibitors in Gynecologic Practice

ABSTRACT: Aromatase inhibitors appear to be effective as an adjuvant treatment for early-stage and late-stage breast cancer. Their role in chemoprevention of breast cancer in high-risk patients remains to be defined. Side effects of aromatase inhibitors in postmenopausal women are due to estrogen-lowering action at the target tissues and include hot flashes, vaginal dryness, arthralgias, and decreased bone mineral density. In reproductive-aged women, aromatase inhibitors stimulate gonadotropin secretion and increase ovarian follicular activity. The role of aromatase inhibitors in the treatment of endometriosis and in ovulation induction is still being investigated.

American College of Obstetricians and Gynecologists. ACOG committee opinion. Aromatase inhibitors in gynecologic practice. *Obstet Gynecol.* 2008 Aug;112(2 Pt 1):405-7.

ACOG Committee Opinion #413 Age-Related Fertility Decline

ABSTRACT: Age is a significant factor influencing a woman’s ability to conceive. Social trends have led to deferred childbearing, and an increasing number of women are experiencing age-related infertility and pregnancy loss. Women older than 35 years should receive expedited evaluation and treatment after 6 months of failed attempts to conceive, or earlier if clinically indicated.

American College of Obstetricians and Gynecologists. ACOG committee opinion. Age-related fertility decline. *Obstet Gynecol.* 2008 Aug;112(2 Pt 1):409-11.

ACOG Committee Opinion #414 Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome and Women of Color

ABSTRACT: In the United States, women of color (primarily African-American and Hispanic women) comprise most new cases of human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) among women. Most women of color acquire the disease from heterosexual contact, often from a partner who has undisclosed risk factors for HIV infection. Safe-sex practices, especially consistent condom use, must be emphasized for all women, particularly for women of color. A combination of testing, education, and brief behavioral interventions can help reduce the rate of HIV infection and its complications among women of color.

American College of Obstetricians and Gynecologists. ACOG committee opinion. Human immunodeficiency virus and acquired immunodeficiency syndrome and women of color. *Obstet Gynecol.* 2008 Aug;112(2 Pt 1):413-6.

AFP American Family Physician Spontaneous Vaginal Delivery

ABSTRACT: Vaginal delivery is a natural process that usually does not require significant medical intervention. Management guided by current knowledge of the relevant screening tests and normal labor process can greatly increase the probability of an uncomplicated delivery and postpartum course. All women should be screened for group B streptococcus; women who test positive should be treated with antibiotics during labor. Routine human immunodeficiency virus screening of all pregnant women, and treatment with antiretroviral medication for those who test positive, can reduce perinatal transmission of the infection. Once a woman is in labor, management should focus on the goal of delivering a healthy newborn while minimizing discomfort and complications for the mother. In a patient who tests negative for group B streptococcus, delaying admission to the labor ward until she is in active labor decreases the number of possible medical interventions during labor and delivery. Once a patient has been admitted to the hospital, providing her with continuous emotional support can improve delivery outcomes

and the birthing experience. Epidural analgesia is effective for pain control and should not be discontinued late in labor to reduce the need for operative vaginal delivery. Epidurals prolong labor, but do not increase the risk of cesarean delivery. Research has shown that labor may not progress as rapidly as historically reported; this should be considered before intervening for dystocia. Routine episiotomy increases morbidity and should be abandoned. Once the infant has been delivered, active management of the third stage of labor decreases the risk of postpartum hemorrhage.

Patterson DA, Winslow M, Matus CD. Spontaneous Vaginal Delivery. *Am Fam Physician.* 2008;78(3):336-341, 343-344.

Patient Information: Labor and Delivery: What You Should Know?

Breastfeeding

Suzan Murphy, PIMC

Infant Feeding in Disasters

Scenario: Flooding, hurricane/cyclone, earthquake, blizzard, fires, mud slides, power outages, unsafe water, extreme heat wave, tornado, tsunami/tidal wave, massive evacuation for environmental/political unrest or?

Question: How to feed the babies?

