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Rheumatic Disease in Native American Children: How Prevalent? How Severe? How Different?

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Lesions representing the bony erosions of rheumatoid arthritis are unknown in the skeletal remains of Europeans prior to 1492, although findings compatible with bony spondyloarthropathy and osteoarthritis are common.¹ In contrast, rheumatoid arthritis appears to have been present at a very high prevalence rate in Native Americans living within the Ohio and Tennessee River valleys from very early times.¹ Thus, it can be logically argued (although not conclusively proven) that rheumatoid arthritis originated in Native Americans. This hypothesis is supported by epidemiologic studies demonstrating high prevalence rates of rheumatoid arthritis in Native Americans in general² and specific tribes in particular.^{3,4}

A fact not well appreciated by most primary care providers is that, as a group, the rheumatic diseases of childhood are among the major chronic conditions contributing to childhood morbidity in North America. Thus, diseases such as juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE), and juvenile dermatomyositis (JDMS) have a significant impact on child health. It is also becoming increasingly clear that “textbook” descriptions of at least one of these diseases, JRA, are applicable to only a small population: European-descended Caucasians. We have recently published data demonstrating, for example, that JRA in African Americans differs significantly in age of onset, subtype distribution, and autoantibody expression compared with Caucasian children.⁵ Thus, well-designed studies examining the prevalence, phenotype, immunogenetics, and

serology of rheumatoid arthritis and rheumatic disease in Native American children are urgently needed.

These differences in phenotype and disease course are of more than academic interest. Since non-white children may not fit the “textbook” descriptions for specific rheumatic diseases, the task of identifying these diseases in Native American children is made all the more challenging. For the family of illnesses collectively subsumed under the subheading “JRA,” this task is made somewhat easier by understanding that the common denominator in all these illnesses (even in non-white children) is leukocyte invasion, inflammation, and proliferation of the synovial membranes which line joints. In younger children with pauciarticular disease, this will almost invariably present as limping which is made better with activity and worse with rest. In older children with polyarticular disease, morning stiffness, fatigue, and generalized malaise are the common presenting

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symptoms. In our experience, pain as an isolated complaint is almost never the presentation of children with chronic synovitis. Inflamed, proliferative synovium is usually quite easy to detect on physical examination once one has gained some experience with the physical signs of synovitis.

For a disease such as dermatomyositis, however, differences in disease expression between Native American and Caucasian children may be dramatic enough to cause confusion in diagnosis. For example, 2 of the 6 Native American children we currently follow with JDMS express the Jo-1 autoantibody, an extraordinarily rare serology in children.⁶ These patients frequently present with a proliferative synovitis before the rash and muscle weakness become apparent. Thus, one patient from this area developed severe weakness on non-steroidal anti-inflammatory drugs before the myositis was recognized and appropriate (steroid) therapy was initiated. This experience has led us to order muscle enzymes on all Native American children presenting with signs and symptoms of synovitis, a practice we would not routinely follow in Caucasian children.

Communication with colleagues throughout the United States has alerted us to the fact that unusual forms of rheumatism exist in children from other tribes in the United States as well. A colleague in the Northeast has described to us an unusual and severe form of anterior uveitis occurring in Native American children with chronic arthritis. The children affected are antinuclear antibody-negative, a category that would place Caucasian children at low risk for the development of the eye complications of JRA. This suggests that the recommendations for the frequency of slit lamp examinations in children with JRA recently published by the American Academy of Pediatrics and the American College of Ophthalmology⁷ may be inappropriate for Native American children, or at least for children of particular tribes or groups.

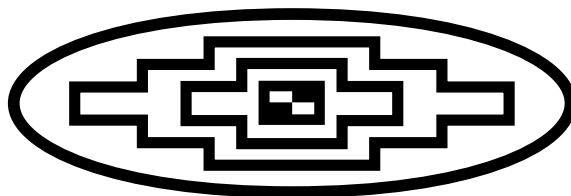
There is clearly a great deal to be learned about the rheumatic diseases in Native American children. We have recently received a generous grant from the Oklahoma Chapter of the Arthritis Foundation to gather more information on one

of these diseases, JRA. However, it is already clear from our initial studies that a more comprehensive, national effort will eventually need to be undertaken in order to address the many issues raised by even the most casual inquiry into rheumatic diseases in Native American children. Almost assuredly such an endeavor will require a partnership between the Native American people themselves, the IHS and/or tribal health care systems, and academic health care centers. We are preparing to undertake such a study as soon as appropriate funding can be secured. In the meantime, we welcome inquiries and suggestions from IHS physicians and are eager to work with tribal leaders anywhere in North America to thoughtfully find better approaches to these diseases in Native American children. □

