### Abstract

Background: Presently, little is known about maternal morbidity in American Indian and Alaska Native (AI/AN) women. The purpose of this study was to examine the prevalence of maternal morbidity during delivery hospitalizations at select Indian Health Service (IHS) medical centers.

Methods: Using the IHS National Patient Information Reporting System, we identified maternal morbidity using ICD-9 codes from the pregnancy chapter (640-677) as well as other pertinent non-pregnancy ICD-9 codes. Delivery hospitalizations were identified by an ICD-9 V27 code. All analyses were performed using SAS Version 9.1.

Results: AI/AN women in this study population had higher rates of some maternal morbidity compared to women in the general population, including postpartum hemorrhage, gestational diabetes, and pregnancy-related hypertension.

Conclusions: Ongoing monitoring of maternal morbidity at both the national and local level is needed to further understand their elevated health risk.

### Introduction

Maternal morbidity is a physical or psychological condition resulting from or aggravated by pregnancy that

### Results

<table>
<thead>
<tr>
<th>Characteristics No.</th>
<th>%</th>
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<tr>
<td>Total</td>
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</tr>
<tr>
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</tr>
<tr>
<td>East</td>
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</tr>
<tr>
<td>West</td>
<td>1979 (29.3)</td>
</tr>
<tr>
<td>Southwest</td>
<td>418  (6.2)</td>
</tr>
<tr>
<td>Alaskan</td>
<td>272  (4.0)</td>
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<tr>
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<tr>
<td>0-1</td>
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<tr>
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<td>3044 (44.9)</td>
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<td>4 or more</td>
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### Table 1

<table>
<thead>
<tr>
<th>Region</th>
<th>Characteristics No.</th>
<th></th>
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<tbody>
<tr>
<td>West</td>
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<tr>
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### Discussion

AI/AN women experience higher rates of maternal morbidity compared to women in the general population. Further research is needed to identify and address these disparities.
Introduction

A Long-Term Evaluation

Maternal morbidity is a physical or psychological adverse effect on a woman's health. During labor and delivery, when most maternal morbidity and deaths occur, 20% of women experience some type of obstetric complication. Some of the most common complications during labor and delivery include pregnancy-related hypertension, infection, and gestational diabetes. At present, there are few published studies on maternal morbidity among American Indian and Alaska Native (AI/AN) women. The purpose of this study was to examine the prevalence of maternal morbidity during delivery hospitalizations among AI/AN women.

Materials and Methods

Data Source: We examined delivery hospitalizations from five Indian Health Service (IHS) medical centers from July 2002 to June 2004 using the National Patient Information Reporting System (NIPRS). The NIPRS is the IHS national registry for patient demographics and patient care activity at IHS medical facilities and contracting facilities that provide care to the IHS user population. It is comprised of data from both the Patient Care Component (PCC) and patient registration components of the Resource and Patient Management System (RPMS). The NIPRS includes patient information such as age, geographic region, and eligibility for private insurance and Medicaid. Hospitalization characteristics include up to 15 diagnosis fields and 3 procedure fields. All diagnosis and procedure fields are based on International Classification of Diseases, ninth Revision (ICD-9) codes.

Because of the complexity of the NIPRS database, we analyzed data from a small, subpopulation of women to assess the utility of the NIPRS database to capture maternal morbidity. For this analysis, we used all delivery hospitalizations reported to the NIPRS for five IHS medical centers during the selected time period. The medical centers were located in three geographic regions of the IHS health service delivery system and were chosen because of their obstetric and surgical capabilities, as well as their annual number of deliveries. More than 30% of annual deliveries in the IHS service area take place in these centers. Permission was obtained from IHS and each medical center to perform this study. In order to protect tribal and individual identity, all analyses in this study are reported in aggregate form.

Definitions and analysis: Delivery hospitalizations were identified by a V27 ICD-9 code listed in any of the 15 diagnosis fields. We defined maternal morbidity using the ICD-9 codes 640-677, which are specific to pregnancy, labor, and delivery, listed in any of the 15 diagnosis fields. In addition, related ICD-9 codes outside of the 640-677 range were included in the morbidity categories. For example, preeclampsia (ICD-9 code 596) was included with code 468.6 to define the gestational complications category. No morbidity was defined as the absence of any of the predetermined codes. Documentation of morbidity classifications is available upon request from the study authors. All analyses were performed using SAS Version 9.1.

Results

From July 2002 to June 2004, 6761 deliveries occurred at the five medical centers. Demographic characteristics of the AI/AN women are shown in Table 1. Fifty-seven percent of women were from the southwest, 29% were from Alaska, and 14% were from the east. More than 80% of women were between the ages of 15–34. The majority of women had a hospitalization stay of 2–3 days, while 9% of women remained in the hospital four or more days. Almost 16% of deliveries occurred by cesarean section.


<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No.</th>
<th>%</th>
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<tbody>
<tr>
<td>Length of hospital stay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-1</td>
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<td>20.0</td>
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<td>2-3</td>
<td>5039</td>
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<tr>
<td>&gt;4</td>
<td>362</td>
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<tr>
<td>Cesarean delivery</td>
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</tr>
<tr>
<td>Some or a multiple during pregnancy</td>
<td>554</td>
<td>8.2</td>
</tr>
<tr>
<td>Eligible for Medicaid at time</td>
<td>574</td>
<td>8.5</td>
</tr>
<tr>
<td>Required no private insurance at time</td>
<td>2694</td>
<td>39.8</td>
</tr>
</tbody>
</table>

...
Overall, 29% of AI/AN women experienced some type of obstetric complication during delivery (Table 2). The most prevalent complication was postpartum hemorrhage, occurring in 8.5% (95% CI 7.8, 9.2) of deliveries. Gestational diabetes was found in 7.6% (95% CI 6.9, 8.3) of women. Other leading causes of maternal morbidity included preeclampsia and gestational infections, 5.7% (95% CI 5.2, 6.3) and 2.6% (95% CI 2.2, 2.9), respectively.

Table 2 shows the average length of stay for women experiencing morbidity by type of delivery. The average length of stay for AI/AN women without complications delivered by cesarean section was 1.9 days (95% CI 1.8, 2.0) while women delivered by cesarean section had an average length of stay of 2.9 days (95% CI 2.6, 3.1). For non-cesarean deliveries, women with severe preeclampsia/ eclampsia remained in the hospital an average of 4.5 days (95% CI 3.5, 5.5). For cesarean deliveries, women with other infections (including Group B streptococcus, pneumonia, and sepsis) remained in the hospital an average of 5.6 days (95% CI 4.7, 6.5).

