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Cultural Practices and Beliefs of Birth and Death of Southwest Native American Tribes

Carol Dahozy, Area Nurse Consultant, Phoenix Area Indian Health Service, Phoenix, Arizona

All Native American tribes have cultural practices and beliefs surrounding the birth and death experience. These two events have significant meaning for every Native American tribe. Nurses working with Native American tribes are often directly involved in the care of patients at birth and at death. Cultural awareness of Native American traditional practices is important to the patient as well as to the nurse. According to Lillian Tom-Orme,[1] combining traditional beliefs with modern treatments not only provides culturally competent care but helps keep heritage alive.

Birth Practices

Native American cultures view children as a gift from the creator to be treasured, nurtured, and protected. This process begins during pregnancy for many Native American tribes. The Pima Indians are thought to be descendents of *HuHugam* meaning "those who are gone." They migrated to the Gila River Valley of Arizona around the year 300 B.C. and settled near the Gila River in the dry desert.[2]

Pima women were required to have their babies in a special segregation hut apart from the main dwelling. During labor an Indian woman was assisted by her female relatives or other women of her tribe who had special knowledge of birth customs.[3] The mother was instructed never to salt her food; the baby's navel would not heal properly if the mother used salt. When the baby was four days old, the godparents were to give the baby a name. The godmother would place a mixture of water and white clay into the baby's mouth to make certain evil spirits were kept away and lightning would not strike the baby as long as he or she lived. The baby was then presented to the first rays of the sun by his parents. The baby was placed in a cradleboard made of the bark of mesquite wood and cottonwood trees. The purpose of this early confinement was to give an early start for developing good sound nerves and obedience.[2]

The Maricopa migrated to their present location in the 1700s. They were originally a tribe of the Yumas of the Colorado River region. Their continual fighting with other Colorado River tribes caused them to move east where they settled with the peaceful Pimas along the Gila River.[2] One Maricopa Tribal member says she was told that babies are gifts and should not be mistreated. If you mistreat children, they would be taken away from you. She remembers that pregnant women were to stay away from animals or scary things. This could have negative effects on the baby, causing birth deformities. Mothers and grandmothers acted as the midwife and performed

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the deliveries. Pregnant women were also instructed to drink warm drinks and not to drink anything cold. After the baby was born, mothers were bound around their abdomen to help the involution process.

The Cocopah, Quechan, and Mohave tribes are referred to as the River Yuman tribes. They live on a series of reservations along the Colorado River near Parker and Yuma, Arizona. The Yuman Tribes believe that dreaming guided their people to special abilities affecting almost every phase of their lives.[4] All talents, skills, and achievements in life were believed to derive from dreams dreamed in the mother's womb. They have a special belief that the visions in the dreams are of the spirits of the great gods of the beginning of the world. The basic and most significant dreams are those which one had before birth, while still in the mother's womb. It is these prenatal dreams that the newborn baby and the child do not remember, but will come back to the growing boy and to the man as he grows older.[5]

The Hopi, which means good, peaceful, or wise, live in northeast Arizona. The Hopi people are one of the oldest tribes of the region. Mothers are often left alone at the moment of birth, but as soon as the baby is born, the maternal grandmother severs and ties the cord and makes her daughter and new grandchild comfortable. After washing the newborn, the baby is rubbed with ashes so its skin would always be smooth.

The baby begins its life on earth in a room almost as dark as the womb from which it has emerged. For eighteen days the mother and baby lay at rest in the darkened room. On the twentieth day the mother and baby are washed with the root of the yucca plant by female relatives. The baby is given a name by each female relative. The father stands watching for the sun. When the sun begins to appear, the grandmother carries the baby to the edge of the mesa. As the sun appears over the horizon, the grandmother lifts the baby so the sun rays fall directly on the little face. She sprinkles sacred corn meal over the baby while reciting a prayer. She flings the rest of the corn-meal over the edge of the mesa toward the sun. The baby is now a full member of the family. This ceremony is followed by a family breakfast feast.[3]

The Navajo Tribe believes that pregnancy is a natural state. A "Blessing Way" ceremony is conducted before the baby is born. The expectant woman is said to relive the creation story. The purpose of the ceremony is to promote a peaceful growth of the fetus and an uncomplicated delivery. Once birth has occurred, the Blessing Way provides immediate protection and strengthens the newborn's survival and coping skills. The ceremony also reinforces the bonding process of the new family.[6]

A Navajo woman must keep a peaceful and positive mind at all times as she communicates with her child in utero. She must tune into herself, feelings, thoughts, and experiences. She must avoid death, dying people, and funerals. She must not tie knots as in weaving or basket making. This could cause problems with the umbilical cord. The father of the baby must also keep good thoughts. He is responsible for protecting his mate's environment as well as her psyche.[6]

According to Wilson,[6] if there is a problem with the cord around the baby's neck, it can be treated by tying and untying knots over the woman's belly with a rope, yucca, or fern grasses. The placenta is given to the family and buried under a healthy bush or tree, giving back to mother earth. The umbilical cord is also buried with a special wish for the child. The first meconium stool is also saved and put on the mothers face to decrease pigmentation. The sash belt is wrapped around the mother's abdomen as a binder for two weeks after delivery to help with the involution process. Breastfeeding is the traditional choice. Freezing breast milk is taboo as it takes the life out of the milk. Babies are put into the Navajo cradleboard for security and protection.[6]

The Havasupai are a small band of the Yuman-speaking tribes who live in a deep canyon that forms a branch of the Grand Canyon. Havasupai means, "People of the blue water." They are closely related to the Hualapai tribe, and the two were once considered one tribe.[7]

The Havasupai believe that good health depends on using specific remedies and also observing taboos and carrying out prescribed behaviors for certain occasions.[8] The Havasupai believe that once conception takes place, certain precautions are necessary if the infant is to develop properly. According to Weber & Seaman,[8] mother and father have to avoid eating all meats one month before the baby is born and one month after the birth. The mother also must avoid salt before giving birth and through the nursing period. Using salt will cause things to dry up. The mother is not supposed to scratch her body with her fingers, but can use a stick to safely scratch herself.

When the time for delivery was near, the woman went home to her own mother. Her mother and female relatives assisted with the birth. If the baby was slow in coming, pressure was applied to the abdomen. The father may be asked to assist. The placenta was buried safely away from animals. A woven belt was wrapped tightly around the abdomen to force out the fluid; if this was not done, it was feared that fluid would flow to the top of the womb and cause death. Following the birth, the mother, baby, and father were bathed in yucca suds. The mother would lie down on a heated bed made by burying hot stones under moist stones. The mother was given hot soup made from dry corn. She was cared for in this manner for three nights.[8]

According to Weber & Seaman,[8] the baby was given the breast two days after birth. If the baby was a boy, the father would run every morning for the first month so that the boy

would grow up and chase deer. The baby was put in a cradleboard made by the baby's maternal grandmother before the child was born.