If the baby is formula fed, the concerns will be:

- Availability of formula - ready to feed will be the safest choice
- Access to safe water – decontaminate or use bottled water
- Clean environment for preparation and cleaning of bottles and nipples
- Availability of a person who can correctly mix formula
- Access to refrigeration for prepared/opened formula

If the baby is breastfed, the questions may be:

Can the mother breastfeed with the stress of a disaster?

Yes –

Women have breastfed through many disasters, wars, and famines. It will help to offer support and encouragement that:

- Stress does not dry up a mother’s milk supply.
- Breastfeeding causes hormones to be released to relieve anxiety and stress for moms.
- The quality of human milk does not vary significantly with maternal diet changes. Even if the mother is not able to eat well, the important nutrients will not be impacted.
- Human milk will supply a major portion of nutrient need in the first year of life and beyond if other safe foods and liquids are not available.
- Breast milk is always the right temperature and matches her baby’s nutrient needs. It will prevent hypothermia and many illnesses for her baby.

Can the mother receive immunizations while breastfeeding?

Yes –

- Routine immunizations like mumps, rubella, tetanus, diphtheria,

Northern Plains Tobacco Prevention Program (NPTPP)

The NPTPP is an initiative of the Aberdeen Area Tribal Chairmen's Health Board to address commercial tobacco use among American Indians residing in the Aberdeen Area (North Dakota, South Dakota, Nebraska, and Iowa). NPTPP serves as a tribal support center assisting tribal communities and tribally-based organizations to plan, implement, evaluate, and sustain tobacco prevention and control programs.

NPTPP is committed to improving the health of American Indian communities through promoting traditional concepts of health and well being and providing excellence in tobacco prevention and control. If you are interested in learning more about how to implement a tobacco cessation or prevention program, or would like to learn more about how commercial (non-ceremonial) tobacco use is affecting Indian Country, please contact us. www.aatchb.org/nptpp

pertussis, influenza, Streptococcus pneumoniae, Neisseria meningitides, hepatitis A, hepatitis B, varicella, and inactivated polio are safe for breastfeeding mothers and their infants/children.

What about illnesses that can be part of disasters?

- See www.cdc.gov for information about managing breastfeeding women and specific diseases.

What if the mother and baby or toddler have recently stopped breastfeeding - can breastfeeding be started again?

- Yes –
- Encourage the mom to offer the breast to her child. It may take several days or weeks of frequent nursing, but her milk can come back. Suckling every 2 hours with skin-to-skin contact are magic for restoring breast milk supply. Please note that re-lactation may be faster with a younger infant.
 - Monitor the baby for adequate hydration and nutritional status.
 - Assure the mom that her milk will be fine. Breast milk is a dynamic fluid, always being cleaned, recycled, and restored. It has not spoiled or become outdated in her body.

For more information and downloadable materials, please consult: American Academy of Pediatrics - Infant Nutrition during a Disaster—Breastfeeding and other Options (www.aap.org)

Center for Disease Control for Disaster Safety (www.cdc.gov).

If phone service is available during a disaster and more information is needed, call 1-877-868-9473.

Family Planning

Beyond the 6 week postpartum check; try 3 weeks instead...

Introduction: The 6-week postpartum visit is an anachronism. Performing the initial pelvic examination at this duration after delivery is based upon statements in old textbooks and teachings from a time when infection was prevalent and before modern methods of contraception were available. The basis for this clinical advice was derived from the understanding that a 6-week period of time would result in sufficient involution of the changes of pregnancy to allow an effective pelvic examination that would confirm the return of normal pelvic anatomy. Many women resume sexual activity

before the sixth postpartum week, and because ovulation frequently occurs before 6 weeks, the obstetrical tradition of scheduling the postpartum visit at 6 weeks should be changed. A 3-week visit would be more effective in preventing postpartum conception by initiating effective contraception at this time, instead of after the 6-week visit. There is no reason why a complete physical examination cannot be deferred in an asymptomatic woman until the 3-month follow-up visit that is part of good contraceptive care.