Table 3. Mean length of hospitalization stay among American Indian and Alaska Native women, National Patient Information Reporting System, 2002-2004

<table>
<thead>
<tr>
<th>Maternal Morbidity</th>
<th>Cesarean Delivery (n=5852)</th>
<th>Non-cesarean Delivery (n=5789)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean LOS</td>
<td>95% CI</td>
</tr>
<tr>
<td>Gestational diabetes</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Infections</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Postpartum hemorrhage</td>
<td>3.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Preeclampsia</td>
<td>3.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Eclampsia</td>
<td>4.8</td>
<td>4.5</td>
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<tr>
<td>Eclampsia</td>
<td>5.4</td>
<td>5.0</td>
</tr>
<tr>
<td>Other infections</td>
<td>6.7</td>
<td>6.2</td>
</tr>
<tr>
<td>DVT/obstetric embolism</td>
<td>7.5</td>
<td>7.1</td>
</tr>
</tbody>
</table>
|                             | Length of hospital stay (in days) | Includes Group B streptococcus, puerperal infections, pneumonia, and postpartum fever of unknown origin
|                                     | Unable to report due to small sample size

Conclusion

In our knowledge, this was the first attempt to specifically examine maternal morbidity during delivery among AI/AN women. The results presented here are also the first published data on maternal morbidity from the NPSRS database. Overall, we found that 29% of deliveries were complicated by one or more maternal morbidities. The rate among AI/AN women in our study population was similar to that for overall obstetric women.
morbidity among women in the US. However, AI/AN women in our study had higher rates of some severe complications compared to women in the US, including postpartum hemorrhage, gastrointestinal disease, and all preclampsia.

In our study population, 15.8% of deliveries occurred by cesarean section. This is higher than previous reports of AI/AN women and may reflect the increasing use of cesarean section in the US. The rate of cesarean section may also represent a high-risk group of AI/AN women that need to deliver at those hospitals with obstetric and surgical facilities. However, the cesarean section rate in our study population is significantly lower than the current rate of 26% for all women in the US.

The prevalence of postpartum hemorrhage among AI/AN women in our study was four times higher than that reported among all US women. It is unclear why AI/AN women would have higher rates of postpartum hemorrhage compared to other women. Previously identified risk factors have included prolonged labor, obesity, and macrosomia, some of which are prevalent among AI/AN women. Hemorrhage is a leading cause of maternal death. In a large population-based study, severe anemia and postpartum bleeding were the leading cause of hemorrhage in women who died after a live birth. However, deaths associated with hemorrhage can be prevented with early diagnosis and proper medical management. Recently, Fenton et al found that active management of the third stage of labor, which included early cord clamping and cutting, oxytocin administration, and controlled cord traction, reduced postpartum blood loss in a population of rural American Indians.

AI/AN women in our study had nearly three times the rate of gestational diabetes at delivery than women in the general population. Prior studies have indicated a prevalence range of gestational diabetes from 3.4% in Navajo to 14% in Zuni Indian women. Gestational diabetes is associated with both maternal and fetal complications, including pregnancy-related hypertension, cesarean section, macrosomia, and shoulder dystocia. A national population-based study found the rate of pregnancy-induced hypertension, macrosomia, and chronic hypertension were significantly higher among AI/AN women with gestational diabetes than white women with gestational diabetes. In addition to adverse perinatal outcomes, women with gestational diabetes are more likely to develop type II diabetes later in life. Steinhart et al found that 58% of Navajo women with gestational diabetes went on to develop type II diabetes.

The prevalence of pregnancy-related hypertension was also higher than that reported for women in the US, 5.7% vs 1.8%. The prevalence of preclampsia and eclampsia in our study population is similar to the 5.2% prevalence found in a recent review of delivery data in an IHS medical center and the 5.8% prevalence among American Indian women in New Mexico. However, this is lower than previous reports of Navajo and Zuni Pueblo women in New Mexico. Although the etiology of preclampsia is unknown, risk factors include a prior pregnancy with preclampsia, obesity, and diabetes.

Laussiere found that AI/AN women with diabetes during pregnancy were more likely than white women to have pregnancy-induced hypertension. We would expect the prevalence of gestational diabetes and hypertension to vary greatly across AI/AN Areas and tribes.

Severe maternal morbidity and maternal death are most likely to occur during labor and delivery. Fortunately, there were no maternal deaths at delivery in our study population. From 1996-1998, two maternal deaths were reported across all IHS Service Areas. Although uncommon, the risk of maternal death among AI/AN women is almost twice that of white women.

In our study, we examined data from 676 delivery hospitalizations that occurred in five IHS medical centers with obstetric and surgical capabilities. Our results should only be compared to data with similar patient and hospital demographics. Approximately 10,000 births occur each year in IHS tribal and federal hospitals (data from IHS Division of Program Statistics, 2000-2001). However, not all women who are eligible to deliver at an IHS facility do so. AI/AN women with private insurance or Medicare may choose to deliver at a hospital outside of the IHS system. Furthermore, high-risk women may be transferred to a tertiary care facility outside the IHS system. In one study, Looman found that 3.2% of Zuni and Navajo births occurred in a non-IHS tertiary care center when prematurity and fetal anomalies were indicated.

We also used important variables such as parity, obesity, urban/rural status, and health behaviors (e.g., smoking and alcohol use) that would provide valuable information regarding the etiology and severity of disease. The PCC of RPMIS contains only a subset of the most important information recorded in the medical charts. Furthermore, the amount of data reported to RPMIS varies by hospital. Even if data are entered into RPMIS, they may not be exported to the national repository. Medical record reviews would likely give better insight to a woman's overall health status at the time of delivery and more information than ICD-9 codes to understand the severity of morbidity. This may also include information on depression, history of injuries, and exposure to family violence. Finally, we were unable to link the delivery with the infant hospitalization to investigate neonatal outcomes. This linkage may be possible at the local level using the RPMIS system and systematic chart review.

Despite the limitations, this study provides important insight on maternal morbidity during delivery among AI/AN women. Our results stress the need for comprehensive preconception and prenatal care to prevent morbidity. Our results also indicate opportunities should be taken to elucidate the full potential of the IHS data repositories to determine maternal morbidity among AI/AN women. Furthermore, these studies may be possible to follow a woman over time by linking her delivery hospitalization with other facility and clinic visits. By expanding surveillance efforts to include ante-partum and postpartum complications, as well as infant's health...
records, we would have a more comprehensive understanding of the burden of maternal morbidity among AI/AN women. Furthermore, we would have a clearer idea of the etiology of the cases of maternal mortality in this high-risk population. We encourage national, regional, and local use of these data to inform policy and intervention strategies across all IHS service Areas to improve overall maternal health.

Acknowledgements

The authors would like to thank Anne Butman for her assistance in creating the database needed in this study. We would also like to thank Stan Greif, MD, Mike Garmo, and Karen Carver for providing clarity and advice on using NPIRS data.

References

The IHS Injury Prevention Fellowship Program: A Long-Term Evaluation

Lawrence Berger, MD, MPH, Academic Director, IHS Injury Prevention Fellowship Program, Albuquerque, New Mexico; CDR Lawrence Berger, MD, MPH, MHA, Area Injury Prevention Specialist, Tucson Area Indian Health Services, Tucson, Arizona; and CDR Nancy M. Bal, MPH, CHES, Injury Prevention Manager, Indian Health Service, Rockville, Maryland

Introduction

Intentional and unintentional injuries are a leading cause of suffering and death among American Indians and Alaska Natives (AI/AN). They are the number one cause of mortality from ages one to 44 years. Among children ages 1-17 years, high injury rates account for virtually the entire disparity in childhood mortality rates between AI/AN children and U.S. White children. Injuries are also the leading cause of years of potential life lost (YPLL) before age 65. Among AI/AN nationally, 40% of YPLL before age 65 is due to injury, compared to 9% for heart disease, 8% for cancer, and 3% for diabetes.