The Apache Tribe have a ceremony that has been passed down over many years. The Long-life Ceremony was given to them by the Apache Gods. It has been translated to mean "Water has been put on top of his head." This ceremony takes place as soon as possible after birth, before anything untoward can happen. This ceremony blesses and strengthens the baby. It is meant to carry the child safely until the puberty ceremony is held.[9]

The White Mountain Apache women also were attended by their female relatives. According to a tribal member, after the birth of the baby, the placenta is placed at the grandparent's house, as this is the place where they will find security and guidance. The woman is not to attend a funeral. Baby items should not be bought until after the baby is born. Pregnant women are not to go to Sunrise Dance ceremonies, where there is dressing of the yellow painted girl. Babies are also put into a cradleboard that is made of the pinon tree and Yucca plant.

Death Practices and Beliefs

Death is viewed by Native American Tribes as a natural part of life. It is a time of transition into another world. It is believed that at death the soul of the person continues the journey into an afterlife.

The Pima tradition begins immediately after one has died. As relatives prepare the body for burial, loud wailing accompanies their work, which is referred to as *ehsto* meaning, "to hide the remains."[2] The Pima's reverence for death was so great that mourners only say, "They have departed for the hereafter." The community gathers to help the grieving family. All the belongings of the deceased are buried with the body. The home is burned. Nothing remains to bring back memories of the departed one.

According to Shay,[2] the spirit hovers around their home for several days. Food is prepared and placed in the grave for the deceased to eat before their departure from the world. Family and mourners wail and sing the mourning songs. The name of the deceased is never mentioned again, as it is believed that this will bring sickness and death. There is a mourning period that lasts a month for family and friends. A widow had to cut her hair up to her earlobes. She cannot have a social life for a year.[2] The hereafter is referred to as *Si'al Wui,* "Where morning begins in the east." This is a place of everlasting merrymaking and dancing, and a place of only happy times.

The Yumans have a powerful and moving cremation ceremony. Singing and wailing preceded an imminent death. According to Griffin-Pierce,[4] mourners sang 30 song cycles with 200 songs in each. Men and women dance in line, arm in arm, moving back and forth to the accompaniment of the singing. Funeral orators made speeches praising the virtues of the deceased. The orators also addressed the dead, encouraging him to end his ties with his loved ones on earth.

Immediately after death, the body and all possessions, including his house, were set on fire. Mourners also cast their personal offerings on the fire. The River Yumans believe that the soul spends the first four days after cremation revisiting significant places in the individual's life.[4] During the four days after the funeral, relatives are to eat no meat, salt, or fish and drink no cold water. They fumigate themselves with the smoke of burning arrow weed. Female mourners cut their hair to ear level.

The Maricopa have beliefs similar to those of the Yuman Tribes. According to a tribal member, the Maricopa believe that their ancestors will come for them and help them make a peaceful crossing to the other side. The Maricopa also have cycles of songs that are sung at wakes and on the way to the crematory. Today, wakes are held in a community building referred to as a cry house. All the belongings of the deceased, including their animals, are burned or destroyed. Mourners also bring personal belonging to the crematory to be burned with the body. It is their belief that they send belongings on to someone that has died. After four days, the deceased must be forgotten. If you continue to remember the deceased, it will cause sickness and death.

The Hopi Tribe views life and death to be part of a continuous process. Life and death are viewed as a complementary pair that is part of a continuous whole. The Hopi believe that corn can be viewed as a metaphor of life itself. Hopis begin as seeds that are planted in the mother's womb. They emerge from the womb and are blessed by light and nourished by their family. On the 20th day, a Hopi child is led from the house where he/she has been kept and receives corn as the sun emerges from the eastern horizon. They grow and mature. Hopi live with corn as their mainstay of their diet. As adults they will create the seeds of the next generation and will eventually die and be replaced by their offspring. For Hopi, death becomes part of the cycle, and they will become katsina spirit essences.[10] They believe that the spirits of the dead become clouds that bring rain to the living.[4]

According to Rasband,[11] the hair of the deceased is washed in yucca suds and prayer feathers are placed in the hands, feet, and hair. Over the face is placed a mask of cotton that is representative of the cloud mask the spirit will wear when it returns with the cloud people to bring rain to the village. Women are wrapped in their wedding robes; men are buried in a special blanket with a plaid design.

The ghosts of the dead are feared rather than death itself. To prevent the ghosts from returning to bother the living, *pahos* are given to the spirits of the deceased, and the trail back to the village from the burial site is ceremonially closed with sacred meal. Those who did the actual burial are purified with juniper smoke. The spirits of children who die before they are initiated are believed to return to the mother's house to be born again.

The Navajo believe that when one dies, the spirit that represents the good in life goes to an afterworld. The journey takes four days and the spirit of the person is guided to the afterworld by deceased relatives and friends. The afterworld is

an underworld and is accessed through the "hole of emergence" from which the first Navajo people came forth at the beginning of time. The afterworld is like life on earth and the inhabitants live there the same as do the living Navajos, but it is a good life with happy times.[12]

According to Alvord,[13] when a person dies, the "good" part of the person leaves with the spirit, while the "evil" part stays with the physical body. When a person dies, an evil spirit referred to as "*ch'iindi***"** is released with the last dying breath. The *ch'iindi* is considered very dangerous and causes sickness and misfortune. The Navajo are very fearful of the *ch'iindi* and take every precaution to avoid contact. They take great caution to avoid the dead, graves, and anything connected with death. When a person dies in a hogan, the hogan is destroyed.[13] Even today, families will bring their dying relatives to the hospital to prevent them from dying in the home. Many Navajos will avoid hospitals as they feel the buildings are filled with *ch'iindis*. One who has touched a dead body must undergo a ceremony known as the Enemy Way to purify and release the *ch'iindi* spirit.

The Havasupai have beliefs similar to other tribes. They believe that a person's ghost could cause sickness and death. Therefore, everything must be done to remove the dead, his belongings, and anything that would cause people to remember him. Remembering and speaking of the deceased person would cause his spirit to return. The funeral was based upon the destructive and purifying power of fire.[8] At the time of death the body and personal belongings of the dead person were burned. The person's home was burned, animals were killed, and crops were destroyed. During the burial process, songs were sung and the person's life and good deeds were retold and reenacted.

According to Weber & Seaman,[8] the Havasupai abandoned cremation and began burying their dead. The Havasupai believed that a corpse could arise with greater ease from beneath a pile of stones than from ashes scattered by wind and rain. It is also thought that the change was due to pressures from Christian missionaries and other outside pressures.

