NATIONAL COUNCIL OF CHIEF CLINICAL CONSULTANTS

CCC CORNER

Focus on the Health of American Indians and Alaska Natives

Vol 6, No 04
April 2008

High prevalence of HPV infection
in American Indian women of the Northern Plains

Objectives Cervical cancer is the leading gynecological malignancy worldwide, and the incidence of this disease is very high in American Indian women. Infection with the human papillomavirus (HPV) is responsible for more than 95% of cervical squamous carcinomas. Therefore, the main objective of this study was to analyze oncogenic HPV infections in American Indian women residing in the Northern Plains.

Methods Cervical samples were collected from 287 women attending a Northern Plains American Indian reservation outpatient clinic. DNA was extracted from the cervical samples and HPV-specific DNA was amplified by polymerase chain reaction (PCR) using the L1 consensus primer sets. The PCR products were hybridized with the Roche HPV Line Blot assay for HPV genotyping to detect 27 different low- and high-risk HPV genotypes. The Chi-squared test was performed for statistical analysis of the HPV infection and cytology diagnosis data.

Results Of the total 287 patients, 61 women (21.25%) tested positive for HPV infection. Among all HPV-positive women, 41 (67.2%) were infected with high-risk HPV types. Of the HPV infected women, 41% presented with multiple HPV genotypes. Additionally, of the women infected with oncogenic HPV types, 20 (48.7%) were infected with HPV16 and 18 and the remaining 21 (51.3%) were infected with other oncogenic types (i.e., HPV59, 39, 73). Women infected with oncogenic HPV types had significantly higher (p=0.001) abnormal Papanicolaou smear tests (Pap test) compared to women who were either HPV negative or positive for non-oncogenic HPV types. The incidence of HPV infection was inversely correlated (pb0.05) with the age of the patients, but there was no correlation (p=0.33) with seasonal variation.

Conclusions In this study, we observed a high prevalence of HPV infection in American Indian women residing on Northern Plains Reservations. In addition, a significant proportion of the oncogenic HPV infections were other than HPV16 and 18.

Bell MC, Schmidt-Grimminger D, Patrick S, Ryschon T, Linz L, Chauhan SC. There is a high prevalence of human papillomavirus infection in American Indian women of the Northern Plains. Gynecol Oncol. 2007 Nov;107(2):236-41.

OB/GYN CCC Editorial

Multiple HPV subtypes seen in Northern Plains and Alaska Natives: Keep up screening efforts

Bell et al's findings of multiple co-infections with high risk HPV subtypes in American Indian women of the Northern Plains mirrors Sebbelov's data among Alaska Native women in which multiple genotypes were found in 36.5% of patients.

Sebbelov's retrospective study examining the HPV genotypes in tissue specimens from 52 patients diagnosed with cervical cancer from 1980 to 1989, identified HPV type 16 in 79%, type 33 in 32%, type 31 in 21%, and type 18 in 4%. Infections with multiple genotypes were found in 36.5% of Alaska Native women, much higher than among Greenland Native patients (4%) and Danish Caucasian patients (7%) in the study. These finding suggest that up to 83% of Alaska Native cervical cancers are caused by the HPV types targeted in the vaccine, although the high prevalence of multiple high risk genotype infections raises concern for how effective the currently available HPV vaccine may be in

(continued on page 15)

THIS MONTH

You can make a huge difference

Afghanistan has one of the highest infant-mortality rates of any nation in the world, and the highest maternal-mortality rate ever recorded. In the past 4.5 years, the nationwide infant mortality rate in Afghanistan has fallen from 165 per 1,000 live births to 135 per 1,000 live births.

By strengthening hospital management and leadership, and developing culturally appropriate residency programs for physicians, midwives and other health providers at RBH, HHS have been able to improve the quality of maternal and neonatal health care for Afghan mothers and their babies. See David Gahn's article on page 4

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

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

IHS Child Health Notes

"It doesn't matter if the cat is black or white as long as it catches mice."
—Chinese Proverb

Quote of the month

"What is research but a blind date with knowledge."
—Will Henry

Article of Interest

Estimating the effectiveness of screening for scoliosis: a case-control study.

Pediatrics. 2008 Jan;121(1):9-14.

Does screening for scoliosis lead to earlier detection and decrease the need for surgical treatment? The answer to the first question is "yes". Disappointingly, the answer to the second question appears to be "no".

This was a case control study done in the Netherlands. Patients who underwent screening were diagnosed with scoliosis at an earlier age (10.8 years versus 13.4 years) but earlier detection did not decrease the eventual need for surgical treatment. This also calls into question whether earlier detection and bracing is effective. The authors suggest that a randomized controlled trial of screening and bracing is needed to definitively resolve this question.

Editorial Comment

Screening programs for scoliosis have been around for over 30 years. In the United States 26 states actually mandate school screening for scoliosis. The belief is that with early detection, treatment of scoliosis may be instituted sooner, thereby reducing the number of patients who will require surgery or have crippling deformities.

To screen in such a manner that no one with scoliosis is missed, many individuals are identified falsely as having scoliosis and are referred for confirmation by the pediatrician or orthopedist. Because so many patients are identified falsely, the true cost of screening is unacceptably high. There may also be significant emotional baggage in being identified incorrectly with scoliosis or with scoliosis that is clinically trivial. Given that the benefits are unproven, and that the economic and emotional costs are high, school screening programs for scoliosis have been discontinued in Great Britain and Canada. The American Academy has no policy specifically addressing school screening for scoliosis but does endorse scoliosis evaluation as part of well child care for teens.

Until a definitive randomized controlled trial demonstrates the benefit of school screening for scoliosis it is perhaps better to focus our efforts on screening and treatments with proven benefits.

Infectious Disease Updates.

Rosalyn Singleton, MD, MPH

Here's recent news highlights from the world of vaccines

1. The Advisory Committee on Immunization Practices recommended in February to expand recommendations for yearly flu vaccine to all children 6 months to 18 years. An additional 30 million children will be recommended to receive flu vaccine.

Comment: This makes sense from a disease transmission standpoint. The Japanese showed an overall decrease in influenza illness among all ages when school-aged children were required to receive flu vaccine. While this is welcome news, I find this a little daunting because of all the shots we currently give. Could be a strong case for nasal FluMist®.

2. Merck's ProQuad Vaccine linked to more Seizures: A study presented to the ACIP last month has found that the Merck combination MMR-Varicella vaccine has been associated with higher rates of fever-related convulsions in children. The study found a two times higher rate of seizures in children who received the vaccine than in those who received separate MMR and Varicella. The excess number of seizures was estimated at 5 per 10,000. Although researchers could not isolate factors causing increased rates of fever-related convulsions, they did note that ProQuad contained five times more varicella antigen than Varivax®.

I can't comment on this issue since we haven't used ProQuad in Alaska (We don't have a way to keep it frozen in transit here in the cold north!)

3. Two recent Measles outbreaks in the US underscore the need to maintain high vaccination coverage, and the impact of "vaccine refusals":

a. A Japanese ballplayer traveled while sick with measles to the Little League World Series, causing measles to erupt in Pennsylvania, Michigan and Texas!

b. A child traveling from Switzerland to San Diego exposed numerous children at schools, parks, circuses and clinics resulting in 11 confirmed cases of measles. Health officials say the outbreak

should prompt parents to get their children vaccinated, as all of the confirmed cases involve children who did not receive the measles shot due to their young age or whose parents opted not to have them vaccinated.

Comment: I think it's important for folks who refuse vaccines out of fear to understand some of the risks. These are great lessons!

Recent literature on American Indian/ Alaskan Native Health

Michael L. Bartholomew, MD

Reingold A, Hadler, J, Farley MM, Harrison GL, Lynfield R, Lexau, Benett N, Thomas A, Craig AS, Smith PJ, Beall B, Witney CG, Moore M, Pilishvili T. Invasive Pneumococcal Disease in Children 5 Years After Conjugate Vaccine Introduction—Eight States, 1998-2005. MMWR Morb Mortal Wkly Rep. 2008 Feb 15;57(06);144-148.