Since 1987, a year-long, advanced training opportunity—the IHS Injury Prevention Fellowship Program (IPFP)–has been an important component of the Indian Health Service’s efforts to reduce the burden of injuries and build tribal capacity for injury prevention. The fellowship is part of a broader set of offerings that include a series of three core courses in injury prevention, as well as targeted trainings in child passenger safety, grant writing, program evaluation, and intentional injuries.

Individuals employed by both the IHS and tribes are eligible for participation in the Injury Prevention (IP) Fellowship. The components of the fellowship are primary prevention, evidence-based strategies, and practical skills. Examples of practical injury prevention skills are the use of GPS devices, digital cameras, and computer software, oral and written presentation skills, and proposal-writing. Case studies, data analyses, published literature, and field experiences are drawn from AI/AN communities. Presentations, too, are chosen for their familiarity with injury issues in AI/AN communities, as well as for their professional expertise.

An obvious goal of the fellowship is to enhance the knowledge and skills needed by individuals to fulfill their roles as injury prevention practitioners. To this end, the fellowship has several components:

• Design and completion of a year-long project;
• Classroom work and a field course (four sessions);
• Between-course assignments;
• Computer labs;
• Mentoring by community and academic experts;
• A symposium at which fellows present the results of their projects.

Table 1: Comparison of the two IHS Injury Prevention Fellowship options

<table>
<thead>
<tr>
<th>Focus</th>
<th>Epidemiology Option</th>
<th>Program Development Option</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluation, Surveillance, Data collection</td>
<td>Community interventions</td>
</tr>
<tr>
<td>Education Prerequisites</td>
<td>Bachelor’s degree required</td>
<td>Bachelor’s degree not required</td>
</tr>
<tr>
<td>Training Prerequisites</td>
<td>Introduction to IP + Intermediate IP or equivalent</td>
<td>Introduction to IP or equivalent</td>
</tr>
<tr>
<td>Field Experience Prerequisites</td>
<td>1 year in public health; 2 years in injury prevention</td>
<td>1 year in injury prevention</td>
</tr>
<tr>
<td>Travel/Tour Away from Home</td>
<td>6 weeks + presentation (2 days)</td>
<td>4 weeks + presentation (2 days)</td>
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<tr>
<td>Curriculum</td>
<td>3 days: Project development; 7 days: Epidemiology; 4 days: Field course; 2 days: Symposium</td>
<td>4.5 days: Injury prevention program planning; 4.5 days: Project implementation and evaluation; 4.5 days: Field course; 4 days: Marketing, advocacy, presentation skills (Albuquerque); 2 days: Symposium</td>
</tr>
</tbody>
</table>

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Beginning with the Class of 1993, there have been two fellowship options, one with an epidemiology focus and the other emphasizing community interventions. Table 1 summarizes the two fellowship tracks.

Based on two criteria, there is ample evidence that the fellowship is successful in building tribal capacity in the short-term. The first criterion is the development of new injury prevention resources. For example, fellowship field courses had produced home inspection forms to assess fire safety in AI/AN communities, a checklist for determining the comprehensiveness of child passenger safety efforts, a model for teaching GPS skills using a go-casting exercise, and a template for conducting focus groups on injury prevention issues. The second criterion is the assumption by individuals of new professional roles in injury prevention based on their fellowship experience and training. A tribal police lieutenant, for example, became a national expert on police policies and procedures for responding to domestic violence calls on tribal lands. The director of a state health department's injury prevention program developed unique insights into tribal state collaboration as a result of her fellowship project.

We wanted to determine if the fellowship program was effective in the long term, which we define as three or more years after completion of training. The criteria we chose to assure long-term effectiveness were that fellowship graduates would:
1. Continue to work in the field of injury prevention;
2. Report that their year-long project had a lasting impact on reducing the burden of injuries;
3. Assume prominent roles in IP as trainers, decision-makers, and policy makers;
4. Publish the results of their projects.

Methods
From the fellowship class of 1987 through the current class of 2006, there have been 227 participants. We sent a survey via e-mail to 115 fellows who graduated at least three years previously (Classes of 1987 through 2003). Non-responders were contacted by phone and e-mail to request their participation.

We also conducted a literature review (using Medline searches and through personal communications) to identify published articles whose authors included fellowship graduates.

As this study was conducted in an "established educational setting" (the IHS Injury Prevention Fellowship Program) and constituted research on the effectiveness of an instructional technique, it was specifically exempted from Human Subjects Institutional Review Board approvals.

Results
Of the 115 former fellows contacted, 86 completed the survey, a response rate of 75%. The 86 respondents represent 41% of the 209 fellows who graduated between 1987 and 2004. The average number of years since graduation was nine.

Among the 86 respondents, 48% said that injury prevention constituted at least 20% of their current workload, 73% said that at least 5% of their current workload is devoted to injury prevention. The great majority (88%) of the respondents were employed in one of three settings: the Indian Health Service (99%), tribes or Alaska Native Corporations (14%), or other federal agencies, such as the CDC, HRSA, FDA, NIOSH, or the US Coast Guard (15%).

Many of the fellowship graduates are in important administrative and policy-making positions. They include two Area Chiefs and a Division Director in the IHS Environmental Health Services Branch; a Senior Public Health Analyst at the Office of Performance Review (HRSA); Acting Director, Division of Healthcare Preparedness (HRSA); Director of Environmental Health Support, IHS/Alaska Native Tribal Health Consortium; Chief, Injury Prevention Service at the Oklahoma Department of Health; Department Chair for Injury Prevention and Associate Academic Dean at the United Tribes Technical College; Branch Chief for Safety, Environmental Health, and Food Service, US Coast Guard; and the IHS Injury Prevention Program Manager. Of the 27 Injury Prevention Specialists listed on the IHS web-site, 23 (89%) are fellowship graduates. Also, nine members or alternate members of the National Injury Prevention Tribal Steering Committee had completed the fellowship program.

The Fellowship made a lasting impact on all of the respondents. One hundred percent of the respondents (86/86) answered "Yes" to the question, "Was the fellowship year worth the time and effort you devoted to it?" They mentioned a new awareness of injuries as a public health issue; long-term networking with fellowship classmates, acquisition of knowledge and skills to design, implement, and evaluate a project; and changes in how they assess their daily work ("Is what I am doing proven to be effective? Am I targeting the right people with my message?").

More than four out of five respondents (84%) reported that the fellowship enhanced their professional careers. Several fellowship graduates stated that the training prompted them to attend graduate school and obtain a Master's Degree in Public Health. Others attributed to the Fellowship their decision to remain active in the field of injury prevention, "even when I could have left for a promotion."

A key question was whether the fellows' year-long projects had any impact on reducing injuries, or had merely sat on a shelf. Two-thirds of the respondents (66%) said their project had led to some positive results, another 12% were unsure, and 20% said their projects had led to no changes. A number of projects led to national injury prevention initiatives, such as the Native Peoples' Brain Injury Council, a degree program in injury prevention at a tribal college, and two tribal Head Start/USI courses programs (Sleep Safety and Safe Sleep). Information from fellowship projects was also used to obtain funding for roadway improvements, law enforcement projects and equipment, and tribal injury prevention programs.