CCC Editorial Comment:

This article provides an excellent overview of optimal postpartum contraception care. Benchmarks about when women really resume intercourse (32-60% by 6 weeks in a variety of international studies), when ovulation resumes (on average 4 weeks postpartum in non-nursing mothers), and that ovulation precedes menstruation more than 50% of the time. Lactational amenorrhea can convey a level of protection similar to OCPs, however if supplemental feedings are introduced or menses return then ovulation resumes quickly. The authors recommend adherence to the “Rule of 3’s”: 1.) For fully breastfeeding women, a contraceptive method should be started in the 3rd postpartum month. 2.) After spontaneous or elective abortion of a pregnancy of <12 weeks, contraception should be started immediately. 3.) After a pregnancy of 12 weeks or more, contraception should be started by the 3rd week postpartum.

Individual contraceptive methods are addressed in detail:

- Progestin-only pills can be started immediately and should be started by the third week or month as above.
- Combined oral contraceptives (as well as transdermal and vaginal combined methods) can be started in the third week or the third month as above.
- Depo-Provera and implants (such as Implanon) may be placed immediately postpartum.
- IUDs can be placed 4-8 weeks postpartum or within 15 minutes of delivery.
- Because of the increased risk of clotting disorders in the immediate postpartum period; strong consideration should be given to use of a non-estrogen containing method from 3 to 7 weeks postpartum.

Speroff L, Mishell DR Jr. The postpartum visit: it's time for a change in order to optimally initiate contraception. Contraception. 2008 Aug;78(2):90-8. Epub 2008 Jun 12.

International Health Update

Claire Wendland, Madison, WI Active tuberculosis more likely in diabetics: a new meta-analysis has serious global health implications

The World Health Organization estimates that one third of the world's population is infected with tuberculosis. Fortunately, in most people the infection remains quiescent. Only about one in ten of those infected go on to develop the active disease that damages their own bodies and puts them at risk for infecting others. Anything that changes the rate of conversion to active tuberculosis, for better or for worse, has significant public health implications. In recent years, for instance, the link between HIV and TB has attracted much attention: immune suppression related to HIV puts patients at dramatically increased risk for active tuberculosis. But HIV is not the only such condition.

Clinicians have suspected a connection between diabetes and active TB for almost a century. A causative connection is biologically plausible, because diabetes impairs host immunity. Studies in diabetic mice show diminished T-cell response to infection with M. tuberculosis – a response that is critical to keeping infectious bacilli contained. In addition, human studies show reduced production of interferon, impaired neutrophil activity and decreased leukocyte bactericidal action with rising HbA1c. A new meta-analysis now confirms the long-suspected association between active tuberculosis and diabetes mellitus, and explores the implications for public health internationally.

Two epidemiologists looked at all available good-quality research comparing active tuberculosis in adults with and without DM. (They were particularly interested in cohorts with a confirmed prior diagnosis of DM, because direction of causation can be tricky: tuberculosis induces a hyperglycemia that resolves with treatment.) They found thirteen studies: seven from North America, including two in Native American communities, and the remainder from Europe, Central America and Asia. Despite different geographic regions, study designs, and background incidences of TB, they found a consistently significant association between DM and active TB. The relative risk of active TB was doubled for diabetics in areas where background incidence of TB was low, more than tripled where background incidence is high. In addition, the relative risk seemed to be substantially higher in younger people.

The public health implications are profound. The global burden of diabetes is expected to double by 2030. Some of the fastest rates of increase are seen

in India and China, also huge population centers with high background rates of TB and relatively young mean ages. Already, the authors calculate that DM probably accounts for about 15% of all active TB cases in India. These findings make even more urgent the need for investigation of – and intervention into – social determinants of diabetes mellitus. In the mean time, they also have practical implications. Public health practitioners may want to seek out people with DM for tuberculosis case-finding, and clinicians have one more good reason to work with their patients toward diabetes prevention.

Jeon CY, Murray MB. Diabetes mellitus increases the risk of active tuberculosis: a systematic review of 13 observational studies. PLoS Medicine 5(7):e152, July 2008.