The Havasupai adopted the Yuman Tribes mourning ritual. A gathering referred to as *Nemitiawak* meaning "meet to cry" is held. Mourning songs are sung and the people form a circle and dance to the songs. During this time, the people are allowed to talk about their loved ones who have died. They bring gifts to send to their loved ones who have gone to the spirit world. These gifts are cast into the burning fire. The ceremony is followed by a feast for all in attendance. This ritual is held on an annual basis allowing tribal members to laugh, to weep, to dance and to sing.[7]

The Apache Tribe believes that when a person dies, a dead kinsman appears to the dying to lead the person on a four-day journey to the north where the afterworld is located. All his possessions are destroyed so they do not stand in the way of the deceased one's path to the Spirit World. The name is never again spoken or mentioned after death. The Apache ritual places the head facing in an Eastward direction with the feet toward the west. Female relatives conduct lamentations and crying loudly at sunset. This practice is often conducted at the patient's hospital bedside. Widows used to cut off their hair, and she lived with the family of her husband's brother whom she married at the end of the mourning period.[4]

Conclusion

Native Americans tribes view birth and death with very specific meaning. Many of these cultural beliefs are still practiced today. Cultural awareness of these sacred events is important for nurses to provide quality culturally sensitive care to Native people.

References

1. Cantore J. (01, February 14). *Earth, Wind, Fire and Water*. Retrieved November 19, 2003, from *http://www.minoritynurse.com/features/nurse_emp/01-14-02b.html*.
2. Shaw AM (1974). *A Pima Past* (3rd ed.). Tucson: The University of Arizona Press.
3. Niethammer C. (1997). The dawn of life childbirth in Native America. In C. Niethammer (Ed.), *Daughters of the earth, the lives and legends of American Indian women* (pp. 1-21). New York: Touchstone.
4. Griffin-Pierce T. (2000). The River Yumans. In T. Griffen-Pierce (Ed.), *Native peoples of the southwest* (1st ed., pp. 233-259). Albuquerque, NM: University of New Mexico Press.
5. Desert Southwest Transmission Line (2003). Cultural Resourses. *Desert Southwest Transmission Line*, 3.2-10.
6. Wilson U. (1999). *Navajo Cultural Beliefs*. Retrieved December 29, 2003, from *http://www.delphicenter.org/library.htm.*
7. Iliff FG. (1985). Foreward. In F. Iliff (Ed.), *People of the Blue Water* (2nd ed., pp. 10-15). Tucson,AZ: University of Arizona Press.
8. Weber S, Seaman P. (1985). Maintaining a healthy family. In S. Weber (Ed.), *Havasupai Habitat* (pp. 106-117). Tucson, AZ: University of Arizona Press.
9. Kavasch E, Baar K. (1999). Birth and Infancy. In E. Kavasch & K. Barr (Eds.), *American Indian Healing Arts* (pp. 2-15). New York: Bantam Books.
10. Geertz C. (2003). *Hopi World View*. Retrieved November 14, 2003, from *http://mc.maricopa.edu/dept/d10/asb/anthro2003/religion /hopi_world_view.html*.
11. Rasband J. (2001). *Rituals and rites of passage*. Retrieved November 14, 2003, from *http://teacherlink.ed.asu.edu/tlresources/units /Byrnes_celebrations/rites%20of%20passage.html*.
12. Carter H. (1999). *Death or, is life worth leaving?* Retrieved November 13, 2004, from *http://www.hyattcarter.com/Death_or_,htm.*
13. Alvord LA (1999). *Cutting into sacred territory*. Retrieved November 13, 2003, from http://www.salon.com/health/books/1999/06/09/cadver/print.html.

A Case Presentation and Discussion

Daniel Berg, MD, Department of Internal Medicine, Gallup Indian Medical Center, Gallup, New Mexico

Chief Complaint

Fever and swollen joints for 10 days.

History of Present Illness

A 35 year-old man with no significant past medical history developed a sore throat one month before admission. He was treated at an outside service unit with a shot of penicillin at that time. His sore throat improved, but returned about ten days after receiving his shot. Of note, several of his children also had sore throats.

Eighteen days before presentation he developed a sore right heel. He then developed a rash behind the ankles and knees, and on the arms. He describes it as macular circular lesions with well demarcated edges and central clearing. The rash and heel pain resolved over the next week, but then ten days before presentation he developed joint pains in the ankles, knees, hands, wrists, and shoulders. His left hand became swollen and painful first, then resolved while his right hand swelled. The joint pains in his leg required him to use crutches for seven days before becoming completely bed bound for the three days up until arrival at GIMC.

He reported subjective fevers for one week, along with anorexia and vomiting. He also noted dark urine for two days. He denied diarrhea, penile discharge, or infidelity. He still had a sore throat on the day of admission. Rapid strep test in the emergency department was negative.

Past Medical History

None.

Medications

None.

Family History

Unremarkable.

Social History

Married with four children. Works in social services in Window Rock, Arizona. No tobacco or alcohol use.

Review of Systems

No weight loss, cough, hematuria, kidney stones, melena, or bright red blood per rectum.

Physical Examination

Vital Signs: T 97.3; P 86; R 18; BP 128/85. *Gen*: Young man in no distress. *HEENT*: jaundice. Oropharynx without erythema or exudate. No lymphadenopathy in neck, axillae, groin. Throat without erythema or exudate. *Lungs*: Clear to auscultation bilaterally. *CV*: Regular rate and rhythm without murmurs, rubs, or gallops. *Abd*: soft, nontender, not distended, with normal bowel sounds. *Ext*: no cyanosis, clubbing, or edema. *Joints*: swelling and erythema in right ankle and right knee with large effusion in knee. Right hand is swollen over the proximal interphalangeal and metacarpalphalangeal joints, as well as over the carpals and wrist. Shoulders very sore.

Laboratory

Knee arthrocentesis: 22,700 wbc's, 25,300 rbc's, 96% PMN's. Gram stain negative. *CBC*: wbc 28.8 with 90% neutrophils. Hgb 14.1; hct 40.8; platelets 402,000 *Hgba1c* 6.4%. *ESR* 106. *Urate* 2.9. *Sodium* 127. *Creatinine* 0.9. *AST* 54. *ALT* 107. *Alk Phos* 191. *Bilirubin* 4.4. *Protein* 8.7. *Albumin* 2.7. *RA panel* negative. *Urinalysis*: 100 protein, 33 rbc's, 6 wbc's. *Electrocardiogram*: first degree A-V block with pr interval 248. Labs pending at time of admission: ASO, throat cultures, ANA, hepatitis panel, urine gonococcus and chlamydia screens, HIV.

Assessment

At the time of presentation acute rheumatic fever was the leading diagnosis. Other possiblities considered included gonococcal arthritis, hepatitis C with cryoglobulinemia, reactive arthritis, or a new onset rheumatic disease such as RA or SLE.