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Information about anything for the IHS Injury Prevention Fellowship is available at [http://www.ihs.gov/MedicalPrograms/InjuryPrevention/](http://www.ihs.gov/MedicalPrograms/InjuryPrevention/). Applications for the class of 2007 are due December 15. For further information about the fellowship, please contact:

Lorenzo Berger, M.D., MPH  
Phone and fax: (805) 279-5153  
e-mail: bergerlo@mvms.com

For further information about the IHS Injury Prevention Program, please contact:  
Nancy Bill, MPH, IHS Injury Prevention Manager  
Phone: (301) 443-0100  
Fax: (301) 445-5736  
e-mail: nancy.bill@ihs.gov

**Conclusion and Recommendations**

The IHS Injury Prevention Fellowship Program is unique in that it specifically addresses the injury prevention needs of tribal communities, provides diversity in learning methods and training locations; offers in-depth training for, and interaction among, individuals employed by both the IHS and tribes; and emphasizes practical, hands-on experiences that online courses cannot duplicate. Based on the career paths of the fellowship graduates, the impact of their year-long projects, and their numerous publications, the fellowship has been effective in the long-term.

Among the recommendations from graduates for how the fellowship might be improved were the following: more extensive dissemination of project results throughout IHS, tribes, state health departments, and other agencies; more emphasis on the prevention of intentional injuries, such as domestic violence and suicide; and recruitment of fellows from other tribal and IHS disciplines, such as health promotion, disease prevention, behavioral health, and nursing.  A philosophical cornerstone of the fellowship program has been that the educational process is as important as the content. Sustaining the individual’s commitment to the field of injury prevention requires that the training program 1) promote a sense of competence by incorporating concepts of adult-centered learning (e.g., sharing experiences, individualized goals, small group work); providing community and academic mentors to help guide projects to successful conclusions; conducting a field course requiring specific deliverables in a short time frame; and emphasizing acquisition of practical skills using GPS devices, focus groups, digital camera, and the Internet; oral and written presentation skills, preparation of funding proposals; and 2) enhance networks of support by having role models as presenters; conducting team-building exercises; creating space for social activities; and holding courses in a variety of geographic locations and settings (tribal agencies, universities, IHS facilities); and 3) instill hope by identifying funding opportunities for injury prevention interventions and by sharing success stories from Alaskan Native and American Indian communities throughout the United States.

**References**

10. Chandler B, Berger LB. The financial burden of


There is a variation in the rollout of HPV vaccine in Indian vaccine, some may initially restrict HPV vaccine to a limited age group (e.g., 11-12 year old VFC-eligible), but eventually the vaccine should be available to all VFC-eligible females 9-18 years. As these states gear up to provide HPV-related injuries — Navajo Nation, 1988-1991.


34. Berger LR, Kuklinski D. When smoke alarms are a National Fire Protection Association hazards in rural Alaskan homes.


The 19th Annual Indian Health Service (IHS) Research Conference, "Multiple Perspective on Research Policy in Indian Country," will bring together stakeholders in American Indian/Alaska Native (AI/AN) research activities from across the continent. This will include clinicians, administrators, educators, consumers, and community and tribal government leaders, as well as researchers. The three-day general conference from June 4 - 7 will enhance our collective ability to provide the benefits of biomedical, psychological, and health services research to Native tribes and peoples. The conference will include multiple perspectives on research activity in AI/AN communities. On June 4, a special preconference session will be offered for grant applicants who wish to improve their prospects of funding their research with grants from NIH, ARRA, or the NARCH program. This training is offered in collaboration with the National Institute on Drug Abuse (NIDA), and the emphasis will be on behavioral health research applications. Members of the IHS Institutional Review Boards (IRBs) will also hold a meeting on the afternoon of June 4.

**Sponsorship, Abstracts, Registration and Updates:**

The conference is sponsored by the IHS Research Program, the Native Health Network (NHN), and the IHS Clinical Support Center (CSC), the accredited sponsor. There is no registration fee. Participants who want to present their research (oral or poster) should prepare an abstract using the electronic form in the Call for Abstracts at: [http://www.dhs.gov/MedicalProgramsResearchconference.cfm](http://www.dhs.gov/MedicalProgramsResearchconference.cfm) and e-mail it in .doc format to Lesia L. Randell, RN, MPH by COB March 19, 2007 (see Call For Abstracts) to lesia.randell@ihs.gov, with a copy to Alan Trachtenberg, MD, MPH at alan@apogee.org. For questions about abstract submission, Ms. Randell may be reached by telephone at (505) 622-4966 (cell) or (505) 697-7897 (home), and Dr. Trachtenberg at (301) 443-0176.

Online registration will be available by late February on the CSC web site at: [http://www.dhs.gov/MedicalProgramsResearchconference.](http://www.dhs.gov/MedicalProgramsResearchconference.) Conference updates will be posted on the IHS Research Program website at: [http://www.dhs.gov/MedicalProgramsResearchconference.](http://www.dhs.gov/MedicalProgramsResearchconference.)

**Hotel:**

The conference will be held at the Sheraton Crescent Hotel, 2620 West Dunlap Avenue, Phoenix, Arizona 85021, telephone (602) 948-8280, fax (602) 371-2857. The room rate is $74.00 per room, per night, plus tax. A single/double occupancy (this is the approved federal government rate). Be sure to mention the “Indian Health Service” when making your reservations. Deadline for making room reservations at the conference rate is May 2, 2007. The hotel’s toll-free number is 1-800-432-4126, or book your room on-line at [http://www.starwoodmeeting.com/StarGroupsWeb/res?id=0702026635&key=90F25](http://www.starwoodmeeting.com/StarGroupsWeb/res?id=0702026635&key=90F25).

**CE Information:**

The IHS Clinical Support Center is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. The IHS Clinical Support Center is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.

Further Information:

For more information about the conference program, please contact Alan Trachtenberg, MD, MPH, IHS Conference Co-Chair (alan@apogee.org) or Donald Warnes, MD, MPH, NARCH Conference Co-Chair (donald.warnes@ihs.gov). For more information about registration or continuing education, please contact Dora Bradley (dora.bradley@ihs.gov) or Gigi Holmes (gigi.holmes@ihs.gov) at the IHS Clinical Support Center, or call (602) 964-7777.

**Conference Dates:**

Please note that June 4 - 7, 2007 are the new dates for this annual IHS research Conference, which was formerly scheduled for April.
February 2007: Better sleep quality in the past 7 days was associated with a lower risk of injury, with ORs of 0.82 per one hour of increased sleep (95% confidence interval (CI) 0.80 to 0.97). Self-reported sleepiness just before injury compared with control time was associated with a lower risk of injury, with ORs of 0.82 per one hour of increased sleep (95% confidence interval (CI) 1.03 to 1.09), but this effect disappeared when we controlled for activity, location, and recent alcohol consumption.

CEOs, Service Unit Directors: Over the past decade, CEOs and Service Unit Directors have become involved in the area of health care management. The management of health care facilities has evolved from an emphasis on providing care to an emphasis on improving care. This evolution requires not only a new set of managerial skills, but also a new set of leadership skills. In order to be effective leaders, CEOs and Service Unit Directors must be able to manage their organizations effectively.

The Association of American Indian Physicians is hosting the following events in 2007:

• 10th Annual National Native American Youth Initiative: to be held June 23 - July 1, 2007 in Washington DC. American/Indian/Aleut Native (AAN) high school students, ages 16 - 18, who have an interest in the health careers and/or biomedical research are encouraged to apply. For additional information and/or to register for the workshop, please contact Stephanie Klepacki at (505) 821-4480 or by e-mail at Stephanie.Klepacki@nih.gov.