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References

1. Rothschild B, Woods RJ, Rothschild C, Sebes JL. Geographic distribution of rheumatoid arthritis in ancient North America: implications for pathogenesis. *Semin Arthritis Rheum* 1992;22:181-187
2. Morbidity and Mortality Weekly Report 1996; 45:373-379
3. Harvey J, Lotze M, Stevens MB, Lambert G, Jacobson D. Rheumatoid arthritis in a Chippewa band. 1. Pilot screening of disease prevalence. *Arthritis Rheum* 1981;24:717-721
4. Del Puente A, Knowler WC, Pettitt DJ, Bennett PH. High incidence and prevalence of rheumatoid arthritis in Pima Indians. *Am J Epidemiol* 1989;129:1170-1178
5. Schwartz MM, Simpson P, Kerr K, Jarvis JN. Juvenile rheumatoid arthritis in African Americans. *J Rheumatol* 1997;24:1826-1829
6. Rider L, Miller FW, Targoff IN, Sherry D, Samayoa E, Lindahl M, Wener MH, Pachman LM, Plotz P. A broadened spectrum of juvenile myositis or Myositis-specific autoantibodies in children. *Arthritis Rheum* 1994;37:1534-1538
7. American Academy of Pediatrics sections on rheumatology and ophthalmology. Guidelines for ophthalmologic examinations in children with juvenile rheumatoid arthritis. *Pediatrics* 1993;92:295-296



Domestic Violence on the San Carlos Apache Reservation:

Rates, Associated Psychological Symptoms, and Current Beliefs

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Abstract

Domestic violence is thought to be a serious problem in many AI/AN communities, but more data on rates, associated problems, and community perceptions are needed. Participants in this study were 169 Apache women and 65 Apache men. A majority of women (75%) and men (58%) reported sustaining physical assault in their current relationship. These figures are comparable to other communities that face similar socioeconomic and political disadvantages. Depression and posttraumatic stress disorder (PTSD) symptomatology were highly related to domestic violence victimization among females. Qualitative responses highlight the role that alcohol, jealousy, and control play in domestic violence in this community. Participants thought domestic violence should be addressed by screening in IHS facilities, coordinating alcohol and domestic violence interventions, improving police manpower and response time, providing more counseling, and building a local shelter. These findings may impact and improve policy development in AI/AN communities.

Introduction

Many domestic violence experts have observed that rates of domestic violence seem higher and the psychological costs greater in American Indian and Alaska Native (AI/AN) communities, but unfortunately there is too little information about the problem available.¹ In 1996 on the San Carlos Apache Reservation, there were 263 police arrests for domestic violence; this was the context for approximately half of all assault arrests that year. This and other findings led tribal leaders to recruit the authors of this paper to help implement a project to assess the extent of the domestic violence problem on the reservation.

The resulting project was a cooperative effort between the San Carlos Apache Tribe, the San Carlos Indian Health Service (IHS) Service Unit, Phoenix Area IHS staff, and Johns Hopkins University. It was wholeheartedly supported by the

Tribal Council, the Tribal Health and Welfare Committee, and the Tribal Health and Human Services Department.

The following purposes of the project were identified during meetings with personnel from each of these agencies:

- To determine the rates (yearly incidence and relationship prevalence) of domestic violence on the San Carlos Apache Reservation. Domestic violence was defined as any physical assault by a spouse or other romantic partner. Injury rates were also determined.
- To assess the correlation of current PTSD and depressive symptomatology with domestic violence.
- To examine current beliefs regarding domestic violence.

Methods

The participants were 234 American Indian reservation residents (88% San Carlos Apache, 9% San Carlos Apache plus some other ethnic group, 3% other American Indian). They were generally young (80% 18 to 45 years old), with low income (69% less than \$800 per month), and of low education (72% high school or less). About half were married (51%). Most had been with their partner for several years (76% for two or more years) and had two or more children (68%).