Midwives Corner

Lisa Allee, CNM, Chinle Centering Pregnancy— A Model of Group Prenatal Care

Centering Pregnancy is a model of group prenatal care that is being used in numerous sites around the country. Prenatal care provided through the Centering model differs from clinic visits in a number of ways. First, there is no waiting room!! Women arrive and their appointment begins right then. Second, women get to spend two hours with their provider at each appointment! Third, women are actively involved in their care. Women are taught at the first group how to do aspects of their prenatal care themselves—blood pressure, weight, and urine dip—and how to chart and keep track of these results. Each subsequent session then begins with about a half hour of women doing these things and rotating through “mat time” with the midwife. Mat time is private time with the midwife (or physician) where the woman can report private concerns or questions and fundal height and fetal heart tones are checked. Once everyone has done their vitals and seen the midwife the group comes into a circle. During the circle time a topic for the day is discussed and activities occur. This is not a didactic class—it is a group session, which means that the midwife and a co-facilitator facilitate the session, asking questions and helping the group discover information they already know or new information. The topic of the day is usually just a jumping off point and the discussion can flow into many more areas of interest to the group.

There are a number of IHS sites offering Centering groups as an alternative to clinic-based prenatal visits and more sites are exploring offering it soon.

Medical Mystery Tour

Fetal Heart Monitoring

Neil Murphy, Alaska Native Medical Center

Last month Dr. Murphy raised the following question:

Everyone knows how to read a fetal heart rate (FHR) tracing, right?

He then posed a series of questions about FHR interpretation.

And the answers are:

- 1.) False
- 2.) True
- 3.) False
- 4.) True
- 5.) False
- 6.) True
- 7.) True

To be reminded of the questions, and for a thorough discussion of the answers, please refer to the on-line edition of the CCC Corner at: www.ihs.gov/MedicalPrograms/MCH/M/ob.cfm?module=9_08

**Ann Bullock, Cherokee, NC
Advances in Indian Health Conference**

Save the Dates!

The 2009 "Advances in Indian Health Conference" will be April 21-24, 2009 in Albuquerque, NM. "Advances" is Indian Health's conference for primary care providers and nurses. Get up to 28 hours of CME/CE credit learning about clinical topics of special interest to I/T/U providers, including the option to focus on diabetes training. To see the 2008 brochure, go to <http://hsc.unm.edu/cme/2008Web/AdvancesIndianHealth/AIH2008Index.shtml> or you can contact the Course Director, Dr. Ann Bullock at annbull@nc-cherokee.com for more information.

The Four Corners Chapter of the American College of Nurse Midwives received a grant from the March of Dimes to support and expand Centering on the Navajo Nation. Part of the grant is to make a promotional DVD about Centering. The interviews with patients that have gone through Centering for their prenatal care have been astonishing and yet also not surprising. The words coming out of these women's mouths say everything that Centering says it does—they report feeling empowered to make good decisions for themselves and their children, they report learning more than they ever did or would of in clinic, they report connecting with other women and realizing they are not alone in their experiences, they report increased confidence, they report learning from the others in the group, they report having fun, they report enjoyment of the longer time spent with their midwife or doctor, they report loving Centering. They also report wanting to continue groups past the immediate post partum—this has been requested by so many Centering participants nation-wide that the national Centering folks have develop Centering Parenting that provides well baby care through the first year.

There has been concern expressed by staff at several IHS sites on the Navajo Nation that Centering is not compatible with Navajo tradition, that Navajo women won't like it, and that privacy issues will keep it from working. The interviews with Navajo women who have done Centering bely these concerns. These Navajo women clearly liked Centering for their prenatal care! They spoke about privacy and reported that at first they felt shy, but as they got to know the group they felt more comfortable sharing. Everyone also clearly understood that it was their choice what personal information they wanted to share or not share with the group—there was no pressure to do otherwise. A number of comments were made that even though there was a subject or question that they didn't feel comfortable sharing or asking about another woman would bring it up and, thus, they were able to learn about the subject after all because of the other woman. As for Navajo tradition some interviewees spoke to how Centering met their traditional needs, one example being that the group was held outside the building where the ER was and, thus, kept her from having to go into a place where people die as she was taught not to do when she was pregnant. Centering is based on an eons-old, global-wide, crossing-all-cultures tradition of women gathering to discuss, support, and learn from each other about all things female—menses, pregnancy, breastfeeding, childrearing, menopause, etc. A Navajo specific example is Ki'nal'da' the puberty ceremony

for young women where women gather to talk and teach the young woman about being an adult woman. The Centering model can expand on this tradition and allows for the time to teach young women more about Navajo traditions—time that rarely is found in a 10-15 minute clinic visit!