• 36th Annual Meeting and Health Conference: to be held July 26 – 31, 2007 in the Gaylord Opryland Resort & Convention Center in Nashville, Tennessee. The theme is “One Culture, Two Worlds: Connecting Tribal and Urban Indian Health.” Call For Abstracts: AAPI is seeking presentations that address current issues regarding Urban Indian Health.

For questions regarding the above events, please contact the AAPI office at 1225 Sovereign Row, Suite 103, Oklahoma City, Oklahoma 73108, telephone (405) 946-7872, fax (405) 946-7873, or at http://www.aapi.org.
Sleepiness and sleep deprivation are associated with injury
Chronic Disease and Illness
influenza A and B viruses on management of febrile infants without signs of focal infection.
Wagner TH, Engelstad LP, McPhee SJ, Pasick RJ. The follow-up care for an abnormal Pap smear, outreach workers
Outreach workers should follow women with the most severe PAP abnormalities
Women’s Health meeting, August 15 - 17, 2007 in Albuquerque will highlight speakers from the Institute for...
Go to Put innovation into motion: National Indian Health MCH
aneuploidy should be available to all women who
is an effective screening test for Down syndrome in the general population. At the same false-positive rates, this ...
• First-trimester screening using both nuchal
Summary of Recommendations and Conclusions
Editor’s Note: The following is a digest of the monthly Obstetrics and Gynecology Clinical Consultant’s Newsletter (Volume 5, No. Jan-Feb; 20(1):16-22.
• Overview of GPRA and CRS 2007
• Advanced CRS 2007
• Overview of GPRA and CRS 2007
• Experienced CRS users with a
Conclusion
Ob/GYN Chief Clinical Consultant’s Corner Digest
Abstract of the Month
Low hanging fruit: Promotion of healthy lifestyles during and after pregnancy: less DM
Gestational diabetes mellitus (GDM) affects approximately 2% to 4% of all pregnant women in the US each year. Women who have had GDM are at high risk for developing type 2 diabetes mellitus. The objectives of this study were to assess the prevalence of modifiable risk factors for developing diabetes among women with previous GDM only.
Methods: Cross-sectional data for nonpregnant women from the 2003 Behavioral Risk Factor Surveillance System were used to estimate and compare the prevalence of modifiable risk factors among three groups: nonpregnant women with previous GDM only, nonpregnant women with current diabetes, and nonpregnant women without diabetes.
Results: In 2000, 7.6% of nonpregnant women aged 18 years and older in the United States had current self-reported, physician-diagnosed diabetes, and 1.5% had previous GDM only. Compared with women without diabetes, women with previous GDM only had higher prevalence of no leisure-time physical activity (52.0% vs 28.5%), overweight (62.2% vs 40.0%), and obesity (20.4% vs 20.9%). After adjusting for sociodemographic variables, women with previous GDM only were more likely to have no leisure-time physical activity (prevalence odds ratio [POR] 1.4, 95% confidence interval [CI] 1.2-1.7) and more likely to be overweight (POR 1.6, 95% CI, 1.0-2.5) or obese (POR 1.7, 95% CI, 1.3-2.7), compared with women with no diabetes.
Conclusion: Women with previous GDM are more likely to have modifiable risk factors for developing diabetes than women without diabetes. More attention to this issue is needed from health care providers and public health officials to encourage the promotion of healthy lifestyles during and after pregnancy.
OB/GYN CCC Editorial comment
In GDM, many times the chance to make changes in postpartum lifestyle is squandered. Russell et al, below, report that the glucose often goes unchecked. One successful model has been the utilization of intense case management. Here is a model to consider.
OB/GYN Chief Clinical Consultant’s Corner Digest

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

Initial exercise consult: Assessment of current physical activities and level of readiness for exercise education/information on exercise and GDM, and individualized exercise plan.
The full program is described in the online version of this digest.
From Your Colleagues
Jody Thiry, HQE
Consumer Reports: Only 2 out of 12 infant car seats performed well in crash tests
Consumer’s Union, publisher of Consumer Reports, conducted crash tests on 12 infant car seats at 35 mph (frontal crash) and 38 mph (side-impact crash), the speeds currently used to crash test most new cars and minivans. Rear-mounted rear-facing seats, suitable for children under one year and 22 lbs according to the manufacturers, were found to detach from their bases or treat violently, damaging test dummies in some cases. While the latest New Car Assessment Program scores crash safety in the form of highly publicized “star ratings,” no similar score is used to rate infant and child safety seats. Manufacturers have improved car designs based on star ratings but there is no such incentive for car seat manufacturers. The tests also highlighted ongoing problems with the federally-mandated LATCH system, where most car seats performed less well using LATCH than when attached with vehicle safety belts. A NEVADA report issued last month noted that 40% of parents use safety belts instead of the LATCH system because of concerns about the system.

Hot Topics
Obstetrics training: decision to incision times significantly improved
Decision to incision, as was conducted and implemented, did not transfer to a detectable impact in the study. The Adverse Outcome Index could be an important tool for comparing obstetric outcomes within and between institutions to help guide quality improvement. LEVEL OF EVIDENCE: 1.

OB/GYN CCC, Editorial comment
Put innovation into motion. National Indian Health MCH and Women's Health meeting. Another successful example is the 100,000 Lives Campaign, which is an initiative to engage US hospitals in a commitment to implement changes in care proven to improve patient care and prevent avoidable deaths. The Institute for Healthcare Improvement estimates that the lives saved as of June 14, 2006 was 122,500.

To that end, the National Indian Health MCH and Women's Health meeting, August 15 - 17, 2007 in Albuquerque will highlight speakers from the Institute for Healthcare Improvement and others who have evaluated and treated various health care systems. The meeting has individual facility program reviews as well as many hours of CME/CES. Your facility should send a team to the meeting; you and 2-3 other colleagues from different disciplines should start planning now. Go to http://www.iai.gov/MedicalPrograms/MCHFC/CV01/evttagg?

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

Wagner TH, Englefield LP, McPac B, Patrick RJ. The costs of an outreach intervention for low-income women with abnormal Pap smears. Prev Chronic Dis. 2007 Jan

Child Health
Rapid flu test trims further tests, treatment
Conclusion: The inclusion of rapid influenza testing for the evaluation of febrile young infants without signs of focal infection during influenza season decreases the need for additional studies and reduces the length of stay in the ED, the use of antibiotics, and unnecessary hospitalizations.


Chronic Disease and Illness
Sleepiness and sleep deprivation are associated with impacts
Results: Better sleep quality in the past 7 days was associated with a lower risk of injury (odds ratio [OR] 0.89, 95% confidence interval [CI] 0.80 to 0.97). Self-reported sleepiness just before injury compared with control time was associated with a lower risk of injury, with ORs of 0.82 per unit of a magnitude of 1.2 and 0.78 per unit of magnitude of 0.8 in case-control analysis and 0.75 to 0.85 in case-crossover analysis. In case-crossover analysis, additional sleep in the 24 hours before injury compared with the 24 hours before that was associated with an increased risk of injury (OR 1.06 per hour; 95% CI 1.01 to 1.10), but this effect disappeared when we controlled for activity, location, and recent alcohol consumption.

Conclusion: Better recent sleep quality was associated with a lower risk of injury, but surprisingly, feeling sleepy was also.