This study investigates invasive pneumococcal disease (IPD) trends in children 5 years and younger pre- and post-introduction of 7-valent pneumococcal conjugate vaccine (PCV7) in 8 states from 1998 to 2005 through analysis of CDC's Active Bacterial Core (ABCs) surveillance data (population and laboratory-based surveillance data). Their results indicate that the incidence of IPD among children <5 years in 1998-1999 (pre-PCV7 vaccine years) were 98.7 cases per 100,000 while in 2005 the rate was 23.4 cases per 100,000 giving an overall rate reduction of 77%! Rates of IPD declined across all age groups with the largest absolute rate reduction {175.7 per 100,000 (82%)} in children aged 1 year (largest baseline rate).

The painted picture may not be "so rosy." Non-PCV7 IPD appears to be on the rise. Further evaluation of the data indicates a leveling off of IPD rates from 2002 to 2005. This steady state is in large part due to non-PCV7 IPD, particularly the 19A serotype. In 2005, the incidence of 19A serotype IPD was 9.3 cases per 100,000; an increase from 2.6 cases per 100,000 in 1998-1999. In 2005, 40% of IPD were related to non-PCV7 serotypes.

Singleton et al1 illustrated a similar trend in IPD in Alaska Native children. For Alaska Native children less then 2 years of age, the overall all IPD rate reduction was 67% (from 403.2 cases per 100,000 in the pre-PVC7 vaccine years of 1995 through 2000 to 134.3 cases per 100,000 in 2001-2003). The rate of IPD attributed to PVC7 covered serotypes (PVC7 IPD) in 1995-2000 was 275.3 per 100,000. After introduction of PCV7 there was a 92% reduction to 23.4 per 100,000 by 2001-2003 in PVC7 IPD. By 2004-2006, the rate reduced further to 10.6 PVC7 IPD cases per 100,000. These advances in rate reduction were off set by increases in non-PVC7 IPD seen in the Alaska Native children population. The rate of non-PVC7 IPD prior to introduction of PVC7 in children less than 2 years was 95.1 per 100,000. Through 2006, this rate increased by 140% to 228.6 cases of non-PVC7 IPD per 100,000. This rate more than doubled between 2001-2003 and 2004-2006. A majority of these non- PVC7 IPD cases were caused by serotype 19A.

Both studies support the development of expansion of the valency of conjugate vaccines to protect against serotypes not included in the current PCV7 vaccine, especially serotype 19A. Time will tell whether expansion will be beneficial in further reducing IPD rates, elimination of health disparities as it relates to IPD, and improvement in the health status of AI/AN children. As Dr. Esposito would say, "I will try to keep you posted."

Reference:

1. Singleton RJ, Hennessy TW, Bulkow LR, Hammitt LL, Zulz T, Hurlburt DA, Butler JC, Rudolph K, Parkinsn A. Invasive Pneumococcal Disease Caused by Nonvaccine Serotypes Among Alaska Native Children With High Level of 7-Valent Pneumococcal Conjugate Vaccine Coverage. JAMA. 2007;297:1784-1792.

From Your Colleagues

David Gahn, Tahlequah

Afghanistan Update

On January 12th, 2007, and Indian Health Service team deployed to Kabul, Afghanistan as part of the HHS Afghanistan Health Initiative. Dr. Pat O'Connor, MD (Pediatrics, Tuba City, AZ), Dr. Brandon Taylor, Pharm. D. (Tahlequah), and I endured 6 weeks of a brutal Afghanistan winter working at Rabia Balkhi Women's Hospital (RBH).

We encountered what we expected – a hospital staff overwhelmed with pathology in the face of lack of supplies and training. We all tackled our problem lists and worked on providing sustainable training, bedside teaching, and making recommendations to the Office of Global Health Affairs (OGHA) and the Centers for Disease Control and Prevention (CDC) on equipment needs, staffing, and training while providing epidemiological data on the patients.

Two non-governmental organizations (NGO's) are currently working at RBH under cooperative agreements with HHS. International Medical Corps is focused on providing training to the hospital staff is general areas (i.e. infection prevention) as well as specific clinical training to physicians, nurse midwives, laboratory personnel, et al. Cure International is responsible for developing the administration of RBH as well as the supply chain issues. The NGO's are experts at what they do and, partnering with OGHA, CDC and IHS, they have made a significant impact on the morbidity and mortality occurring at RBH.

Dr. O'Connor, Dr. Taylor, and I spent a majority of our time at the bedside with the physicians and pharmacists conducting clinical teaching and modeling the team approach to patient care. As I mentioned in a previous article, RBH houses an Ob/Gyn residency training program. The residents lack a strong foundation in basic sciences, but have superb clinical skills due mainly to the amount of pathology that presents to the hospital. The focus of the project is developing the residency training program, but naturally that involves the entire hospital from housekeeping to the blood bank. Each system presents challenges for improvement, but the hospital staff is eager to move forward.

In January 2008, OGHA and IHS entered into an interagency agreement to allow for IHS clinicians to deploy to Kabul. Money has been identified by OGHA to reimburse individual service units through IHS headquarters. I have been assigned to work on the project full time, and we are assembling another team to deploy in June 2008 to continue the work. We are currently searching for an Ob/Gyn physician to deploy for four weeks, and have identified potential candidates in anesthesia, pediatrics, and an operating room nurse.

If you are interested in the project or have any questions, please contact david.gahn@IHS.gov. The work is exciting, incredibly rewarding, and very challenging.

OB/GYN CCC Editorial

You can make a huge difference

Participating in the Rabia Balkhi Women's Hospital project could change your life. Make no mistake, Rabia Balkhi Hospital does not compare to a modern U.S. hospital. However, since HHS began its involvement with the hospital, it "is cleaner and provides better care since the project began, experts agree." RBH is considered the best hospital in Kabul. It is clean, and it offers good health care to the people of Afghanistan.

RBH has become one of the best hospitals in Afghanistan. Its reputation draws an increasing number of patients, including many with very poor health and nutritional status, which has the unintended impact of stressing an already overburdened facility.

All HHS staff who have visited Afghanistan and who have been involved in this project have a heartfelt desire to do something to help the women and children who so desperately need our assistance in gaining access to basic medical care.

As HHS embarked on this project, no one underestimated the incredible challenge, and we fully recognized that much more would be needed from other sources, but doing something to get started was better than standing by and doing nothing.

What HHS has already accomplished at RBH exceeded our initial expectations, and created the hope that, with more investments and time, sustainable improvements can occur. HHS is proud of the work we have done in extremely challenging circumstances in Afghanistan. Everyone agrees there is much more that we can do, and many challenges to meet.

The challenges of providing health care in a war zone are enormous. Security restrictions have made it consistently difficult to deploy our personnel to Afghanistan.

Furthermore, in the short amount of time since we began the Afghanistan Health Initiative, the Afghan Government has had two different Health Ministers, each with very different approaches to conducting business; multiple Deputy Health Ministers; and two directors of RBH.

The newness and fragility of the Afghan Government has not always made decision-making and the flow of financial support for the project a simple matter.

But true to our tradition, if Indian Health is asked to help, we always do our best to contribute.

Hot Topics

Obstetrics

Cesarean delivery during nursing change of shift is associated with increased complications

RESULTS: Physician change of shift had no measurable effect on maternal and neonatal outcomes. Neonatal facial nerve palsies were increased at nursing change of shift (5 vs 0) as were hysterectomies (33 [0.24%] vs 23 [0.53%]; P _ .007). Nursing change of shift had no impact on composite maternal morbidity after controlling for age, race, insurance, medical problems, prior incision type, weekend day, and prenatal care (odds ratio _ 0.98; 95% confidence interval _ 0.89-1.08).