The interviews and filming also revealed wonderful aspects of Centering for partners and other family members, but that will have to wait for another column as space is running out....

If you are interested in Centering Pregnancy please check out the Centering website www.centeringhealthcare.org and look for informational sessions at most IHS maternal-child health meetings. AND please join the IHS Centering Pregnancy list serve by emailing me at lisa.allee@ihs.gov!!!

Nurses Corner

Sandra Haldane, HQE

Nurses provide effective, and cost-effective, depression care for cancer patients

BACKGROUND: Major depressive disorder severely impairs the quality of life of patients with medical disorders such as cancer, but evidence to guide its management is scarce. We aimed to assess the efficacy and cost of a nurse-delivered complex intervention that was designed to treat major depressive disorder in patients who have cancer.

FINDINGS: Primary outcome data were missing for four patients. For 196 patients for whom we had data at 3 months, the adjusted difference in mean Symptom Checklist-20 depression score, between those who received the intervention and those who did not, was 0.34 (95% CI 0.13-0.55). This treatment effect was sustained at 6 and 12 months. The intervention also improved anxiety and fatigue but not pain or physical functioning. It cost an additional pound sterling 5278 (US\$10 556) per quality-adjusted life-year gained.

INTERPRETATION: The intervention-Depression Care for People with Cancer-offers a model for the management of major depressive disorder in patients with cancer and other medical disorders who are attending specialist medical services that is feasible, acceptable, and potentially cost effective. *Strong V, Waters R, Hibberd C, Murray G, Wall L, Walker J, McHugh G, Walker A, Sharpe M. Management of depression for people with cancer (SMaRT oncology 1): a randomised trial. Lancet. 2008 Jul 5;372(9632):40-8.*

Perinatology Picks

George Gilson, MFM,

Methods of delivering the placenta at caesarean section

BACKGROUND: Worldwide, caesarean section is the most common major operation performed on women. Some of the reported short-term morbidities include haemorrhage, postoperative fever and endometritis. The method of delivering the placenta is one procedure that may contribute to an increase or decrease in the morbidity of caesarean section. Two common methods used to deliver the placenta at caesarean section are cord traction and manual removal. **OBJECTIVES:** To compare the effects of manual removal of the placenta with cord traction at caesarean section.

SEARCH STRATEGY: We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (30 September 2007).

SELECTION CRITERIA: All randomised controlled trials comparing manual removal and cord traction or spontaneous of delivery of the placenta.

AUTHORS' CONCLUSIONS: Delivery of the placenta with cord traction at caesarean section has more advantages compared to manual removal. These are less endometritis; less blood loss; less decrease in haematocrit levels postoperatively; and shorter duration of hospital stay. Future trials should provide information on interval between the delivery of the infant and of the placenta, change in lochia, blood splashing during placental removal and uterine pain after operation, as well as the effects of delayed cord clamping.

Anorlu RI, Maholwana B, Hofmeyr GJ. Methods of delivering the placenta at caesarean section. Cochrane Database Syst Rev. 2008 Jul 16;(3):CD004737.

Limit maximum oxytocin doses to 20 mu/min in patients attempting VBAC

OBJECTIVE: The objective of the study was to more precisely estimate the effect of maximum oxytocin dose on uterine rupture risk in patients attempting vaginal birth after cesarean (VBAC) by considering timing and duration of therapy.

RESULTS: Within the nested case-control study of 804 patients, 272 were exposed to oxytocin: 62 cases of uterine rupture and 210 controls. Maximum oxytocin ranges above 20 mU/min increased the risk of uterine rupture 4-fold or greater (21-30 mU/min: hazard ratio [HR] 3.92, 95% confidence interval [CI], 1.06 to 14.52; 31-40 mU/min: HR 4.57, 95% CI, 1.00 to 20.82). **CONCLUSION:** These findings support a maximum oxytocin dose of 20 mU/min in VBAC trials to avoid an unacceptably high risk of uterine rupture.