Features
ACOG Guidelines recommend universal screening for Down syndrome regardless of age
Summary of Recommendations and Conclusions
The following recommendations are based on good and consistent scientific evidence (Level A):
- First-trimester screening using both maternal transvaginal measurement and biochemical markers is an effective screening test for Down syndrome in the general population. At the same false-positive rates, this screening strategy results in a lower risk of detection than does the second-trimester maternal serum triple screen and is comparable to the quad screen.
- Measurement of nuchal translucency alone is less effective for first-trimester screening than in the combined test (maternal transvaginal measurement and biochemical markers).
- Women found to have increased risk of aneuploidy with first-trimester screening should be offered genetic counseling and the option of CVS or second-trimester amniocentesis.
- Specific training, standardization, use of appropriate ultrasound equipment, and ongoing quality assessment are important to achieve optimal nuchal translucency measurement for Down syndrome risk assessment, and this procedure should be limited to centers and individuals meeting these criteria.
- Neonatal tube defect screening should be offered in the second trimester to women who elect only first-trimester screening for aneuploidy.

The following recommendations are based on limited or inconsistent scientific evidence (Level B):
- Screening and invasive diagnostic testing for aneuploidy should be available to all women who present for prenatal care before 20 weeks of gestation regardless of maternal age. Women should be...

SAVE THIS DATE!
May 21-25, 2007
The Indian Health Service Clinical Support Center
Announces
The IHS 2007 Continuing Education Seminar
Sponsored by Advanced Practice Nurses and Physician Assistants
Chaparral Suites Hotel
5001 North Scottsdale Road, Scottsdale, Arizona 85250
(480) 949-1414

Designed for physicians, physician assistants, nurses, nurse practitioners, nurse midwives, and pharmacists working in the Indian health programs, this CE seminar provides an opportunity to network with peers and colleagues on issues of common concern, update knowledge of current health trends and issues to enhance skills to improve patient care, and receive accredited continuing education.

CURRICULUM
The Advanced Practice Nurses' business meeting will be held Monday, May 21st through the morning of Tuesday, May 22nd. The physicians assistant business meeting will take place Tuesday afternoon, May 22nd, 8:30-10:30 am.

The continuing education sessions will begin at 1:00 pm on Tuesday, May 22nd and continue through 5:30 pm on Friday, May 25th. The agenda will include plenary and concurrent workshop sessions on a variety of clinical topics. The complete agenda with registration forms will be available in late January.

ACCREDITED SPONSOR
The Indian Health Service (IHS) Clinical Support Center is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. The IHS Clinical Support Center is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Continuing education credits for PAs will be requested from the AAPA.

 Lodging
Please make your room reservation early by calling the toll-free reservations number, 1-800-528-1656 or call Chaparral Suites Hotel at (480) 949-1414. Mention you are a participant of the "IHS: Advanced Practice Nurses & Physician Assistants" to receive the special group rate of $119.00 + 9% (state/local sales tax) per night. The deadline for making room reservations is April 21, 2007. Any reservation request received after this date will be accepted on a space-available basis only. Please be advised that you will need to guarantee your reservation with a credit card or personal check for the first night of lodging.

The hotel provides transportation to/from the airport. When you arrive at the airport, go to the baggage claim area and locate the telephone booth that lists various hotels.

NOTE: A registration fee of $50 will apply for those employed by compounding pharmacies that have taken their share of CSC funds and for those working in the private sector.

WATCH YOUR MAIL FOR REGISTRATION INFORMATION!
IHS Clinical Support Center, 40 N. Central Ave, Suite 780, Phoenix, AZ 85004 (602) 364-7777

February 2007 THE IHS PROVIDER 36
19th Annual IHS Research Conference

ABSTRACT TEMPLATE AND BIOGRAPHICAL DATA FORM


Background: Major needs in assessing care included: using existing data; and assessing primary care. We used “available hospitalization” indicators to assess how well IHS primary care prevented avoidable hospitalizations. Methods: The avoidable hospitalization indicators were: TIH, pancreatitis, cervical cancer, rheumatic heart disease, and asthma, complications of hyper tension, influenza and pneumococcal pneumonia in 65+ year olds, infant gastrointestinal and newborn disease due to immunizations. The IHS inpatient database for years 1985–1999 provided the count of cases. The denominator was the IHS Service Population. Derived from the census 1985–1999 of American Indian and Alaska Native residents. We calculated the

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Breastfeeding

Suzan Murphy, PIMC

Supporting employee breastfeeding is easier than it seems.

The Indian Health Services’ Lactation Support Circles is part of a new national wave of improvements to the work environment. Establishing guidelines that support moms to work and breastfeed benefits many parts of the work environment.

• When new moms can keep breastfeeding their infants, their children have half the clinic visits for diarrhea and otitis media and dramatically lower rates of hospitalizations rates for lung and gastrointestinal illnesses.

• Breastfeeding moms need less leave for sick infants, reducing the burden to their co-workers for unexpected absences.

• Breastfed babies are cheaper to care for medically. Ball et al found significantly less health care/insurance dollars spent for illness with breastfed babies compared to formula fed babies.

• Aetna Life and Casualty, Hartford CT is a forerunner in supporting breastfeeding. The

Research on employee and management satisfaction indicates that supporting the choice to breastfeed improves job satisfaction and productivity.

So what is the easy part about supporting employee breastfeeding?

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

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In almost all cases (88%), there was a single parasitic fetus. Of course it is too much to expect that any such projections are perfect, and the lower limbs were noticed the 4-inch-long fetus inside the boy’s abdomen. It had limbs and a partially developed spinal cord but no head. The mother, who said she was 29, believes she had a normal pregnancy. A doctor at a hospital in Temuco, where she lives, noticed the baby’s strange form. A boy has been born in Chile with a fetus in his stomach in what doctors said was a rare case of Fetus in fetu, a parasitic monozygotic twin. Medical Mystery Tour A boy has been born in Chile with a fetus in his stomach. The lower limbs were noticed the 4-inch-long fetus inside the boy’s abdomen. It had limbs and a partially developed spinal cord but no head. The mother, who said she was 29, believes she had a normal pregnancy. A doctor at a hospital in Temuco, where she lives, noticed the baby’s strange form. A boy has been born in Chile with a fetus in his stomach in what doctors said was a rare case of Fetus in fetu, a parasitic monozygotic twin. Medical Mystery Tour A boy has been born in Chile with a fetus in his stomach. The lower limbs were noticed the 4-inch-long fetus inside the boy’s abdomen. It had limbs and a partially developed spinal cord but no head. The mother, who said she was 29, believes she had a normal pregnancy. A doctor at a hospital in Temuco, where she lives, noticed the baby’s strange form. A boy has been born in Chile with a fetus in his stomach in what doctors said was a rare case of Fetus in fetu, a parasitic monozygotic twin. Medical Mystery Tour A boy has been born in Chile with a fetus in his stomach. The lower limbs were noticed the 4-inch-long fetus inside the boy’s abdomen. It had limbs and a partially developed spinal cord but no head. The mother, who said she was 29, believes she had a normal pregnancy. A doctor at a hospital in Temuco, where she lives, noticed the baby’s strange form. A boy has been born in Chile with a fetus in his stomach in what doctors said was a rare case of Fetus in fetu, a parasitic monozygotic twin.
The conference will be held at the Sheraton Crescent.