CONCLUSION: Physician change of shift does not appear to be associated with an increase in morbidities. However, cesarean delivery during nursing change of shift is associated with increased risk of neonatal facial nerve palsy and hysterectomy. Further investigation is needed to understand the cause of this association.

Bailit JL, Landon MB, Lai Y, et al; for the National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network. Maternal-Fetal Medicine Units Network Cesarean Registry: impact of shift change on cesarean complications. Am J Obstet Gynecol 2008;198:173.e1-173

Physical abuse during pregnancy present a large increase in the risk of preterm delivery

CONCLUSION: Women who have had physical abuse during pregnancy present a large increase in the risk of preterm delivery, independently from a large set of sociodemographic and behavioral characteristics usually recognized as determinants of preterm birth.

Rodrigues T et al Physical abuse during pregnancy and preterm delivery. Am J Obstet Gynecol. 2008 Feb;198(2):171.e1-6

Gynecology

Co-Occurrence of Pelvic Floor Disorders May Be High in Women

METHODS: Stress urinary incontinence (SUI), overactive bladder (OAB), pelvic organ prolapse (POP), and anal incontinence were assessed using a validated questionnaire among 25- to 84-year-old women.

CONCLUSION: Although the prevalence of pelvic floor disorders in a community-dwelling population is high, age was not a significant contributor after adjustment for confounders. The high co-occurrence of pelvic floor disorders suggests that physicians seeing women seeking care for one condition should inquire about symptoms of other disorders. LEVEL OF EVIDENCE: II.

Lawrence JM et al Prevalence and Co-Occurrence of Pelvic Floor Disorders in Community-Dwelling Women. Obstet Gynecol. 2008 Mar;111(3):678-685.

The Evolution of Midurethral Slings

Use of urethral slings in the treatment of incontinence started in the early 20(th) century. An evolution in understanding the pathogenesis of urinary incontinence led to development of the midurethral sling, which was designed to replace the natural suburethral vectors of support, as described in the integral theory. Since the introduction of tension-free vaginal tape in 1995, multiple other commercially available types of midurethral sling have been introduced. In general, these sling types share the common characteristics of using a thin, type I synthetic mesh inserted at a midurethral level and applied without tension. The midurethral sling procedure has subsequently undergone multiple technical modifications, predominantly alterations to the technique and route used for sling insertion. Despite the variety in techniques, available evidence suggests that all sling types provide efficacious and durable outcomes. Several adverse effects have been reported that are specific to certain techniques, and include the risk of vascular, enteric or nerve injury, lower urinary tract injury, urinary retention or voiding dysfunction, and vaginal erosion. Nonetheless, the midurethral sling provides a safe surgical option overall, and represents a notable advance in the treatment of stress urinary incontinence

Rapp DE et al The evolution of midurethral slings. Nat Clin Pract Urol. 2008 Mar 4;

Child Health

Maternal grandmothers' alcohol use linked to FAS in the Northern Plains

Introduction: Characteristics of Northern Plains American Indian maternal grandmothers who had grandchildren with fetal alcohol syndrome (FAS) or incomplete FAS are described to more effectively prevent fetal FAS and alcohol use during pregnancy.

Obstetrics

Early maternal feeding following CD is associated with higher maternal satisfaction

METHODS: A prospective, randomised study was designed including 179 women undergoing first or repeated CD. Women who were assigned to the early feeding group received clear fluids and solid food within 8 h of surgery, in accordance with their request. The traditionally fed women received clear fluids 8-12 h after the surgery subsequent to physician examination confirming bowel sounds.

CONCLUSIONS: Early maternal feeding following CD is associated with higher maternal satisfaction. However, it is not associated with higher rates of post-operative complications.

Bar G, et al Early maternal feeding following caesarean delivery: a prospective randomised study.

Acta Obstet Gynecol Scand. 2008;87(1):68-71.

Methods: Study 1 had 27 maternal grandmothers who had grandchildren with FAS and Study 2 had 18 grandmothers with grandchildren who had incomplete FAS (cases) which were compared with 119 maternal grandmothers who had grandchildren without FAS (controls). The grandchildren were born between 1981 and 1993 on the Northern Plains. Medical records were manually reviewed for each case and control grandmother. Data were analyzed using Mantel–Haenszel chi square.

Results: Study 1 case grandmothers were more likely to experience medical problems (70.4%) including trauma (48.1%) and injuries (51.9%) than the controls. Most of the Study 1 and 2 case grandmothers (92.6% and 77.8%, respectively) had alcohol use documented in their medical records compared to less than half of the control grandmothers. Seven (15.6%) of the case grandmothers had more than one grandchild in either Study 1 or Study 2.

Conclusion: Maternal grandmothers who had grandchildren with FAS had significantly higher rates of alcohol use and alcohol-related medical problems than control grandmothers. Antenatal care providers should screen pregnant women for alcohol use at their first visit. The provider needs to ask the women who are using alcohol about their mothers' use of alcohol to provide appropriate care and counseling for the women and prevent FAS.

Kvigne VL, Leonardson GR, Borzelleca J, Welty TK. Characteristics of Grandmothers who have Grandchildren with Fetal Alcohol Syndrome or Incomplete Fetal Alcohol Syndrome. Matern Child Health J. 2008 Jan 15

Comments from the authors:

When a child is diagnosed with FAS, please consider a FASD evaluation for the mother

Over a decade ago we conducted a case control study of children with FAS and incomplete FAS in northern Plains Indian communities. The recently published report of grandmothers of the case children indicates a familial pattern of alcohol use during pregnancy that we hope will help with the understanding and prevention of FAS. The report emphasizes the importance of screening for substance use at the first antenatal visit and for interventions to help women who are drinking to stop. Evaluation of the family situation is a critical component of promoting abstinence throughout pregnancy in pregnant women who are drinking. The pregnant mom herself may be adversely affected by fetal alcohol exposure and need considerable support to cope with her social situation. A multidisciplinary approach to such cases will likely be the most successful. Reduction or elimination of fetal alcohol exposure will give the offspring of such pregnancies the best chance of being productive citizens in their communities. It seems that that when a child is diagnosed with Fetal Alcohol Syndrome perhaps the mother needs to also be evaluated for a Fetal Alcohol Spectrum Disorder. (Tom Welty, Valborg Kvigne)

Chronic Illness

Pedometer-Based Walking Programs Helpful for Overweight, Sedentary Adults

CONCLUSION: Pedometer-based walking programs result in a modest amount of weight loss. Longer programs lead to more weight loss than shorter programs.

Richardson CR et al A meta-analysis of pedometer-based walking interventions and weight loss.

Ann Fam Med. 2008 Jan-Feb;6(1):69-77.

Chronic disease and Illness

Low-dose aspirin is linked to lower risk for all-cause mortality in women, especially older women

CONCLUSIONS: In women, low to moderate doses of aspirin are associated with significantly lower risk of all-cause mortality, particularly in older women and those with cardiac risk factors. A significant benefit is evident within 5 years for cardiovascular disease, whereas a modest benefit for cancer is not apparent until after 10 years of use.

Practice Pearls

- Women who take low to moderate doses of aspirin (1 - 5 tablets per week) have lower risk for mortality from all causes.
- Women who take low to moderate doses of aspirin have lower risk for mortality from cardiovascular disease within 5 years and lower risk for mortality from cancer after 10 years.
- However, current clinical practice should not be changed yet based on the results from this observational study.

Chan AT et a; Long-term aspirin use and mortality in women. Arch Intern Med. 2007 Mar 26;167(6):562-72.

How is Your Sleep: A Neglected Topic for Health Care Screening

RESULTS: Direct questions about sleep health are often not included in health history questionnaires. Eight of 14 (57%) database batteries reviewed in this study featured no sleep-related questions. Other lifestyle issues were screened with much greater frequency. For example, questions about healthy eating patterns and regular physical activity were present in 13 and 12 of the 14 batteries (93% and 86%), respectively. CONCLUSIONS: Despite the significant burden that sleep disorders place on human health, this study found that clinics do not screen for them as frequently as they do for other lifestyle/behavioral issues when they establish a health history database for new patients.