A number of measures were used. The Revised Conflict Tactics Scales (CTS2)² is the most widely used scale to assess domestic violence. It uses the following breakdown of items:

Physical Assault

Minor subscale: pushed, grabbed, threw something, twisted arm/hair, slapped

Severe subscale: beat up, punched, slammed against wall, kicked, choked, used knife/gun, burned

Injury items

Minor subscale: sprain/bruise/cut, felt pain next day

Severe subscale: went to doctor, needed doctor, broken bone, passed out, hospitalized

The Center for Epidemiologic Studies - Depression (CES-D) scale³ is a 20-item scale that assesses the following symptoms during the preceding week: depressed mood, guilt, worthlessness, psychomotor retardation, appetite loss, and sleep disturbances. It has been successfully used with Native American populations in several studies. The Davidson Trauma Scale⁴ is a self-report scale for posttraumatic stress

disorder (PTSD) symptomatology, as defined in the DSM-IV. The Total Frequency scale was used. This is its first use with a Native American sample.

Twelve open-ended, qualitative questions about domestic violence were also asked⁵ (see Results section). These were completed by 134 women and 14 men who took part in more in-depth interviews.

Recruitment strategies included an advertisement on the local cable television channel, announcement in the newspaper, and public flyers and signs. These all requested volunteers for a study on issues facing families on the reservation and offered \$10 to people willing to complete the interview. Interviews were conducted at two sites, the IHS Social Services trailer at the hospital and a satellite clinic that serves the far eastern side of the reservation. The majority of the interviews (64%) were conducted by a female PhD student who is Chippewa Indian. The remaining interviews were completed by other female staff. The interview began with obtaining informed consent. All but two individuals (both men) agreed to participate.

The interview was read to each individual. Only 3% of participants requested that any items be translated into Apache. For the questions with an answer scale, response categories were visible on cards. After completing the interview, participants could ask questions and were given information about local services and shelters. Some (15%) made Behavioral Health appointments. At the close of the interview participants were given \$10 in cash.

The representativeness of the sample was examined in several ways. The sample distribution did not differ significantly from the actual population distribution by either age or district of residence, as determined by Tribal Enrollment Office records ($p > .20$). Bureau of Indian Affairs (BIA) unemployment statistics from 1995 (the most recent year available) were not significantly different from the 62.4% in this sample who reported that they did not have an occupation outside the home ($p > .20$).

We purposely oversampled women because domestic violence is a much greater health and mental health concern for women on this reservation. Men were included in the study primarily to increase the acceptability of the project in the community. Oversampling was accomplished by advertising at the local grocery store and offices, which are frequented by more women than men. Women comprised 72.1% of the total sample and 50.3% of the tribal population, which is a significant difference ($p < .001$).

Results

Yearly incidence (any physical assault or injury in the last 12 months by a partner) and relationship prevalence (any physical assault or injury over the course of an entire marriage or other comparable relationship) were computed separately for females and males. Because most studies measure domestic violence only for individuals in relationships, only participants in relationships were included in these figures.

About half of women and men reported sustaining physical assault in the past year, and substantially more than that over the course of their relationship. Chi-square testing revealed that women had experienced more severe injury in the last year, and more victimization and injury over the entire course of their relationship than men (see Table 1).

Table 1. Yearly incidence and relationship prevalence of physical assault and injury for a sample of females and males in relationships.

	Females (n = 117)	Males (n = 40)
Yearly Incidence Rates		
Measure		
Physical Assault		
Minor	46.2	50.0
Severe	33.3	25.0
Any	47.9	50.0
Injury		
Minor	34.2	22.5
Severe	29.1	7.5 **
Any	36.8	22.5
Relationship Prevalence Rates		
Physical Assault		
Minor	73.5	55.0 *
Severe	59.0	35.0 **
Any	75.2	57.5 *
Injury		
Minor	60.7	30.0 ****
Severe	46.2	12.5 ****
Any	61.5	30.0 ****
****	p < .0001	*** p < .001
**	p < .01	* p < .05.

To identify whether depression and PTSD symptomatology were associated with domestic violence, bivariate correlations and regression analyses were performed for all females. These analyses attempted to statistically explain depression and PTSD symptoms in all females regardless of whether they were currently in a relationship or not. Depression (CES-D) was highly correlated with the yearly incidence of both physical assault [$r(162) = .44$; $p < .001$] and injury [$r(162) = .43$; $p < .001$]. PTSD symptomatology (DTS Total Frequency) was also highly correlated with the yearly incidence of both physical assault [$r(162) = .44$; $p < .001$] and injury [$r(162) = .44$; $p < .001$].