Treatment

The patient was treated with claforan 1g iv q8, penicillin 500mg po tid and aspirin 2g po bid. He rapidly improved on this regimen. During his hospitalization he developed a new S3 gallop on cardiac exam, though he was asymptomatic. A troponin and BNP were normal. An echocardiogram was normal. The S3 disappeared on the day of discharge. His hyperbilirubinemia resolved with fluids and was attributed to Gilbert's disease. His ECG remained abnormal with a prolonged pr interval. His fevers resolved during hospitalization. An ID specialist and cardiologist consulted on the patient.

The patient was discharged after three days to complete seven days of penicillin and ciprofloxacin. He continued on aspirin 2g bid and a PPI for prophylaxis. After he left all labs came back negative except for the ASO, which was elevated at 1701.

One week after discharge the patient returned to clinic feeling much stronger. He could walk unassisted and felt that he was getting back to his baseline physical health. He was given 1.2 million units of benzathine penicillin IM and told to follow up three weeks later. His four children and wife were also tested. One child had asymptomatic streptococcal pharyngitis. All family members were given seven days of penicillin.

Review of Acute Rheumatic Fever

Acute rheumatic fever is an illness only rarely encountered at this time in the United States, although it is still common in the developing world. It principally occurs between the ages of five and 15 years, although it can occur at any age. Principal risk factors include crowding and low socioeconomic status.

It is an inflammatory disease occurring after pharyngeal infection with Group A Streptococcus, leading to fever, polyarthritis (sometime migratory), carditis, chorea, erythema marginatum, and subcutaneous nodules. Streptococcal infection at any other site will not cause disease.

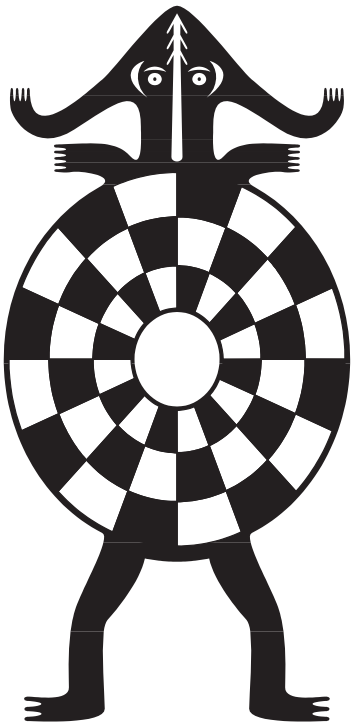
To qualify for the diagnosis, the patient must have evidence of preceding Group A streptococcal infection and meet two major criteria or one major and two minor criteria from the Modified Jones Criteria. The major manifestations are: carditis, polyarthritis, chorea, erythema marginatum and subcutaneous nodules. The minor manifestations are arthralgias, fever, elevated ESR or CRP and prolonged pr interval on ECG. Preceding streptococcal infection should be documented with a positive throat culture or elevated or rising streptococcal antibody titer. The patient discussed had three major criteria (carditis, polyarthritis and erythema marginatum) and four minor criteria with good evidence of preceding streptococcal infection.

Recommended treatment involves antibiotics and anti-inflammatory medications. 1.2 million units of benzathine penicillin and 4-8 grams of aspirin per day in divided doses is the standard therapy. Some experts advocate high dose glucocorticoids for severe carditis (prednisone at 2mg/kg/day), although there is not good evidence for this therapy. In this case we treated the patient with both penicillin and claforan since it was initially unclear whether or not the patient may have had disseminated gonococcus. He also received high dose aspirin.

In general, 75% of patients recover within six weeks, with 5% persisting greater than six months. Salicylate therapy should continue until after the ESR has normalized. Recurrences generally only occur with reinfection, though patients who have had rheumatic fever are very susceptible to recurrence with reinfection and therefore require long term antibiotic prophylaxis with 1.2 million units of benzathine penicillin per month. Length of treatment is controversial; while patients should be treated for a minimum of five years, some advocate ten years or even lifelong therapy.

References

1. Essential Cardiology, W.B. Saunders Company 2001, 561-564.
2. Harrison's Principles of Internal Medicine, Thirteenth Edition, McGraw-Hill 1994, pg1046-1052.
3. UpToDate, Feb, 2004



Editor's Note: The following is a digest of the monthly Obstetrics and Gynecology Chief Clinical Consultant's Newsletter (Volume 2, No. 2, February 2004) available on the Internet at http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm. We wanted to make our readers aware of this resource, and encourage those who are interested to use it on a regular basis. You may also subscribe to a listserv to receive reminders about this service. If you have any questions, please contact Dr. Neil Murphy, Chief Clinical Consultant in Obstetrics and Gynecology, at nmurphy@anmc.org.

OB/GYN Chief Clinical Consultant's Corner Digest

News flash: NEW: NEONATAL RESUSCITATION PROGRAM at the ACOG/IHS Postgraduate course in Denver. The course will be held on Sunday morning, June 13th from 8 am to 12 noon at the Radisson Hotel. Class size for the NRP is limited, so please register early! The regular ACOG/IHS course begins at 1 pm that afternoon. More information can be found at *http://www.ihs.gov/MedicalPrograms/MCH/M/CN01.cfm#June2004*, or see flyer on page 65

Abstract of the Month

Low-risk deliveries in a collaborative care birth center have outcomes similar to hospital deliveries by obstetricians.

Whether low-risk women give birth in collaborative care birth centers that use certified nurse-midwife (CNM)/obstetrician management or in a hospital where care is managed by an obstetrician, maternal and infant outcomes are similar. However, the collaborative care birth centers have fewer surgical deliveries and use fewer medical resources, according to a study supported in part by the Agency for Healthcare Research and Quality (HS07161).

William H. Swartz, MD, of the University of California, San Diego Medical School and his colleagues studied the care and outcomes of 2,957 low-risk, low-income women from the time they began prenatal care to discharge home from a collaborative care birth center or hospital. Of these women, 1,801 received collaborative care, and 1,149 received traditional hospital care. Major antepartum, intrapartum, and neonatal complications were similar in both groups, as were neonatal intensive care unit admissions. However, women in collaborative care had 15 percent more normal spontaneous vaginal deliveries, 23 percent fewer episiotomies, and 36 percent less use of epidural anesthesia.

Overall, technical interventions (for example, induction and augmentation of labor with oxytocin, episiotomies, and epidural use) were more common in traditional care and less technical interventions (walking, tub or shower use, and oral fluids) were more common in collaborative care. Also, collaborative care women had shorter lengths of stay in the birth facility, with 28 percent more being discharged before 24 hours, and almost 6 percent fewer having stays longer than 72 hours. Thus, operative deliveries and hospital stays, major determinants of the cost of perinatal care, were substantially reduced with collaborative care. The researchers conclude that managed care organizations, local and state governments, and obstetric providers may want to consider inclusion of collaborative management/birth center programs in their array of covered or offered services.