Sorscher AJ. How is Your Sleep: A Neglected Topic for Health Care Screening. J Am Board Fam Med. 2008 Mar-Apr;21(2):141-8

Features

ACOG American College of Obstetricians and Gynecologists

Treatment of Urinary Infections in Nonpregnant Women

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

- Screening for and treatment of asymptomatic bacteriuria is not recommended in nonpregnant, premenopausal women.
- Resistance rates higher than 15–20% necessitate a change in antibiotic class.
- In all cases of acute pyelonephritis, whether treatment is on an inpatient or outpatient basis, 14 days of total antimicrobial therapy should be completed.
- A 3-day antimicrobial regimen is the preferred treatment duration for uncomplicated acute bacterial cystitis in women, including women aged 65 years and older.

The following conclusion is based on limited or inconsistent evidence (Level B):

- The initial treatment of a symptomatic lower UTI with pyuria or bacteriuria or both does not require a urine culture.

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

- Beta-lactams, such as first-generation cephalosporins and amoxicillin, are less effective in the treatment of acute uncomplicated cystitis than those antimicrobials listed in Table 1.
- To diagnose bacteriuria, decreasing the colony count to 1,000–10,000 bacteria per milliliter in symptomatic patients will improve the sensitivity without significantly compromising specificity.

ACOG Practice Bulletin No. 91: Treatment of Urinary Tract Infections in Nonpregnant Women. Obstet Gynecol. 2008 Mar;111(3):785-94.

AHRQ Agency for Healthcare Research and Quality

Care quality is not necessarily better with electronic health records

Electronic health records (EHR) do not automatically guarantee higher quality care in medical settings, a new study finds. Researchers from Harvard and Stanford looked at the effect EHRs had on 17 indicators of quality, including disease management, antibiotic use, preventive counseling, screening tests, and drugs prescribed for elderly patients. They found EHRs improved performance for 2 indicators, worsened performance for 1, and offered no real advantage for the remaining 14.

Physicians using EHRs scored well in not prescribing sedatives (benzodiazepines) to depressed patients and avoiding routine urinalyses at general medical visits. In addition, when researchers limited the study sample to primary care and heart physicians, those who employed EHRs more often counseled smokers to quit. Yet, doctors who had EHR systems didn't do as good a job in prescribing medication for patients with high cholesterol as those who didn't use EHR systems, notes Jeffrey A. Linder, M.D., M.P.H.

Dr. Linder and colleagues used 2003 to 2004 data from more than 50,000 patient records collected by the National Ambulatory Medical Care Survey of patient visits to U.S. physician practices. Electronic health records were used in 18 percent of about 1.8 million ambulatory medical visits during the study period.

The authors note that performance for both groups—with and without EHRs—was below par, indicating there is room for improvement across the board. They stress that no one should assume that quality improves as EHR use widens. Earlier studies conducted by the Agency for Healthcare Research and Quality, however, found that EHRs can boost the amount of care that meets with guidelines, improve care through clinical monitoring, and curtail medical errors.

The authors recommend that physicians adopting EHR systems consider ones that include clinical decision support and use that feature to improve care.

This study was funded in part by the Agency for Healthcare Research and Quality (HS14563 and HS11313).

See "Electronic health record use and the quality of ambulatory care in the United States," by Dr. Linder, Jun Ma, M.D., R.D., Ph.D., David W. Bates, M.D., M.Sc., and others, in the July 9, 2007, Archives of Internal Medicine; pp. 1400-1405

Ask a Librarian

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

Women's Health Resources

A new Web resource providing scientists and consumers with the latest information on significant topics in women's health research from scientific journals and other peer-reviewed sources is now available through the National Library of Medicine (NLM). The NLM Division of Specialized Information Services, Office of Outreach and Special Populations has partnered with the NIH Office of Research on Women's Health (ORWH) to create this one-stop resource.

The 2008 National Institutes of Health (NIH) Research Priorities for Women's Health were used to identify overarching themes, specific health topics, and research initiatives in women's health. Within each section of the Web site are topics with links to relevant and authoritative resources and research initiatives for women's health.

Women's Health Resources from the NLM Web site can be found at:
http://sis.nlm.nih.gov/outreach/womenshealthoverview.html

Behavioral Health Insights

Peter Stuart, IHS Psychiatry Consultant

School Refusal

By Elise Fatimi, MD*

It is estimated that up to 4% of children refuse school because of anxiety. Ten- to 14-year-olds are especially prone to school refusal. These children may go on to be less likely to ever marry or have children, and are at increased risk for future anxiety disorders and depression. Because anxiety is strongly hereditary, a parent may be too fearful to set firm limits in the face of their child's panic. With each day's unexcused absence it grows harder to reestablish regular school attendance.

Sometimes the goal of returning to full attendance is abandoned, and a child may be home-schooled, or provided home-based instruction by the school. This may maintain academic achievement, but social confidence and age-appropriate friendships often suffer. It takes a strong commitment of time and social networking for a parent to engage with other home-schooling families. For working parents, or those with anxiety problems of their own, this is a tall order.

A child who refuses school may have a real illness or a good reason to worry (e.g. a depressed parent, a bully in the playground). But when these have been ruled out with reasonable confidence, explore for anxiety symptoms. Have other separations been difficult? Is the child a 'worrier'? Have there been past attempts at school refusal after holiday breaks or illnesses? Is there a family history of anxiety?

There are many "flavors" of anxiety. Children who refuse school may have Separation Anxiety Disorder. A child may also have Generalized Anxiety Disorder, with worries about illness, worst-case scenarios, or far-off events, and physical symptoms such as headaches and stomachaches. In Social Anxiety Disorder, children are fearful of embarrassment, scrutiny, or interacting with unfamiliar people.

I consider school refusal to be a genuine psychiatric emergency, much like heavy bleeding. A child's confidence in his ability to "make it" is, in a sense, hemorrhaging. Time is of the essence. Here are some elements of an effective treatment plan:

1. Educate the whole family. Explain clearly that the goal is a return to full attendance, but that you will work hard to make this tolerable. Avoid bargaining ("let's wait until after Spring break, it's only another week") or granting of retroactive medical excuses. Get permission to contact school staff. Refer for therapy as needed to develop and follow a plan for reintroduction to school- children with more severe problems may start with a class period and increase steadily to a full day.
2. Work with school staff. Most principals will allow a child to use a 'time-out' in the nurse's office is he/she is too upset to stay in class. Ask the nurse not to send the child home before the agreed time unless there is objective evidence of illness. Devise a specific strategy for morning drop off at school. Parents should keep goodbyes brief. Avoid parent-child phone contact during the school day, as it tends to exacerbate anxiety.
3. Medication may be indicated when a child is severely anxious. Short-term use of benzodiazepines (e.g. clonazepam at bedtime before a school day) can help with anticipatory anxiety and insomnia. If the child is sleepy in the morning, reassure parents and teachers that "asleep at school is better than awake at home" at the start of treatment. Ongoing treatment of anxiety disorders is best achieved with SSRI medications (e.g. fluoxetine, sertraline). Self-injurious or aggressive behavior may (rarely) require inpatient management.

Most children can resume full school attendance within days to weeks, and many seem to forget the episode in a little while. In overcoming this challenge, the whole family will build confidence and skills for the future.

Here's a link to the American Academy of Child and Adolescent Psychiatry that has information on this topic as well as a large range of other psychosocial/mental health related ones:
http://www.aacap.org/cs/root/facts_for_families/children_who_wont_go_to_school_separation_anxiety

*This month's column is provided by Elise Fatimi, MD, a child and adolescent psychiatrist with long experience in IHS in the Southwest. She currently presides over the Greater Phoenix Chapter of the Academy of Child and Adolescent Psychiatry. She mixes clinical acumen and patient advocacy exceedingly well.