Results: Compared with planned vaginal deliveries, planned cesarean delivery doubles rate of NICU and the risk for pulmonary disorders. Conference updates will be posted on the IHS Research Program website at http://www.ihs.gov/sponsorship.

Further studies are needed to determine the significance of this finding.

For questions about abstract submission, Ms. Randall may be reached by telephone at (503) 621-8996 (cell) or (503) 697-7397 (home), and Dr. Trachtenberg at (301) 443-0578.

89% of fetus in fetu lesions were noted before 18 months of age. In reviewing literature most case reports up to 1989 showed the preoperative diagnosis of fetus in fetu was made only in 14.7% of cases because CT scan was not performed. Nowadays, CT scan has proven very helpful in suggesting the preoperative diagnosis. Magnetic resonance imaging was also used in 4 cases.

The differential radiologic diagnosis were teratoma and maximun pseudocyst. Indeed these masses often had calcified components so they were sometimes difficult to differentiate with futs in fetus. Treatment was complete resection of the mass except when it was adherent to the host's organs. Relapse was observed in 1 case (out of 87 cases) with recurrent right abdominal mass 4 months after surgery. This was a teratoma, which contained cystic, solid, and calcified components. It measured 13 cm in diameter and 5% of the tumor was yolk sac carcinoma. After surgical excision, the patient was treated with chemotherapy and recovered at 2 years of age.

Which valuable medical resource was the original source of this story? While I did not spend enough time in the grocery check out line this month to definitively say if the vulnerable medical journal, the National Enquirer, also covered this story, I did ask our readers who regularly subscribe the National Enquirer to print their personal subscriptions. Hearing few replies, I will say I first saw this story on Reuters, before I launched my literature review in Pediatrics, Published Journal of Pediatric Surgery, etc.
planned cesarean delivery: Compared with planned vaginal deliveries, planned cesarean delivery doubles rate of NICU and the environment and genes may potentially beneficial effects on the child’s eye and hand following fish oil supplementation in pre pregnancy is safe for the fetus and infant: Maternal fish oil supplementation during Perinatology Picks

• Aikins and Feinland (N=1068) studied planned home ant, and may have put a stop to breast

• Taking Sister Study materials to places where eligible women may be, such as doctors’ offices, beauty salons, churches/synagogues, meetings, workplaces, conferences, events, etc.

• Making a pledge to personally find 5 eligible women to enroll in the study

• Writing a letter to your newspaper editor with a personal story

• Writing a letter to your newspaper editor with a personal story

• Soong and Barnes (N=3756) found that the semi- Perinatology Picks

• Shorten, et al, (N=2891) found that the lateral position atrachte@hqe.ihs.gov MD, MPH at

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Perinatology Picks

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There is a variation in the rollout of HPV vaccine in Indian vaccine, some may initially restrict HPV vaccine to a limited age group (e.g., 11 - 12 year old VFC-eligible), but eventually the vaccine should be available to all VFC-eligible females 9 - 18 years.


IHS Child Health Notes

"Quote of the month"

The most effective way to remember your wife’s birthday is to forget it once.”

Anonymous

Editorial Comment

The essay below by Dr. Ratmeyer grew out of conversation at a Navajo Area Pediatric meeting this past fall. Dr. Ratmeyer makes an important plea for empathy and dialogue, not just criticism. This collaborative approach will allow health professionals to develop a successful working relationship with tribal employees that will benefit American Indian and Alaska Natives.

Understanding the Child Protection Role of Child Health Care Practitioners in Indian Country

Recently, pediatricians working on the Navajo Nation asked me to share my thoughts about our role in child protection. Although much of what I’ll say comes out of my 15 years of experience at the Gallup Indian Medical Center, I suspect that many of my observations are applicable to doctors and other medical practitioners working elsewhere with Native American populations.

I have to start out by saying that I feel the pain of everyone tasked to interact with our social work and law enforcement agencies in Indian Country. We need to first acknowledge the reality of the professional environment in which we work. Although there are many examples of professional competence mixed with caring individuals doing the work of child protection, we tend to see agencies whose work product is the result of misunderstanding, undermining, and underfunding.

We have workers who have no training other than “on-the-job,” courtesy of the previous child protective services (CPS) worker or police officer. There are often minimal job requirements for these positions. Most tribal social work (SW) positions don’t require a degree in social work. Many Family Court judges also may have little experience with the Navajo Nation’s Children’s Code, which is supposed to guide Family Court decision-making. We, in the medical profession, come from an entirely different world of expectations and experience in which we are not put “on the job” until after at least seven years of intense training. That being said, we can only do the medical job for which we trained, with a bit of child advocacy to create and support a system that protects children. We cannot be social workers, we cannot be law enforcement officers, and we cannot be officers of the court, either prosecutors or judges.

Our temperament is always to step out of our own discipline to point out the shortcomings of those in other disciplines, because of what we think they should be doing. A better and more effective approach is to come to understand what those in these agencies do. We need to learn about their reality, including what allows for such difficulty in responding to child maltreatment.

To do that, we have to stay in dialogue. We humanize people when we view them as equivalent to what they do (or, as we see it, what they fail to do). And it shows in how we talk to people. We — often unwittingly — paint ourselves as aloof, self-righteous, intolerant, and unapproachable when we go on our tirades lambasting CPS staff for what we perceive as poor performance. It’s a sure way to turn bridges. People will avoid us, refuse to speak with us, and work around us and at cross purposes to what we want to and need to do in those cases. We need to cooperate. We do that by talking, not just about work, but by getting to know one another by name and developing healthy personal relationships. They need to get to know us as we see us, as well as for what we do.

The only way to do that is by establishing a routine of regular meetings, always at the same time/day, in the same place, month after month, year after year. It requires that we commit to the process, as well as the utility, of the multidisciplinary team. People need to understand we approach these situations from the perspective of diagnosis and treatment, just as we need to understand that they do so with a set of expectations imposed by the law and the courts. We have to be very objective in approaching this work within our own discipline, but we have to be more subjective about how people in other disciplines approach this work. We have to be aware of their shortcomings and the environment that allows those problems, while resisting the temptation to diarrhetically criticize everything they do. Lastly, we need to do our job with a standard of excellence that makes us shine. People will look at us and say, There goes a real professional! He/She knows so much and understands so much. He/She’s so good at sharing that knowledge with us. He/She’s so good at listening to our concerns. He/She has such good suggestions about..."
how to approach this problem. And he’s really cares about kids. If the CPS people can say things like this about us, then our studies grows. They trust us. They call us to ask about how to approach a particular problem, to discuss the urgency of an issue, to gain understanding about a chronic health condition of one of the kids in custody. That’s collaboration and that’s what we want.

This takes patience, insight, consistency, and commitment! This is what has worked for me over the years. But, I love the work and I love the process. And I appreciate the people in CPS who struggle against great odds to deliver a ‘good product’. Most of all, I want to protect kids. If we all truly want that, we’ll realize that making incremental change over a long period of time is far more reasonable than tilting at windmills, while alienating entire agencies, to effectively look as if we’ve influence over decision-making in the ultimate disposition of those families embroiled in violence, abuse, and neglect.

Building relationships between professionals and establishing continuity and consistency in our child protection processes may prove the most effective way to advocate for all our Native children and their families. And that may just bring us all some peace of mind.