Reference

Outcomes, safety, and resource utilization in a collaborative care birth center program compared with traditional physician-based perinatal care. DJ Jackson, RN, MPH, DSc, JM Lang, PhD, ScD, et al. June 2003 *American Journal of Public Health* 93(6), pp 999-1006.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12773368&dopt=Abstract.

OB/GYN CCC Editorial comment:

As we deliver maternity care to the Indian health community, similar question frequently arise. At my facility or at the facilities that send patients to my facility, 1) How few infants can a facility safely deliver per year? 2) How few deliveries can providers and nurses provide safely on an ongoing basis? and 3) Do 'birthing centers' need to maintain the same credentials and regulatory criteria as a Level I maternity center?

This article confirms previous literature that has shown that low risk maternity care can be provided safely in a collaborative manner using careful triage guidelines while being willing to transport appropriate patients. See the June OB/GYN CCC Corner for a example in Indian country (Leeman, et al), which was the June Abstract of the Month, at *http://www.ihs.gov/medicalprograms/mch/m/mchdownloads/cccorner61903.doc*

As to the other questions, they are actively addressed in the IHS Biennial Women's Health and Maternal Child Health Meeting. The Biennial meeting will be held in Albuquerque,

NM, August 4-6, 2004. I encourage all providers and staff who provide care to female AI/AN to attend to help us sort those issues out. This year's theme is "Prevention in American Indian and Alaska Native Women," and there are remarkable, nationally recognized experts on the agenda. For more information, go to *http://www.ihs.gov/MedicalPrograms/MCH/M/CN01.cfm#August2004*.

From Donald Clark, Albuquerque

Prevalence and correlates of mental disorders in Native American women in primary care.

Objectives: We examined the lifetime and the past-year prevalence and correlates of common mental disorders among American Indian and Alaska Native women who presented for primary care. *Conclusions:* There is a need for culturally appropriate mental health treatments and preventive services.

Reference

Duran B, Sanders M, et al. Prevalence and correlates of mental disorders among Native American women in primary care. Am J Public Health. 2004 Jan;94(1):71-7. *http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14713701&dopt=Abstract.*

OB/GYN CCC Editorial comment:

Many adult mental disorders in AI/AN women start with traumatic experiences in childhood and young adulthood related to child sexual abuse and domestic violence. We will address many issues in the Violence Against Native Women track of the 2004 Women's Health and MCH Indian Health Conference, August 4-6, 2004 in Albuquerque, NM. Specifically, Dr. Duran will be discussing the above finding at the Biennial meeting.

Gynecology

Continuous combination oral contraceptive pills to eliminate withdrawal bleeding:
A randomized trial.

Conclusion: Extension of the 28-day oral contraceptive cycle to continuous use with a low-estrogen dose combination oral contraceptive pill (OCP) resulted in significantly fewer bleeding days.

Reference

Miller L, Hughes JP. Continuous combination oral contraceptive pills to eliminate withdrawal bleeding: a randomized trial. Obstet Gynecol. 2003 Apr;101(4):653-61. *http://www.ihs.gov/MedicalPrograms/MCH/M/MCHfamPlng.asp.*

OB/GYN CCC Editorial comment:

The practice of continuous OCPs is now receiving a great deal more attention in the literature and from pharmaceutical representatives. Gynecologists have used continuous OCPs for years successfully for treatment of various conditions, e.g., endometriosis.

Monthly menses are actually somewhat of a modern contrivance. Not that long ago, our AI/AN patients were either lactating or childbearing for the majority of their reproductive years. Menses were much less frequent until the latter part of the 20th century.

Please recall as various vendors vie for your pharmaceutical budget that you can easily explain to your patient how to use a series standard 28 day OCPs packages on a continuous basis for 3-4 cycles and then have a menses. You can also use it as a good opportunity to reinforce patient education about other aspect of the use of OCPs, as well.

Child Health

Infant physical abuse in Alaska higher than expected.

The rate of fatal infant physical abuse in Alaska during the 7-year study period was 0.20 per 1,000 (or 20 per 100,000). In comparison, the National Center on Child Fatality Review data indicate that the rate for Alaska during the period 1993-1997 was 11.71 per 100,000, while the National Center for Injury Prevention and Control data indicate that the rate for the U.S. as a whole in the year 2000 was 9.07 per 100,000. Gessner BD, Moore M, Hamilton B, et al. 2004. The incidence of infant physical abuse in Alaska. Child Abuse & Neglect 28(1):9-23. More information about child abuse, injury prevention, and infant mortality prevention is available from the MCH Library's organizations lists at *http://www.mchlibrary.info/databases/orgmenu.html*

OB/GYN CCC Editorial comment:

Infant and child abuse may have sequelae long past the childhood years. Dr. Duran at the University of New Mexico has quantified some of the long term effects on AI/AN later in life (see prevalence and correlates of mental disorders in Native American women in primary care above). Dr. Duran and oth-

ers will discuss these and other issues related to domestic violence at the 2004 Womens's Health and MCH Biennial meeting.

Primary Care Listserv

The Primary Care Discussion Forum is one way to learn about and discuss best practices with national experts in an e-mail format.

The next topic, May 1, 2004, facilitated by Donna Perry, Adolescent Medicine, Chinle, Arizona, will be on the topic of Adolescent risk taking behaviors . . . a.k.a. "Sex drugs, and rock and roll." This will include discussion of methamphetamine (up to 15% AI youth in some IHS Areas have tried it), alcohol, and marijuana; driving while "high" or riding with someone who is; and not wearing seatbelts.

You can expect 20-30 total e-mail messages per topic, four times a year. Each discussion will last approximately 4-6 weeks. If that is too much e-mail for you, then don't subscribe, or just subscribe for those topics of special interest to your practice and then unsubscribe after that topic is closed out. When finished, the full discussions and a summary will be posted on the Primary Care Discussion Forum web page at *http://www.ihs.gov/MedicalPrograms/MCH/M/PCdiscForum.asp*.

It is easy to subscribe. Go to the following page and fill in your name, then hit search, then follow the instructions:
http://www.ihs.gov/generalweb/helpcenter/helpdesk/index.cfm?module=listserv&option=subscribe&newquery=1.
Or, contact Jason Crim at *jason.crim@mail.ihs.gov* to join the Primary Care listserv.