Breastfeeding

Suzan Murphy, PIMC

What makes a good idea work?

The concept of supporting breastfeeding is agreeable to most of us. The immunological impact and long term health benefits for both mom and baby make breastfeeding a sound and reasonable behavior to encourage. However, when the findings that breastfeeding can also significantly reduce risk of obesity/overweight and type 2 diabetes are added to the rationale, supporting breastfeeding becomes important tool in tackling a daunting and far reaching public health problem.

So, what will increase initiation and duration?

Baby Friendly Hospital Initiative, (USA) and Baby Friendly, UNICEF/WHO have similar steps that promote breastfeeding perinatally. Generally they are:

1 Maintain a written, well-communicated hospital breastfeeding policy.
2 Train clinical staff to effectively implement policy.
3 Inform all pregnant women about benefits and management of breastfeeding.
4 Help mother initiate breastfeeding ½ hour (UNICEF/WHO)/1 hour (USA) after birth.
5 Show mothers how to continue breastfeeding, even if they are separated from their babies.
6 Do not supplement babies unless medically indicated.
7 Practice rooming in – mother and infants remain together 24 hours/day.
8 Encourage unrestricted breastfeeding.
9 Give no pacifiers or artificial nipples to breastfeeding infants
10 Foster the establishment of breastfeeding support groups and refer mothers to them at discharge.

Research indicates that when the steps are implemented, breastfeeding initiation can increase by as much as 400%. Federal agencies surveyed women who planned to breastfeed and experienced five of the ten steps – early breastfeeding initiation (step 4), no supplementation unless medically indicated (step 6), rooming in (step 7), unrestricted breastfeeding encouraged (step) 8, and no pacifiers or artificial nipples used (step 9). Families who did not experience any of the steps were 8 times more likely to stop breastfeeding before 6 weeks. The more steps experienced, the more likely the family was to continue breastfeeding to 6 weeks and beyond. The strongest risk factors for stopping breastfeeding early were late breastfeeding initiation (missing step 4) and supplementing the baby (missing step 6).

For more information, please see DiGirolamo AM, LM Grummer-Strawn, S Fein. 2001. Maternity care practices: implications for breastfeeding. Birth 28:94-100.

National goals help support breastfeeding. Watch for upcoming information about Healthy People 2020 goals that enlist the community at large. New points of focus include:

Increasing the number of:

- Women who take family medical leave
- Employers with workplace lactation programs
- Baby Friendly hospitals
- Mothers who see lactation consultants in hospital
- Maternity staff receiving 18 hours of lactation training
- Mothers seen by appropriately trained lactation care providers post discharge
- Third party payers and employers who cover lactation care and services
- Number of hospitals that make donor human milk available

And reducing the number of breastfed neonates receiving supplemental formula that is not medically indicated.

Supporting breastfeeding is sometimes about a paradigm shift—big and little changes that may not be easy. It is also about education and choice. For our families it is about improving wellness now and later. **www.babyfriendlyusa.org**

Frequently asked questions

Does anyone have an EHR template that is IHS approved for obstetrical patients?

Question

I am new to IHS, but does anyone have an EHR template that is IHS approved for obstetrical patients?

From Maureen Sullivan CNM, WHNP, MS, Rosebud

Answer

We have a template that we use just for the initial intake visit.

Please contact

Mary Morphet-Brown
Mary.Morphet-Brown@IHS.GOV
Yakama Indian Health Center
Public Health Nursing

If you, or your colleagues, have other insights in templates for women's health care, please let me know at **nmurphy@scf.cc**

Information Technology

Seeking input from the field —Clinician's Information Management Technology Advisory Council

What do you see as the most important issues or needs at this time? What do you see as our future needs?

CIMTAC has been in existence for a number of years. We have been the clinicians (doctors and nurses) PSG - Professional Specialty Group. Requests for RPMS packages and enhancements filter through us for approval and/or prioritization. We are going to be taking a more active role in strategic planning for RPMS. We would appreciate your input.

Contact Kathy Ray at Kathy.Ray@IHS.GOV with your suggestions and input

International Health Update

Claire Wendland, Madison, WI

Routes to TB treatment in rural Nepal

Tuberculosis remains a serious problem in many low and middle-income countries, and as readers of this newsletter well know, it can also be an issue in impoverished parts of wealthy countries. Several factors associated with poverty make TB more likely: overcrowded living conditions, immune suppression (for instance due to HIV or substance abuse), chronic malnutrition. Besides increasing the chances of acquiring TB, poverty affects the likelihood of getting it properly diagnosed and treated.

A new qualitative study from Nepal explores just how people who develop symptoms from TB find their way to diagnosis and therapy. A team of Dutch and Nepalese researchers interviewed a convenience sample of twenty-six patients undergoing TB treatment at various public health centers – some remote, some more central – in lowland Nepal. They found that all of these patients had consulted more than one provider before beginning therapy. When patients decided where to seek help, their decisions were based on a combination of economic factors, their perceptions of whether the symptoms were serious or not, and the reputations and perceived quality of the providers. The opinions of family members or friends influenced their choices as well. Most patients reported that they began their journeys at a private practitioner's facility. Lines were long at the free public clinics, these clinics were often far away, and they were known to run short on medications. Patients knew they could get quicker care at nearby private clinics. Many of these places were "medical shops," places where one can buy drugs with no medical consultation or physical exam. Others were staffed by providers (sometimes medically trained, sometimes not) who offered consultation for a fee.

Unfortunately, only one of these private providers referred a patient to someone more qualified, a problem the authors suggest may relate to financial incentives to keep patients. Most patients self-referred elsewhere only when treatment failed or they lost trust in the competence of their providers. The delay introduced by this chain of referrals lasted an average of seven months before a TB diagnosis was made. (The one positive finding was that once anyone entertained the possibility of TB, appropriate referral for diagnosis and initiation of treatment was quite prompt.)

This article has significant limitations. Chief among these: the sampling strategy means we cannot know what is happening to those who do not find their way to the national treatment program. Nonetheless, these researchers uncovered several practical and counter-intuitive findings for health system planners. First, reputation of the public clinics deterred many people from seeking care there, at least initially – even though the care was free. Second, educational strategies intended to improve TB case-finding will probably need to involve private practitioners. Third, not one person interviewed mentioned anything that could be considered a "cultural barrier" to care, though these are often assumed to be significant in public health programs targeting the underserved.

Ten Asbroek AH, Bijlsma MW, Malla P, Shrestha B, Delnoij DM.. 2008 The road to tuberculosis treatment in Nepal: a qualitative assessment of 26 journeys. BMC Health Serv Res. 2008 Jan 11;8:7.

MCH Alert

Breastfeeding Improves Prevalence of Metabolic Syndrome Among Women in Midlife

We have found that duration of lactation is associated with prevalence of MetSyn [metabolic syndrome] in parous midlife women in a dose-response manner.

The authors found that

* There were 536 prevalent cases of MetSyn (21.3%).
* Among women who breast fed, 297 (18.3%) met the criteria for MetSyn, compared with 239 among those who did not (26.7%).
* Women who developed MetSyn were more likely to have a higher body mass index (BMI) at time of interview and at completion of high school, to be African American, to smoke, and to be of lower socioeconomic status. They also breast fed for shorter periods of time.
* Duration of lactation was inversely correlated with current BMI, waist circumference, systolic blood pressure, diastolic blood pressure, fasting levels of glucose, insulin, triglycerides, total cholesterol, and low-density lipoprotein cholesterol. There was a positive correlation with fasting high-density lipoprotein levels.
* After adjusting for age, current smoking, parity, ethnicity, socioeconomic status, study site, physical activity, caloric intake, and high-school BMI, parous women who had ever breast fed had a significantly lower prevalence of MetSyn.
* The rate of MetSyn was significantly lower with increasing duration of lactation, suggesting a dose-response relationship.