Cahill AG, Waterman BM, Stamilio DM, Odibo AO, Allsworth JE, Evanoff B, Macones GA. Higher maximum doses of oxytocin are associated with an unacceptably high risk for uterine rupture in

patients attempting vaginal birth after cesarean delivery. Am J Obstet Gynecol. 2008 Jul;199(1):32.e1-5. Epub 2008 May 2. www.ncbi.nlm.nih.gov/pubmed/18455132

STD Corner

Lori de Ravello, National IHS STD Program

Take the sex out of STI screening!

Views of young women on implementing Chlamydia screening in General Practice

BACKGROUND: Australia is developing a Chlamydia screening program. This study aimed to determine the attitudes of young women to the introduction of Chlamydia screening in Australian General Practice.

METHODS: In-depth face-to-face interviews with 24 young women from across Victoria, Australia, attending a randomly selected sample of general practices.

RESULTS: Young women reported that they would accept age-based screening for Chlamydia in general practice, during both sexual-health and non-sexual-health related consultations. Trust in their general practitioner (GP) was reported to be a major factor in the acceptability of Chlamydia screening. The women felt Chlamydia screening should be offered to all young women rather than targeted at "high risk" women based on sexual history and they particularly emphasised the importance of normalising Chlamydia screening. The women reported that they did not want to be asked to provide a sexual history as part of being asked to have a Chlamydia test. Some reported that they would lie if asked how many partners they had had

CONCLUSION: Women do not want a sexual history taken when being asked to have a Chlamydia test while attending a general practitioner. They prefer the offer of Chlamydia screening to be based on age rather than assessment of sexual risk. Chlamydia screening needs to be normalised and destigmatised. *Pavlin NL, Parker R, Fairley CK, Gunn JM, Hocking J. Take the sex out of STI screening! Views of young women on implementing Chlamydia screening in General Practice. BMC Infect Dis. 2008 May 9;8:62.*

www.ncbi.nlm.nih.gov/pubmed/18471280

(Estimation of HIV..., continued from page 1)

This study includes updated estimates of rate of new HIV cases for specific populations:

Total	22.8 per 100,000
Gender	
Male	34.3 per 100,000
Female	11.9 per 100,000
Age	
13-29	26.6 per 100,000
30-39	42.6 per 100,000
40-49	30.7 per 100,000
50-99	6.5 per 100,000
Race/Ethnicity	
African Amer.	83.7 per 100,000
Hispanic	29.3 per 100,000
Amer. Indian/ Alaska Native	14.6 per 100,000
White	11.5 per 100,000
Asian/Pac Isl.	10.3 per 100,000

Although the number of HIV/AIDS cases in American Indians and Alaska Natives represents less than 1% of the total number of U.S. cases, when population size is considered, the rate of diagnosis for American Indians and Alaska Natives rank third overall. The CDC has recently updated the “HIV/AIDS among American Indians and Alaska Natives” Fact Sheet. Data presented includes:

- From the beginning of the epidemic through 2005, AIDS was diagnosed in an estimated 3,238 American Indians and Alaska Natives.
- Women accounted for 29% of the HIV/AIDS cases among American Indians & Alaska Natives.
- Transmission categories for American Indian/Alaska Native men were:
 - 61% Male-to-male sexual contact
 - 15% Injection Drug Use
 - 13% Male-to-male sexual contact and injection drug use
 - 10% High-risk heterosexual contact
 - 1% Other
- Transmission categories for American Indian/Alaska Native women were:
 - 68% High-Risk Heterosexual Contact
 - 29% Injection Drug Use
 - 2% Other

The fact sheet also addresses several risk factors that may affect risks for transmission of HIV and barriers to testing for American Indians and Alaska Natives. The full fact sheet can be viewed here: www.cdc.gov/hiv/resources/factsheets/PDF/aian.pdf.