It is also easy to unsubscribe; go to this page and fill in your name, then follow the instructions:
http://www.ihs.gov/generalweb/helpcenter/helpdesk/index.cfm?module=listserv&option=unsubscribe&newquery=1

From your colleagues

From Terry Cullen: Healthcare Disparities: Unequal Treatment, One Year Later; Management of TB, STDs, HIV and Hepatitis C – Strategies for today's clinician

From Barbara Fine: Grant Writing Workshop: National Indian Women's Health Resource Center; "Falls During Pregnancy" March 12, Interactive Web Seminar

From Jim Galloway: Cardiovascular Disease Prevention in Women; Disparities in Premature Deaths from Heart Disease; Coronary Heart Disease in Women with Diabetes

From Sandra Haldane: CNMs – Needed in Afghanistan; SIDS International Conference

From Howard Hays: Towards an Electronic Patient Record in Fort Lauderdale, FL

From Maria Martinez: Advances in cervical cancer prevention – FREE CME

From Kelly Moore: Call to action: The escalating pandemics of obesity and lifestyle

From Chuck North: Strength of Recommendation Taxonomy (SORT): A Patient-Centered Approach to Grading Evidence in the Medical Literature

From Jon Perez: Elder Care Resources from the Division's February 2004 Newsletter

From Sharon Phelan: Know any pregnant AI women interested in quitting smoking?

From Jennifer Retsinas: American Indian, Alaska Native and Native Hawaiian Caucus

From Laura Shelby: Do you have policies and procedures on treatment of STDs? Challenges faced in STD management in Indian County; Insurance coverage among American Indians/Alaska Natives and Whites; Chlamydial Infections: Clinicians Guide

From Arnold Sperling: 4th year students: Sub Internship in OB/GYN Rosebud, S.D.

From Judy Thierry: Do you want to impact Indian Health MCH for decades to come? Office for Victims of Crime (OVC) Clearinghouse

Hot Topics

Obstetrics:

First-trimester screening protocol for Trisomies 18 and 21; Maternal morbid obesity in early pregnancy is strongly associated with pregnancy complications; Management of gestation hypertension-preeclampsia; Predicting failed trial of labor after primary cesarean delivery; Coverage for U. urealyticum improves cesarean prophylaxis; Using rectal Misoprostol in the third stage of labor; SARS and pregnancy: A case report; Health literacy and pregnancy preparedness in pregestational diabetes

Gynecology:

I just gained all this weight . . .. I wonder if it was 'the pill?'; Best kind of dressing to use on a surgical wound? If using HPV DNA testing, then consider this; New contraceptive options; Increasing adherence to Pap guidelines; Evaluation and management of hirsutism in women; 2004 National Women's Health Week celebration: May 9-15, 2004

Child Health:

Who are "fragile families" and what do we know about them? Soft drinks being sold in schools? What is up with soft drinks being sold in schools? Child passenger deaths involving drinking drivers; Low glycemic index diet as practice-based treatment for overweight children; Reducing the risk of SIDS in child care; Azithromycin for persistent or recurrent otitis media; Prevention and treatment of type 2 diabetes in children

Chronic Illness and Disease:

Screening for type 2 diabetes in adults; Strength training among adults aged greater than or equal to 65 years; Moderate intensity exercise works: RCT in overweight, sedentary women; Alaska Natives have a disproportionately high percentage of HIV; Cognitive behavior therapy vs. relaxation therapy for IBS; Do you have Medicaid patients who smoke? Prevalence of diabetes and impaired fasting glucose in adults

Features

AFP: POEMS - First-trimester screening protocol for Trisomies 18 and 21; Ultrasound alone does not diagnose PCOS

ACOG: Uterine artery embolization; Ethics of elective primary cesarean delivery

AHRQ: Web M + M - A pregnant woman arrives at the ED with severe abdominal pain; Total and supracervical hysterectomy: Surgical/clinical outcomes are similar; More aggressive treatment recommendations for women with diabetes; Reducing by at least half the incidence of false-positive mammogram readings; Home visits by a nurse-health advocate team can improve the outcomes

Breastfeeding: Lower rates of overweight among children who were breastfed for longer duration; Easy guide to breastfeeding for American Indian and Alaska Native Families

Domestic Violence: Screening for partner violence: Direct questioning or self-report?

Elder Care News: Routine screening for thyroid disease in adults?

Frequently asked questions: Why do patients' blood sugars go up so high after certain meals? How does the intensity of the exercise affect weight loss, etc? Are pharmacologic agents safe to use for smoking cessation in pregnancy?

Hormone Replacement Update: Nonhormonal alternatives for the treatment of hot flashes; Understanding the risks and benefits of hormone therapy

Information Technology: Domestic violence code for recording GPRA information

International Health: Overseas contraceptives with no active ingredients; Agencies to cut maternal feaths; British Medical Journal: Epidemiology for the uninitiated

MCH Alert: Contraceptive use within adolescents' first sexual relationships; An argument for EC: Unintended pregnancy despite a family planning referral

Medscape: Efficacy and tolerability of oral Zolmitriptan in menstrually associated migraine; Uterovaginal packing with rolled gauze in postpartum hemorrhage;

Office of Women's Health, CDC: West Nile Virus during pregnancy, Infant guidelines

Osteoporosis: Relative value of heel ultrasound in the diagnosis of osteoporosis

Patient Education: Fiber: How to increase fiber in your diet; Nutrition: choosing healthy, low-fat foods; Nutrition: tips for improving your health; Pelvic inflammatory disease: updated facts

Editor's Note: The following is excerpted from the monthly Notes from the Elder Care Initiative *that is published as an e-mail newsletter. Information about how to subscribe can be found below. We would appreciate your feedback about whether or not you will find a periodic digest of this publication printed in* The Provider *useful.*

Notes From The Elder Care Initiative

Bruce Finke, MD, Coordinator, IHS Elder Care Initiative, Northampton, Massachusetts

What's New

The Urban Indian Health Institute (UIHI) of the Seattle Indian Health Board has released an IHS-funded study of the long term care needs and preferences of elders living in the Seattle urban area. The *Urban American Indian/Alaska Native Long Term Care Needs Assessment* may be the first comprehensive look at LTC needs of urban-living AI/AN elders.

Findings from the report include a strong preference for home- and community-based services and an associated low acceptance of facility-based care. There was an indication of significant need for case-management services. Preferences for AI/AN administered services were contingent; if all else was equal, respondents preferred Native programs and services, but quality, affordability, and access were key issues. Most of the respondents had lived in the urban setting for many years and most did not intend to return to reservation as they age. This report will assist the SIHB in their effort to serve their elder population and should help focus the attention of all of us on the needs of the nearly half of all AI/AN elders who live in the urban setting.

The report was compiled from a mix of focus group and survey data. The survey and data collection tools, developed by UIHI for this purpose, are available with training to other programs. For more information or an electronic copy of the report, contact the UIHI at (206) 324-9360 ext, 2113 or online at *www.uihi.org*

From the Literature

The U.S. Preventive Services Task Force (USPSTF) concludes the evidence is insufficient to recommend for or against routine screening for thyroid disease in adults.

Rating: I Recommendation.