The authors conclude that "in addition to the pediatric benefits of breast-feeding, these findings

of maternal benefit may encourage more women to initiate and maintain breast-feeding behavior."

Ram KT, Bobby P, Hailpern S. 2008. Duration of lactation is associated with lower prevalence of the metabolic syndrome in midlife -- SWAN, the Study of Women's Health Across the Nation. American Journal of Obstetrics and Gynecology 198(3):268.e1-268e6.

MCH Headlines

Judy Thierry HQE

Maternal, Infant and Child Health Capacity Needs Assessment

In an effort to better understand the maternal, infant and child health (MICH) services available to urban American Indians and Alaska Natives (AI/AN); the Urban Indian Health Institute (www.uihi.org) conducted a Maternal, Infant and Child Health Capacity Needs Assessment with 34 urban Indian health organizations (UIHO) funded through Title V of the Health Care Improvement Act. The purpose of the assessment was to assist in identifying specific assets, limitations or gaps in the urban Indian health program as a whole.

The findings of this capacity needs assessment highlight current areas of strength and need in providing MICH care to urban AI/AN. Findings document a need for additional pregnancy and infant health services at many sites. Increased resources to support MCH services offered by UIHOs may effectively reduce observed MCH disparities among urban AI/AN in the risk of adverse birth outcomes and infant mortality.

For a link to the report: **www.uihi.org/publications/reports**. Please contact the Project Coordinator with any questions or comments: Shira Rutman, **shirar@uihi.org** or 415-374-7868.

Medical Mystery Tour

You know how to treat yeast infections, right? Which of these are true about vulvar pruritus?

1) It is important to ask patients presenting with vulvar pruritus if symptoms vary with their cycles

True
False

2) Candida glabrata tends to respond to intravaginal boric acid therapy

True
False

3) Nystatin successfully treats the majority of patients with tinea cruris.

True
False

4) Topical steroid ointments at the correct treatment for lichen sclerosus

True
False

5) Classic psoriasis occurs often on the vulva

True
False

Please think about the above scenarios.

The answers, with discussion and references, will be available in next month's CCC Corner Medical Mystery Tour.

Stay tuned to next issue

Menopause Management

What Happened to Women in WHI study 3 years after stopping HRT?

RESULTS: The risk of cardiovascular events after the intervention was comparable by initial randomized assignments, 1.97% (annualized rate) in the CEE plus MPA (343 events) and 1.91% in the placebo group (323 events). A greater risk of malignancies occurred in the CEE plus MPA than in the placebo group (1.56% [n = 281] vs 1.26% [n = 218]; hazard ratio [HR], 1.24; 95% confidence interval [CI], 1.04-1.48). More breast cancers were diagnosed in women who had been randomly assigned to receive CEE plus MPA vs placebo (0.42% [n = 79] vs 0.33% [n = 60]; HR, 1.27; 95% CI, 0.91-1.78) with a modest trend toward a lower HR during the follow-up after the intervention. All-cause mortality was somewhat higher in the CEE plus MPA than in the placebo group (1.20% [n = 233] vs 1.06% [n = 196]; HR, 1.15; 95% CI, 0.95-1.39). The global index of risks and benefits was unchanged from randomization through March 31, 2005 (HR, 1.12; 95% CI, 1.03-1.21), indicating that the risks of CEE plus MPA exceed the benefits for chronic disease prevention.

CONCLUSIONS: The increased cardiovascular risks in the women assigned to CEE plus MPA during the intervention period were not observed after the intervention. A greater risk of fatal and nonfatal malignancies occurred after the intervention in the CEE plus MPA group and the global risk index was 12% higher in women randomly assigned to receive CEE plus MPA compared with placebo.

Heiss G, et al. Health risks and benefits 3 years after stopping randomized treatment with estrogen and progestin. JAMA. 2008 Mar 5;299(9):1036-45

Gynecology

Acupuncture in dysmenorrhea associated with improved quality of life plus cost-effective

CONCLUSION: Additional acupuncture in patients with dysmenorrhea was associated with improvements in pain and quality of life as compared to treatment with usual care alone and was cost-effective within usual thresholds

Witt CM et al Acupuncture in patients with dysmenorrhea: a randomized study on clinical effectiveness and cost-effectiveness in usual care. Am J Obstet Gynecol. 2008 Feb;198(2):166

Midwives Corner

Lisa Allee, CNM, Red Mesa, AZ

Midwives Excel at Keeping Birth Normal, and Midwife-Provided Acupuncture Helps With PROM

Amy Romano, CNM with the Lamaze Institute for Normal Birth presents four fabulous studies in a review of research that further support the extensive benefits of normal birth.

The first study convincingly shows that midwifery care is more effective in keeping birth normal and, thus, women healthier. The study focused on care for women at moderate obstetrical risk. This prospective cohort study made use of an intriguing new tool called the "Optimality Index-US" which assesses care processes as well as outcomes giving better information than just mortality and morbidity. The study found provider type to be predictive of optimality with midwifery care having higher scores. For example: "The cesarean-section rate was 13% among women in the midwife group versus 34% in the physician group, a difference that also was not explained by health status alone. (The rates were 5.6% and 15.6%, respectively, after excluding women with preexisting chronic medical conditions.) In various statistical analyses, only type of provider accurately predicted cesarean rates in the two groups." As to why this may have been true some of the processes of care looked at included: "Compared to women in the physician group, women in the midwife group were more likely to drink or eat (95% vs. 80%); maintain mobility in labor (68% vs. 28%); and use nonpharmacologic methods of pain relief (88% vs. 51%). Epidural use was lower in the midwife group than in the physician group (31% vs. 51%), as was use of any pharmacologic pain-relief methods (64% vs. 82%)." Romano concludes her review with the following: "In this and other studies, midwifery care has been associated with high optimality, demonstrating appropriate use of interventions and good outcomes given the individual women's clinical situations. Midwives are often assumed to care for only low-risk women, but many midwives also care for women at moderate or high risk. This study finds that midwifery may be optimal for a moderate-risk population by promoting good outcomes with less reliance on technological and surgical intervention and greater attention to the care practices that support normal birth." This certainly rings very true for midwifery in the Indian Health Service—we care for women of all risk levels and have impressive outcomes and I would bet "optimality" scores as well. Anyone ready to do the research with this new tool?

The second study looked at third and forth degree perineal tears and again found the less interventionist path to be the preferred route. They looked at six modifiable factors-- forceps, vacuum, episiotomy, prolonged second-stage labor, fetal occiput posterior position during crowning, and epidural—and found that avoiding these individually and definitely in combination helped prevent third and forth degree tears. In her assessment of this study in regards to normal birth Romano says: "Third- and fourth-degree anal tears are highly associated with pain and incontinence in the postpartum period and contribute to long-term pelvic floor dysfunction. Unfortunately, this argument has fueled the debate about the rights of women to choose medically unnecessary cesarean surgeries rather than prompting examination of the obstetric management practices that contribute to excess risk of anal sphincter damage in vaginal births. This study provides evidence of a strong link between modifiable obstetric practices such as episiotomy, epidural use, and instrumental vaginal birth and anal sphincter tears. This study also reinforces that, when instrumental vaginal birth becomes necessary, episiotomy should be avoided and vacuum extraction is less likely to injure the anal sphincter than forceps birth. Although some instances will always occur when these interventions are necessary for fetal or maternal well-being, their overuse contributes to excess maternal morbidity with long-term consequences. Care practices such as avoiding routine interventions, promoting comfort in labor through mobility and nonpharmacologic techniques, and encouraging physiologic, spontaneous pushing in nonsupine positions (none of which were assessed in this study) minimize the risk of severe lacerations both directly in the case of spontaneous nonsupine pushing and indirectly, by reducing the need for epidural, promoting optimal positioning of the fetus, and reducing forceps and vacuum use." Again these are all aspects of the midwifery model of care.