As fully one-quarter of Americans of all races with HIV are unaware of their HIV status, and as people aware of their status

are less likely to transmit the infection to others, widespread HIV testing is now the national standard of care for adolescents and adults ages 13 to 64 in the United States. The CDC recommends:

For patients in all health-care settings:

- HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- Persons at high risk for HIV infection should be screened for HIV at least annually.
- Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health-care settings.

For pregnant women:

- HIV screening should be included in the routine panel of prenatal screening tests for all pregnant women.
- HIV screening is recommended after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- Repeat screening in the third trimester is recommended in certain jurisdictions with elevated rates of HIV infection among pregnant women.

The full CDC recommendations for HIV screening are available at: www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm

ACOG has now officially endorsed routine screening for women ages 19 to 64 and targeted screening outside of this age group. Simultaneously, ACOG issued a second Committee Opinion emphasizing the increased risk women of color face for acquiring HIV, primarily through heterosexual contact with a partner with undisclosed risk factors.

Both the CDC and ACOG recommend “opt-out” screening with verbal or written consent. Many states have updated their legal requirements for HIV screening to facilitate opt-out screening with verbal consent. A state-by-state summary of HIV testing laws is now available through the National HIV/AIDS Clinicians’ Consultation Center of the University of California San Francisco and San Francisco General Hospital. The compendium, updated regularly, can be found at: www.nccc.ucsf.edu/StateLaws.

Does your worksite routinely offer HIV screening to all adolescents and adults? Is HIV screening routinely included with other prenatal labs unless the pregnant woman declines such testing? A study conducted by the CDC/IHS Epidemiology and Disease

Prevention Center in Albuquerque reports that prenatal HIV screening at IHS sites increased from 54% in 2005 to 74% in 2007 but also demonstrated many opportunities to improve both screening and documentation of test results. For more information about this study, please see the report from Brigg Reilley in the August issue of the IHS Primary Care Provider at www.ihs.gov/Publicinfo/Publications/HealthProvider/issues/PROV0808.pdf.

The Indian Health Service has an HIV program which is run by Scott Giberson. He can be reached at Scott.Giberson@ihs.gov.

Centers for Disease Control. CDC HIV/AIDS Fact Sheet; HIV/AIDS among American Indians and Alaska Natives. Updated, August 2008. www.cdc.gov/hiv/resources/factsheets/PDF/aian.pdf

(IHS CHN..., continued from page 3)

3. Urban Indian Health Institute. <http://www.uihi.org/>

Reference:

Dixon, M, Roubideaux, Y (2001). *Promises to Keep: Public Health Policy for American Indians & Alaska Natives in the 21st Century*. Washington D.C.: American Public Health Association. 121-134.

Special Announcement

CDC-TV is currently making the soon to be released animated version of all 4 Eagle Books available for viewing on the internet at www.cdc.gov/CDCTV/

The animated version of the Eagle Book series (Through the Eyes of the Eagle, Knees Lifted High, Plate Full of Color, and Tricky Treats) has been created for availability on DVD from the Native Diabetes Wellness Program (NDWP), Division of Diabetes Translation (DDT), Centers for Disease Control and Prevention (CDC).

The full featured DVD can be used in many ways as an interactive tool with parents, teachers and communities to engage children in activities and discussions about healthy eating and the joy of being active while looking to traditional ways to stay healthy and prevent type 2 diabetes.

The author of the original Eagle Books, Georgia Perez, provides the narration for the animated videos. Children and adults from the Standing Rock Sioux tribal nation bring the book

Centers for Disease Control. *MMWR Recommendations and Reports; Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. September 22, 2006 / 55(RR14);1-17*

American College of Obstetricians and Gynecologists. *ACOG committee opinion. Routine human immunodeficiency virus screening. Obstet Gynecol. 2008 Aug;112(2 Pt 1):401-3.*

American College of Obstetricians and Gynecologists. *ACOG committee opinion. Human immunodeficiency virus and acquired immunodeficiency syndrome and women of color. Obstet Gynecol. 2008 Aug;112(2 Pt 1):413-6.*

characters alive with their creative voice talent.