Rationale: The USPSTF found fair evidence that the thyroid stimulating hormone (TSH) test can detect subclinical thyroid disease in people without symptoms of thyroid dysfunction, but poor evidence that treatment improves clinically important outcomes in adults with screen-detected thyroid disease.

Although the yield of screening is greater in certain high-risk groups (e.g., postpartum women, people with Down syndrome, and the elderly), the USPSTF found poor evidence that screening these groups leads to clinically important benefits. There is the potential for harm caused by false positive screening tests; however, the magnitude of harm is not known. There is good evidence that over treatment with levothyroxine occurs in a substantial proportion of patients, but the long-term harmful effects of over treatment are not known. As a result, the USPSTF could not determine the balance of benefits and harms of screening asymptomatic adults for thyroid disease.

Overtreatment with levothyroxine increases the risk of osteoporosis and atrial fibrillation in the elderly; this relationship is seen even within the normal range (lower TSH, higher rates of osteoporosis and atrial fibrillation). The literature supports targeting the TSH at high normal in the elderly on replacement therapy.

For updates on USPSTF recommendations, go to http://www.ahcpr.gov/clinic/gcpspu.htm.

Resources

The **Center to Advance Palliative Care (CAPC)** is dedicated to increasing the availability of quality palliative care services in hospitals and other health care settings for people with life-threatening illnesses, their families, and caregivers. A national initiative supported by The Robert Wood Johnson Foundation, with direction and technical assistance provided by the Mount Sinai School of Medicine (NY), CAPC provides health care professionals with the tools, training, and technical assistance necessary to start and sustain successful palliative care programs.

Find the excellent online resources of the **CAPC** at *www.capcmssm.org*.

Constipation

The following article is another in an ongoing series in support of the development of a unified approach to palliative care services for American Indians and Alaska Natives. The series consists of brief, concise facts and information for providers of palliative care.

Judith A. Kitzes, MD, MPH, Soros Foundation, Project on Death In America Faculty Scholar, University of New Mexico Health Science Center, School of Medicine, Albuquerque, New Mexico

Chronic constipation: prevalence rate up to 30% in elders, and higher near the end of life.

The hand that writes for opioids must also write for a bowel regimen.

Diarrhea may be sign of impaction.

Constipation is a subjective term relating to the evacuation of hard stools less frequently than "normal" for an individual.

Causes	Symptoms
Malnutrition: autonomic neuropathy	Irregular bowel movements
Drugs (e.g., opioids, diuretics, iron)	Diarrhea
Poor fluid intake	Nausea/Vomiting
Decreased mobility	Abdominal discomfort
Abdominal tumors	Bowel obstruction
Hypo/hypercalcemia	Mental status changes

Treatment

1. Digital rectal exam: check for hard or soft consistency.
2. Increase fluid intake.
3. Start with bowel stimulant and softener:
   - Senna 1-2 tabs hs, plus docusate 100-240 mg PO bid
   - Titrate senna 2-4 tablets bid to qid , plus docosate 240 mg tid-qid
   - Take with lots of water
4. If no bowel movement in three days: Fleet enema or bisacodyl suppository rectally.
5. If still no bowel movement: consider mineral oil, or soapsuds enemas (caution in frail elders), or lactulose 15-30 ml PO qd to tid.
6. If rectum still full: digital impaction, may need to premedicate with opioid or midazolam.
7. If rectum empty: may need abdominal X-ray, and bowel obstruction management.

References

1. American Academy of Hospice and Palliative Medicine, Pocket Guide to Hospice/Palliative Medicine, 2003.
2. Kinzbruner B, Weinreb N, Policzer J. 20 Common Problems in End of Life Care, 2002.
3. Weissman, D. Fast Fact and Concepts #15

The Native Research Network: Promoting Culturally Sensitive Research in Indigenous Communities

The Native Research Network (NRN) is comprised of nearly one hundred persons involved in a broad spectrum of research ranging from the basic sciences to applied public health promotion programs. The NRN was created in 1997 as an informal network and has evolved into a non-profit 501 (c) 3 organization. The purpose of NRN is to establish and maintain a proactive research network of indigenous people of the Americas and to promote research among indigenous populations that is conducted in a culturally sensitive and respectful manner. The NRN provides networking and mentoring opportunities, a forum in which to share research expertise, sponsorship of research events, assistance to communities and tribes, and enhanced research communication.

The NRN is governed by an eleven-member Board of Directors elected by the NRN membership, and is administratively located at the Association of American Indian Physicians (AAIP) offices in Oklahoma City, Oklahoma. Funding for the NRN has been provided through a grant from the Office of Minority Health (U.S. Department of Health and Human Services), the Agency for Healthcare Research and Quality, membership dues, and in-kind contributions of its members.

Past Projects

For the past few years, the NRN held membership meetings at the Indian Health Service (IHS) Research Conference and the American Public Health Association (APHA) Annual Conference in order to recruit new members, conduct board and/or membership business, and to create opportunities for Native American researchers to interact and network. These opportunities to meet and network serve an important role for many Native American researchers, since they are often the only person in their health program, organization, or school with a particular interest in Native research. Many important collaborative relationships and mentoring opportunities have occurred as a result of these meetings.

Members of the NRN conducted a continuing education institute entitled "Conducting Research in Native Communities" at the APHA Annual Meeting and the National Forum on Health Disparity Issues for American Indians and Alaska Natives (OMH) in Denver in 2002. The purpose of this forum was to educate researchers about the issues that need to be considered and processes that need to take place when conducting research in partnership with Native communities.

Current Initiatives: the 2004 Indian Health Service Research Conference

The NRN is actively involved in the planning of a special session at the upcoming IHS Research Conference to be held in May 2004. Day three of the conference (May 13) will highlight the work and research activities of NRN members. The annual Board meeting of NRN will be held during the IHS research conference as well.

Current Board

Marla Pardilla (*Dinè*) Co-Chair
Leslie Randall (*Nez Perce*) Co-Chair
Tassy Parker (*Seneca*) Co-Chair Elect
Yvette Roubideaux (*Rosebud Sioux*) Co-Chair Elect
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Kelly Gonzales (*Cherokee*) Board Member at Large
Delight Satter (*Umpqua/Klickitat*), Board Member at Large
Lillian Tom-Orme (*Dinè*) Board Member at Large
Nina Wampler, (*Eastern Band of Cherokee*) Board Member at Large

Membership

Membership is open to Native researchers and students (including those associated with research, such as Community Health Representatives and program staff), as well as non-Native persons who have conducted research in Native communities. NRN membership meetings are held twice per year, usually in conjunction with the annual IHS Research Conference and with the annual APHA conference.