The third study looked at midwives providing a 20-minute acupuncture treatment to women with PROM. The women in the treatment group had significantly shorter active labor—4.4 hours vs. 6.1 hours—and the relationship was even stronger when they controlled for parity, epidural use, and infant birth weight. For women who were induced the active phase in the control group was twice as long as in the acupuncture group and acupuncture was associated with less augmentation of labor as well. This study was small but the results are impressive. Romano makes some very meaningful conclusions as to the relevance of this to the promotion of normal birth: "Although the majority of

women will go into labor on their own after membranes rupture at term, many providers encourage pharmacologic induction out of concern about infection. Minimal evidence suggests that a policy of routine induction for PROM prevents infection, and several studies report an increase in cesarean rates with induction for PROM versus expectant management. Furthermore, pharmacologic induction always requires other interventions such as intravenous lines, electronic fetal monitoring, and restrictions on mobility in labor, transforming a normal birth into a medicalized one and introducing potentially unnecessary risks. Low-risk techniques to encourage labor to start may be beneficial in preventing complications of both prolonged membrane rupture` and aggressive induction protocols. This small but well-designed study suggests that acupuncture treatment influences labor initiation and progress in women with PROM. A larger trial may be able to confirm an effect on mode of birth, rates of induction, and likelihood of infection. However, in the meantime, the fact that acupuncture has not been shown to be harmful to birthing women or their newborns suggests that it is an optimal first-line approach when the option of encouraging labor to start is desirable." Some IHS sites are providing acupuncture services (finally!) for patients. I think it behooves midwives to work with acupuncture providers in IHS and/or outside IHS to get trained in this technique of promoting labor.

The forth study was published in the ACNM journal and looked at the experience of women in early labor. The study's results and Romano's comments are very encouraging for all of us to examine how we prepare and care for women in early labor. Romano says: "For women who choose hospital birth, mounting evidence suggests that their likelihood of achieving vaginal birth is strongly influenced by how long they stay home. However, simply advising women to stay home until active labor is well established may contribute to anxiety and confusion if they are not equipped with appropriate information, support, and anticipatory guidance. This small study suggests that women spend energy and time in early labor sorting out their expectations, devising new plans, managing mixed emotions, and second-guessing decisions. Providing women with strategies to anticipate and deal with gaps between expectations and experiences may help them adapt better to early labor and have confidence in their management strategies. Reassessing how childbirth educators teach women to self-diagnose labor—or introducing models that include home visitation or outpatient early-labor assessment and support, as proposed by the study authors—may help women who choose hospital birth to optimize the timing of hospitalization to achieve normal births." I highly recommend that each midwifery service in IHS read this study, examine how early labor is talked about with patients in classes, groups, or clinic, and how early labor triaging and care is provided for in the labor and birthing areas.

Romano, A., Research Summaries for Normal Birth, J Perinat Educ. 2007 Spring; 16(2): 47–50.

Navajo News Jean Howe, Chinle

Sexual Assault Nurse Examiner (SANE) Training Course, June 9–13, 2008

Navajo Nation Museum, Window Rock, Arizona.

This 5-day intensive training course will focus on the basic forensic medical examination techniques and issues in providing care for adult and adolescent victims of sexual assault. It will provide nurses and other licensed healthcare professionals with the didactic training necessary for certification as a Sexual Assault Nurse Examiner (SANE) or a Sexual Assault Forensic Examiner (SAFE) and discuss next steps after training. Strategies for developing a multi-disciplinary Sexual Assault Response Team (SART) will also be reviewed.

This course provides the classroom curriculum portion of SANE/SAFE training. For nurses or other healthcare professionals who do not routinely perform pelvic examinations, practical experience to acquire pelvic examination skills should be arranged outside of this course. It would be beneficial to begin this process prior to attending the course if possible. After completion of the course, proctoring is also strongly recommended for the initial forensic examinations performed.

This course is open to Indian Health Service healthcare professionals, including nurses, advanced practice nurses, PAs, and physicians. A brochure and registration forms will be available soon, as well as information on lodging. There is no fee to attend the course. Transportation, lodging, and per diem are the responsibility of the home health system or individual.

This course is being co-sponsored by Carolyn Aoyama, Senior Consultant for Women's Health and Advanced Practice Nursing Program at IHS Headquarters and by the Chinle Family Violence Prevention Task Force and the Navajo-Hopi-Zuni SANE/SART Work Group. For questions about content, please contact Sharon Jackson (Sharon.jackson@ihs.gov) or Sandra Dodge (Sandra.dodge@ihs.gov). For questions about registration or logistics, please contact Alberta Gorman (Alberta.gorman@ihs.gov).

IHS and Tribal sites throughout the Four Corners area are working with the Northern Arizona Center Against Sexual Assault to formulate an integrated approach to sexual assault. This training is a part of that effort. The goal is to have SANE and SART services available throughout the Four Corners area.

Oklahoma Perspective

Greggory Woitte—Hastings Indian Medical Center

Prenatal Care in Oklahoma

A study released last fall compared the state of Oklahoma statistics of Native American women receiving prenatal care versus White women. The study showed a significant increase in the numbers of Native American women receiving prenatal care since the previous study was done in 1994. Today 76.7% of Native American women receive prenatal care in the first trimester, not significantly different from White women (78.8%). This improvement is greatly attributed to the significant improvement in access to care through construction of new and expansion of existing Indian Health Service, Tribal and Urban Health facilities. Barriers to care included in decreasing order: Lack of pregnancy recognition (51.8%), inability to get an earlier appointment (21.2%) and no Medicaid card (16.7%).

Other Statistics

Native American women were more likely to have their first baby before 18 (24.5% versus 14.3%)

Number one barrier to obtaining prenatal care as early as desired for Native American mothers was "I didn't know I was pregnant".
www.ok.gov/health/documents/PRAMS_Native%20Am_2007.pdf
or
www.tulsaworld.com/news/article.aspx?articleID=071213_1_A24_hAnew76523

Perinatology Picks

George Gilson, MFM, ANMC

What is this all about the 'minor markers' for Down Syndrome?

I just wanted to share some info with you (that you may already know) about sonographic 2nd trimester markers for fetal Down syndrome and their significance.

The minor markers: echogenic intraventricular focus (EIF), choroids plexus cyst (CPC), 'sandal-gap' toes, pyelectasis, clinodactyly, etc. are poor predictors of DS (but excellent predictors of overwhelming maternal anxiety!). They are found in about 1% of normal fetuses between 15-20 wks. Younger women (<35 y/o) with a negative quad screen are at very low risk if they have one of these minor markers; amnio is not recommended for this group.

An enlarged nuchal thickness (NT), echogenic bowel, more than one marker, or any anomaly, are stronger predictors. Older women (>35 y/o), with or without a positive quad screen, are at higher risk with even a minor marker however, and counseling about amnio may be appropriate for this group.

The EIF is often the most worrisome to women; they should be reassured that it is NOT a marker that something is wrong with the baby's heart; and they do NOT need fetal echocardiography for follow up. They should also be reassured that a CPC does not mean there is something wrong with their baby's brain! Nevertheless, if the patient is anxious about these findings, it would be appropriate to obtain a follow up scan to reassure the patient that the marker has resolved.

Attached is a chart of the relative risks of each of the markers. Notice that a negative ultrasound (no markers found) will actually lower the pt's risk (RR = 0.6) and should be reassuring (although it can't be 100% so…..).

Also, as more patients get 1st trimester testing (to include BOTH nuchal translucency and PAPP-A and free bHCG at 11-13 wks, not just NT), it is important to know that that's all they need; 2nd trimester testing is NOT indicated. If the results of 1st trimester screening are negative, no further (noninvasive) testing is indicated, and 2nd trimester testing will then only increase the number of false positives.