The DVD has many special features including:

- Three American Indian language translations of the books (Chickasaw, Paiute, Shoshone)
- Spanish translations
- Closed Captioning (CC) and Video Descriptions (for the Deaf/Hard of Hearing/Blind and Visually Impaired)
- Information about the author and illustrators
- Resources for children, parents, teachers and communities

To assist teachers and parents the DVD can be stopped and started for listening to elders, demonstrating fun ways to be active, describing the many colored fruits and vegetables from Mother Earth, and deciding what is a “sometimes” or “everyday” food selection. Teachers and parents may also find the DVD can be used as a read-along tool to accompany the print copies of the Eagle Books.

Join the fun and watch the Eagle Books characters and beautiful artwork by Patrick Rolo and Lisa Fifeild come alive on the DVD and the internet today.

If you have questions about the animation please contact [Cherryll Ranger chr4@cdc.gov](mailto:Cherryll.Ranger@cdc.gov)

Save the dates

Postgraduate Course on Obstetric, Neonatal and Gynecologic Care

- September 14–18, 2008
- Salt Lake City, Utah
- Comprehensive Women's Health Update for Nurses, Advanced Practice Nurses, and Physicians
- NRP offered as pre-conference session
- Contact Yvonne Malloy, ymalloy@acog.org, for more information

Medical Providers' Best Practices Conference, 3rd Annual

- November 18–19, 2008;
- Sacramento, CA
- California Area Indian Health Service
- More information: 916.930.3937 or IHS-CAOGPRA@ihs.gov

2008 Indian Health Information Management Conference, "Managing Health Information Technology to Improve Performance and Outcomes"

- December 15–19, 2008
- Phoenix, Arizona
- Information at: www.ihs.gov/cio/ihimc

First International Meeting on Indigenous Women's Health/Third International Meeting on Indigenous Child Health Conference; Many Voices into One Song

- Women's Health March 4–6, 2009
- Child Health March 6–8, 2009
- Albuquerque, NM
- Joint conference of Women's Health and Children's Health Providers from Canada and the United States

Advances in Indian Health Conference

- April 21–24, 2009
- Albuquerque, NM
- Indian Health's conference for primary care providers and nurses
- 28 hours of CME/CE credit
- Optional Diabetes track
- Contact the Course Director, Dr. Ann Bullock, at annbull@nc-choke.com for more information.

Abstract of the Month

- Estimation of HIV incidence in the United States
—Includes updated estimates of rate of new HIV cases for specific populations:

From Your Colleagues

- Lois Goode, Whiteriver, AZ—Scott Gaustad named next Physical Rehabilitation Services Chief Clinical Consultant
- David Gahn, Kabul, Afghanistan—Afghanistan Update: Assistant Secretary for Health ADM Joxel Garcia, MD, FACOG visits Kabul
- Brigg Reilley, Albuquerque, NM—Indian Health Service Prenatal HIV Screening: Gaps and Best Practices

Hot Topics

- Obstetrics—Highlights from the International Workshop Conference on Gestational Diabetes Diagnosis and Classification held June 11–13, 2008
- Gynecology—Health and economic implications of HPV vaccination in the United States
- Child Health—Association between Maternal Diabetes in Utero and Age of Offspring's Diagnosis with Type 2 Diabetes
- Chronic disease and Illness—Naltrexone alone and with sertraline for the treatment of alcohol dependence in Alaska natives and non-natives residing in rural settings: a randomized controlled trial

Features

- ACOG—Alternatives to Hysterectomy in the Management of Leiomyomas—Routine Human Immunodeficiency Virus Screening—Aromatase Inhibitors in Gynecologic Practice—Age-Related Fertility Decline—Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome and Women of Color
- AFP American Family Physician—Spontaneous Vaginal Delivery
- Breastfeeding—Infant Feeding in Disasters
- Family Planning—Beyond the 6 week postpartum check; try 3 weeks instead...
- International Health Update—Active tuberculosis more likely in diabetics: a new meta-analysis has serious global health implications
- Midwives Corner—Centering Pregnancy; A Model of Group Prenatal Care

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