John Ramnsey, M.D., FAAP
Gallup Indio Medical Center
E-mail: john.ramsey@jibl.gov

Infectious Disease Updates.
Bonnie Tingleston, MD, MPH
Human Papilloma Virus (HPV) Vaccine Rollout Issues: Cost and Availability.

Quadrivalent HPV vaccine (Gardasil®), which prevents two HPV serotypes associated with 70% of cervical cancer and two types of HPV serotypes associated with 90% of genital warts, promises to be an important tool in our prevention armamentarium. The vaccine is a 3-dose series and is licensed for 9 - 26 year old females. ACP recommends routine vaccination of 11 - 12 year old females with catch-up vaccination for 13 - 26 year olds. This vaccine is available through the Vaccine For Children program (VFC), and some states have already started offering it to all VFC eligible (which includes American Indian and Alaska Native) females 9 - 18 years.

However, the cost of the vaccine (per dose costs are $120 private market, $96 federal contract) has put stress on the ability of states with universal vaccine programs like Washington, Alaska and New Mexico to provide HPV vaccine universally. Universal states combine VFC funding with other state and federal funding to provide free vaccines for all children 18 years old. As those states gear up to provide HPV vaccine, some may initially restrict HPV vaccine to a limited age group (e.g., 11 - 12 year old VFC-eligible), but eventually the vaccine should be available to all VFC-eligible females 9 - 18 years.

There is a variation in the rollout of HPV vaccine in Indian Health Service tribal facilities depending on the availability of the vaccine through state VFC programs and the vaccine in is not yet available in some states, at least one tribal facility has purchased HPV vaccine and is seeking Medicaid and private insurance reimbursement. If you have concerns about how HPV vaccine will be rolled out in your state, please contact Amy Groom at amy.groom@faco.gov.

HPV forecasting will be incorporated into the next version of the RPMIS immunization package and will probably include options for forecasting for either 11 - 12 year old or 11 - 13 year old females.

Recent Literature on American Indian/Alaskan Native Health

Doug Eppesino, MD

Summary

This study was designed to investigate the epidemiology of early onset media use (OM) in a group of mostly Ojibwe infants living in a rural reservation or urban setting in Minnesota. Pregnant women 16 years and older were recruited into the study between June 1998 and April 2001. To be eligible, either the mother or the father had to self-identify as Native American.

Data were gathered through interviews conducted during the prenatal period and at 2 weeks and 6 months postpartum. Ears were examined by trained research nurses and tympanograms completed on enrolled infants at 2 weeks and 2, 4, and 6 months of age. In addition, hearing screenings were performed at least 4 times during the study and medical records were reviewed. A series of questionnaires were distributed at various intervals. Ruggeness criteria were employed in the diagnosis of OM combining results from the ear examinations, tympanograms, and hearing screenings obtained during study visits. OM diagnosis were also tallied from clinic visit notes.

The study sample consisted of 408 women. This represented a participation rate of only 20%, a potential source of significant study error. Sufficient data for inclusion in the analysis were collected on a lesser number of participants.

Of the total universe of eligible study participants, 344 infants completed ear examinations in the first 8 months of life. Of those, 65% or nearly two thirds of the infants had at least 1 episode of OM and 34%, had 2 or more episodes. OM occurred before 2 months of age in 29%, between 2 and 4 months of age in 48%, and between 4 and 8 months of age in 33% of these infants. Risk factors significantly associated with the development of early onset OM included a preceding URI and a maternal history of childhood OM. Risk factors found to be associated with OM in previous studies such as short breastfeeding duration and tobacco smoke exposure were not replicated here.

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Editorial Comment
According to the authors, the incidence of early onset OM in this study exceeds that found in a similarly designed study of a White cohort of infants in Minnesota (63% vs. 48%). This study of mostly Ojibwe infants supports what many IHS specialists already know to be true: that Native American children have more OM at an earlier age than other US populations. Other studies exist that thoroughly validate this perception.

Unfortunately, the authors tread on dangerously thin ice when they allude to a possible genetic predisposition of Ojibwe infants to early onset OM. The authors base this conclusion solely on a statistically significant association between early onset OM in study infants and a maternal history of childhood OM. They also suggest that a poorly done study of Apache infants published in the late 80s also supports this contention.

No such conclusion can be reasonably drawn from either study design, in my opinion, and the authors of the Apache study make no such assertion.

As any regular reader of my reviews knows, I firmly reject the notion that genetics can in any way explain the significant health disparities suffered by minority populations. Please refresh your memories by reviewing previous editions of the IHS Child Health Notes: http://www.ncbi.nlm.nih.gov/MedlineProgram/MEDLINEEdContents.ICIP106.doc, although variation between individuals within a population can occur on a genetic basis. Yes, “race” does in fact exist, but it is a purely human invention, born entirely out of the human psyche.

The paper under review is particularly rife with uncontrolled bias and confounding on many fronts, and independent of my own perhaps quirky personal prejudices, no reasonable conclusion invoking genetic factors as a source of disparities in early onset OM in the studied population can be drawn. This is yet another uninformative example of the ongoing medical institutionalization and ratification, or “biologification,” of racism. Common men, more critical thought processes are sorely in order.

Let’s no longer recapitulate the biology of minority populations as the source of their own suffering. Ample scientific evidence compels the conclusion that health disparities derive in their largest part from socially imposed inequities and injustices in exposure and access to resources (i.e., poverty and all its trimmings and trappings). Although it is easier, more convenient, and more comfortable to blame the victims than to blame society and ourselves, we must truly face science and fully take responsibility for the existence of health disparities in the US. We need look no further than five hundred years of exploitation and domination of a “race” of people for answers.

Accepting this, I believe, is the critical first step that will free a just society to make hard choices and truly end health disparities once and for all.

Additional Reading
disease
disease
3. Announcements from the AAP Indian Health Special Interest Group

Locums Tenens and Job Opportunities
If you have a short or long term opportunity in an IHS, tribal or urban facility that you’d like for us to publicize (i.e., AAP website or complimentary ad on Pol Job, the official AAP on-line job board), please forward the information to indianhealth@gap.org or complete the on-line locum tenens form at http://www.aap.org/med/locumtenens forn.
Indian Health Service Clinical Support Center Two Renaissance Square, Suite 780 40 North Central Avenue Phoenix, Arizona 85004

2019 Annual IHS Research Conference

Condition resulting from or aggravated by pregnancy that necessarily reflect those of the Indian Health Service or the Editors. Opinions expressed in articles are those of the authors and do not

Methods: Presently, little is known about maternal morbidity in American Indian and Alaska Native (AI/AN) women. The purpose of this study was to examine the prevalence of maternal morbidity during delivery hospitalizations at select Indian Health Service (IHS) medical centers.

Results: From July 2002 to June 2004, 6761 deliveries occurred at the five medical centers. Demographic characteristics of the

Conclusion: The Provider (ISSN 0142-6964) is distributed to more than 4,000 health care providers working for the Indian Health Service and other tribal health programs. It is sent to more than 10,000 health care providers working for the Indian Health Service and other tribal health programs. It is sent to more than 10,000 health care providers working for the Indian Health Service and other tribal health programs. It is sent to more than 10,000 health care providers working for the Indian Health Service and other tribal health programs. It is sent to more than 10,000 health care providers working for the Indian Health Service and other tribal health programs. It is sent to more than 10,000 health care providers working for the Indian Health Service and other tribal health programs.