Trisom y-21 (Down syndrome) Second Trimester Ultrasonographic Markers

	RR
-thickened nuchal fold*	19.0
-short femur	2.3
-short humerus	2.5
-cardiac abnormality (VSD, AV canal, Tetralogy)	25.0
-echogenic bowel	5.5
-choroid plexus cyst	1.5
-hypoplasia of the middle phalanx of the 5th finger (clinodactyly)	1.5
-widened iliac wings	
-echogenic intracardiac focus	1.5
-pyelectasis	1.5
-sandal gap toes	
-double bubble sign of duodenal atresia (usually 3rd trimester)	
-absent nasal bone	
-2-vessel umbilical cord	
-normal scan/no markers	0.6

*** NF by GA**

Weeks	Mean	95th%
16	2.8	4
17	3.0	5
18	3.3	5
19	3.6	5
20	3.7	6
21	3.9	6

Multiple markers increase the likelihood of DS:	LR
Two markers	10
> 3 markers	115

In a meta-analysis of 2nd trimester ultrasound to detect fetuses with Down syndrome (Smith-Bindman R, et al. JAMA 2001 (N=132,295; DS incidence =1.5%) the following information was derived:

In the absence of a major anomaly, the US markers had the following diagnostic values: sensitivity: 69%; FPR: 8%; PPV 1.5%; NPV: 99%

Smith-Bindman R, et al. Second-trimester ultrasound to detect fetuses with Down syndrome: a meta-analysis. JAMA. 2001 Feb 28;285(8):1044-55.

(High prevalence of HPV…, continued from page 1)
preventing cervical cancer in this population

A few caveats: both studies are small, and although they found that half of the women were infected with oncogenic HPV infections other than HPV16 and 18, the other half were infected with HPV16 and 18, and thus would have received protection from the current HPV vaccine, Gardasil. Please do not read Bell et al and Sebbelov et al and then decide that there is no benefit in providing the current vaccine to AI/AN women in the Northern Plains or Alaska Natives.

Please realize that significant protection can be provided by the vaccine. Our goal as providers should be to educate women about the need to continue to receive regular screenings is also important, even if they receive the quadravalent vaccine.

Sebbelov AM, D.M., Krüger Kjaer S, Jensen H, Gregoire L, Hawkins I, Parkinson AJ, Norrild B., Comparison of human papillomavirus genotypes in archival cervical cancer specimens from Alaska natives, Greenland natives and Danish Caucasians. Microbes Infect, 2000. 2(2): p. 121-6.

MCH Alert

New Bullying-Prevention Toolkit Released

Eyes on Bullying . . . What Can You Do? A Toolkit to Prevent Bullying In Children's Lives offers a variety of tools to help parents and other caregivers understand bullying in a new way, reexamine their knowledge and beliefs about bullying, and shape the beliefs and behaviors of the children in their care. The toolkit, created at Education Development Center, is designed especially for parents and other caregivers of preschool- and school-age children and adolescents to use in child care programs, after-school programs, and camps. Topics include (1) the issue of bullying; (2) why bullying can sometimes be difficult to see; (3) the concepts of bully, victim, and bystander; (4) recommendations and strategies for addressing bullying when it occurs; (5) a strategic approach to creating an environment where everyone takes responsibility for preventing bullying; and (6) resources and references on bullying prevention. The toolkit is available at http://www.eyesonbullying.org/pdfs/toolkit.pdf

All the content from the toolkit and additional information, materials, and resources are available from the Eyes on Bullying Web site at **www.eyesonbullying.org**.

Alaska State Diabetes Program

Barbara Stillwater

Link between type 2 DM in adults and type 1 DM or pregnancy-related diabetes in their mothers

The rate of diabetes or pre-diabetes was 21 percent in subjects born to mothers who had pregnancy-related diabetes (termed gestational diabetes), 12 percent in those whose mothers had a genetic predisposition for diabetes, 11 percent when the mothers had type 1 diabetes, and 4 percent in subjects born to women with no history of gestational or other types of diabetes.

The findings support the idea that exposure to high blood sugar levels in the womb contributes to the development of type 2 diabetes in adulthood, the researchers conclude. Aiming for normal blood glucose levels in pregnant women "may reduce the risk of type 2 diabetes in future generations."

CONCLUSIONS: A hyperglycemic intrauterine environment appears to be involved in the pathogenesis of type 2 diabetes/pre-diabetes in adult offspring of primarily Caucasian women with either diet-treated GDM or type 1 diabetes during pregnancy.

Clausen TD et al High prevalence of type 2 diabetes and pre-diabetes in adult offspring of women with gestational diabetes mellitus or type 1 diabetes: the role of intrauterine hyperglycemia. Diabetes Care. 2008 Feb;31(2):340-6.

Domestic violence

Linking dating violence, peer violence, and suicidal behaviors among high-risk youth

CONCLUSIONS: There is a substantial overlap among different forms of violent behavior, suggesting that additional research is needed to better understand the factors that contribute to involvement in multiple forms of violence.

Swahn MH et al Linking dating violence, peer violence, and suicidal behaviors among high-risk youth. Am J Prev Med. 2008 Jan;34(1):30-8

Women's Health Headlines

Carolyn Aoyama, HQE

Sacred Circle Handouts, Slides, and Training Materials available

The slides really condense and explain the effect of colonial power on indigenous culture and families.

The slides came from Sacred Circle and they were used in a presentation by Sarah Deer at the Tribal Law and Policy Institute.

Contact Carolyn Aoyama for copies
Carolyn.Aoyama@ihs.gov

Save the dates

Keeping Native Women and Families Healthy and Strong
Bemidji Area MCH Conference
- April 23–24, 2008
- Milwaukee, WI
- Great Lakes Tribal Epidemiology Center
- E-mail contact EpidemiologyCenter@gmail.com

Advances in Indian Health (AIH) Conference
- April 29–May 2, 2008
- Albuquerque, NM
- 28 credits, Indian Country's Primary Care Conference www.ihs.gov/MedicalPrograms/MCH/F/CN01.cfm#top

Sexual Assault Nurse Examiner (SANE) Training Course
- June 9–13, 2008
- Navajo Nation Museum, Window Rock, AZ
- 40 hour didactic portion of SANE/SAFE training
- Contact: Sandra Dodge Sandra.dodge@ihs.gov

I.H.S. / A.C.O.G. Obstetric, Neonatal, and Gynecologic Care Course
- September 14–18, 2008
- Salt Lake City, Utah
- Contact YMalloy@acog.org or call Yvonne Malloy at 202-863-2580

Abstract of the Month
- High prevalence of HPV infectionin American Indian women of the Northern Plains

IHS Child Health Notes
- Estimating the effectiveness of screening for scoliosis: a case-control study.
- Infectious Disease Updates—Here's recent news highlights from the world of vaccines
- Recent literature on American Indian/Alaskan Native Health—*Invasive Pneumococcal Disease in Children 5 Years After Conjugate Vaccine Introduction*

From Your Colleagues
- David Gahn, Tahlequah—Afghanistan Update
- OB/GYN CCC Editorial—You can make a huge difference

Hot Topics
- Obstetrics—Cesarean delivery during nursing change of shift is associated with increased complications
- Physical abuse during pregnancy present a large increase in the risk of preterm delivery
- Gynecology—Co-Occurrence of Pelvic Floor Disorders May Be High in Women
- The Evolution of Midurethral Slings
- Child Health—Maternal grandmothers' alcohol use linked to FAS in the Northern Plains
- Chronic disease and Illness—Low-dose aspirin is linked to lower risk for all-cause mortality in women, especially older women

Features
- ACOG—Treatment of Urinary Infections in Nonpregnant Women
- Ask a Librarian—Women's Health Resources
- Behavioral Health Insights—School Refusal
- Breastfeeding—What makes a good idea work?
- Frequently asked questions—Does anyone have an EHR template that is IHS approved for obstetrical patients?
- Information Technology—Seeking input from the field—Clinician's Information Management Technology Advisory Council

Neil Murphy, MD
SCF
PCC–WH
4320 Diplomacy Drive
Anchorage, AK 99508

Non-Profit Org.
US Postage
PAID
Anchorage, AK
Permit #1022