Membership Benefits

Membership in the NRN provides many benefits and opportunities, including:

- Networking with other Native researchers
- Collaborating with individuals and organizations
- Improved communication (including remote and rural areas) with other researchers
- Sharing grant opportunities
- Sharing job opportunities
- Provides a forum for Native professionals to review and critique each other's work in a safe and

supportive manner
- Mentoring for students and young research professionals
- Training opportunities to enhance skills
- Disseminating and acquiring American Indian/Alaska Native health information quickly
- Access to the NRN electronic listserv
- Finding people; on the listserv, people use their social networks to find colleagues who have moved, who have similar research interests, etc.
- Influencing research agenda-setting and policy development

Eligibility Criteria for Membership

- *Full Membership.* Any self-identified American Indian, Alaska Native or Aboriginal person native to the Americas, who is involved in research in any of the basic sciences, public health, interventions, survey administration, bench science, and including program/intervention efforts. These members would be fully paid, active members of the Full Member category. The five sub-categories are:
  1. Student (i.e., full-time, working on a degree program)
  2. Fellow/Intern/Post-doctoral
  3. Community Health Representative (CHR)
  4. Elder
  5. Professional

  Only Full Members are eligible to vote and to hold the position of Chair or Co-chair of the NRN.

- *Affiliate Membership.* Any indigenous person involved in research from Samoa, other Pacific Islands, Australia, New Zealand and Siberia. Affiliate Members are not eligible to vote, but they do have access to the other benefits of membership.

- *Treasured Friend.* Any non-indigenous person involved in research in American Indian, Alaska Native or aboriginal communities/populations native to the Americas. Treasured Friends are not eligible to vote, but they do have access to the other benefits of membership. To join as a treasured friend, the applicant is required to have sponsorship by a Full Member in good standing, and a letter of support from an AI/AN or aboriginal community in which they have worked.

To apply for membership or for more information about the Native Research Network, please visit the Association of American Indian Physicians website at *www.aaip.com* and click on the NRN link, or write to AAIP, 1225 Sovereign Row, Suite 103, Oklahoma City, Oklahoma 73108.

The 9th Annual Elders Issue

The May 2004 issue of THE IHS PROVIDER, to be published on the occasion of National Older Americans Month, will be the ninth annual issue dedicated to our elders. Indian Health Service, tribal, and Urban Program professionals are encouraged to submit articles for this issue on elders and their health and health care. We are also interested in articles written by Indian elders themselves giving their perspective on health and health care issues. Inquiries or submissions can be addressed to the attention of the editor at the address on the back page of this issue.

New 2nd Edition Pediatric Environmental Health Available Free of Charge to Fellows

The American Academy of Pediatrics has produced a 2nd edition of *Pediatric Environmental Health*. Edited by Ruth A. Etzel, MD, the 700-page handbook features more than 40 chapters on identification, prevention, and treatment of childhood environmental health problems. Topics include strategies to reduce asthma triggers in the environment, prevent exposure to nitrates and methemoglobinemia in infants, and reduce exposure to pesticides. New chapters cover arsenic, gasoline and its additives, irradiation of food, metals (including chromium, manganese, and nickel), chemical- biological terrorism, and environmental threats to children s health in developing countries. Each chapter includes a list of frequently asked questions and responses, which makes this a handy desk reference for the busy clinician. All Fellows of the American Academy of Pediatrics may request a copy free of charge. To order, visit AAP s website at *http://www.aap.org/bookstore* or call (888) 227-1770.

CME Opportunity

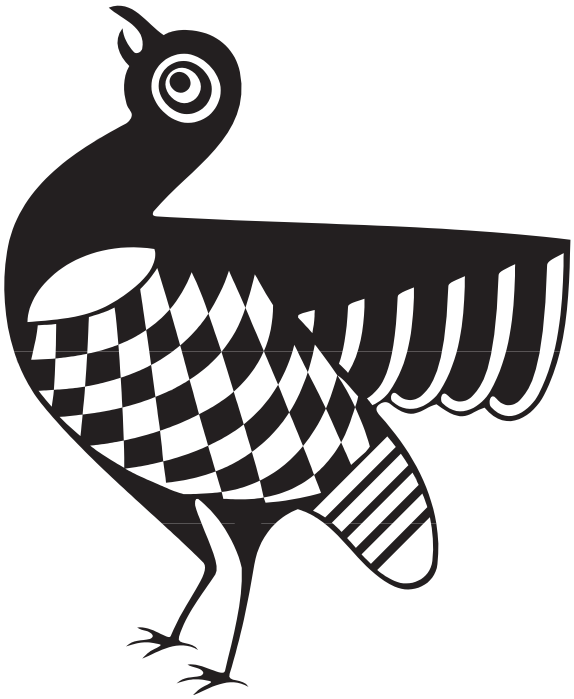
Lifecycle Of Type 2 Diabetes: Reducing Macrovascular Risk In Native Americans

Joslin Diabetes Center Continuing Medical Education presents "Lifecycle of Type 2 Diabetes: Reducing Macrovascular Risk in Native Americans," an Internet-based, self-study CME activity for primary care physicians and other clinicians who treat Native Americans with diabetes.

The activity examines diabetes epidemiology and associated comorbidities that interact with culture and lifestyle; reviews the connection between diabetes and macrovascular complications; and instructs how to identify patients at risk for the metabolic syndrome, how to recognize and treat associated risk factors within Native American populations, and how to design and initiate appropriate risk management strategies for patients at all stages of the disease process. Faculty includes participants from Harvard Medical School, Joslin Diabetes Center, Indian Health Service, and the University of Arizona.

The Joslin Diabetes Center designates this educational activity for a maximum of 3.0 category 1 credits toward the AMA Physician's Recognition Award. The date of release for this activity was November 1, 2003, with expiration October 31, 2004. This activity is supported by an unrestricted educational grant from Wyeth Pharmaceuticals.

To participate in this free activity, go to the Joslin Professional Education website at *www.ProfessionalEd.joslin.org* and locate this activity, "Lifecycle of Type 2 Diabetes: Reducing Macrovascular Risk in Native Americans," in the WebCME Activity listing. Click on either the course title or on **Register Now**. CME credit may be obtained online by completing the activity, scoring 70% or higher on the posttest, and completing the activity evaluation form. Health care professionals who do not collect CME credits can obtain a participation certificate. For further information, contact the Joslin Diabetes Center's Professional Education Office by e-mail at *cme@joslin.harvard.edu*, or call (888) 567-5460.



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THE IHS PRIMARY CARE PROVIDER

A journal for health professionals working with American Indians and Alaska Natives

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Wesley J. Picciotti, MPA .....*Director, CSC*

John F. Saari, MD.....*Editor*

E.Y. Hooper, MD, MPH .....*Contributing Editor*

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Erma J. Casuse, CDA.....*Dental Assisting Training Coordinator*

Edward J. Stein, PharmD .....*Pharmacy Consultant*

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