In a multivariate regression analysis, age, number of partner's, children, income, occupation, relationship length, relationship status, and partner's control over finances were included as predictors, along with physical assault and injury in

a forward-step model. For depression, physical assault was a highly significant predictor [$\beta=7.90$; $SE=1.8$; $t(162) = 4.47$; $p < .0001$]. Partner's control over finances [$\beta=8.90$; $SE=3.4$; $t(162) = 2.50$; $p < .05$] and shorter relationship lengths were also associated with depression [$\beta=-6.70$; $SE=2.4$; $t(162) = -2.94$; $p < .01$]. The R^2 for this model was 27%.

For PTSD symptomatology, physical assault was again a highly significant predictor [$\beta=10.31$; $SE=2.2$; $t(162) = 4.78$; $p < .0001$]. Partner's control over finances was the only other variable that explained PTSD symptoms [$\beta=11.73$; $SE=4.3$; $t(162) = 2.72$; $p < .001$]. The R^2 for this model was 19%. See Skupien⁵ for more details.

For males, the associations between depression, PTSD symptoms, and domestic violence were not significant ($p > .05$), even though levels of depression and PTSD symptomatology did not differ for men and women ($p > .10$). See Hamby⁶ for more information.

Lifetime suicide attempts were twice as common among women who had experienced domestic violence (37.5%) versus women who were not victims (18%; $p < .05$). Although a similar number of men had made suicide attempts (32.5%), it was not associated with domestic violence for men.

Response to Qualitative Questions about Domestic Violence

What do you think causes domestic violence to happen? Alcohol was by far the most frequently mentioned cause of domestic violence by both women (91%) and men (93%). Although many professionals in the field do not consider alcohol to be a cause of violence per se, this perception is notable. The second most commonly mentioned cause by women was drugs and drug use (21%). The second most commonly mentioned cause by men was jealousy and unfaithfulness (29%). These causes were also mentioned by a number of women (8% jealousy, 7% unfaithfulness). A few women (4%) specifically mentioned traditional female roles and male dominance over women. Some also mentioned unemployment (6%).

Can you tell me about your own domestic violence episode? A majority of women (70%) responded to this question. Themes included drinking and drugs, male control and jealousy, being kept isolated and locked up, savage beatings and treatment, witnessing domestic violence, and severe emotional abuse. Issues of male control and power were more evident in these descriptions than they were in participants' naming of the causes of violence. The actual words of a few of the comments will help provide a sense of their experiences:

"Not my husband now, but my first husband beat me with a muffler and he locked me in a trailer and wouldn't let me go anywhere."

"Husband beat me several times in the past; he kicked me . . . and I had to have surgery about five years ago. One time my husband took me out in the woods and took

my clothes off me, beat me. He doesn't drink anymore."

"We used to see my mom and dad beat each other up each weekend and we thought that's the way it was supposed to be."

"My boyfriend was sober and he threatened to kill me and the kids."

A majority of men (71%) also described an episode. Drinking and jealousy were also prominent themes in their descriptions. Mutual fighting was also described. Selected comments are quoted directly as follows:

"Drinking causes most of the problems. I beat her up. She started it and we argued. I was drinking with my wife and my wife threw a knife at me three years ago."

"It started with jealousy, another man looking at my wife. I hit her in the chest and left a scar."

"We drank and got abusive to one another; she pulls my hair and I punch her and I end up in jail."

Do you think this has changed over the years in San Carlos? A clear majority of both female (89%) and male (93%) participants reported that they believe the problem of domestic violence has worsened over time.

Did you ever witness things like this when you were a child or when you were growing up? Over half of women (57%) and men (64%) reported witnessing domestic violence as a child, most often between their parents or step-parents.

Would you like to see the doctors and nurses screening for domestic violence at the clinics? A large majority of both women (89%) and men (93%) were clearly in favor of screening at IHS facilities.

Can you give me some ideas on how the community could respond or prevent domestic violence? The most commonly mentioned response was a need for more counseling services on the reservation (59% of females, 36% of males). A significant portion also wanted more police manpower and a faster response to calls (31% of females, 21% of males). Another 13% of women pointed to the need for more laws. Almost a quarter of women wanted support groups (24%) and a local shelter on the reservation (22%). Another 11% of women wanted a hotline number established with an advocacy program. Some (13% of females, 29% of males) felt that expanding alcohol rehabilitation services would help address the domestic violence problem.

Discussion

The results of this study indicate that domestic violence is a problem in this tribal community. More than half of the participants, both female (75%) and male (58%), reported being the victims of domestic violence at some point in their most recent relationship. There are few other studies of AI/AN populations to which to compare these results. Rates in other studies of tribal members have ranged from 15 to 70%.⁷⁻¹⁰ Rates among other groups that also face poverty, discrimination, or community trauma range from 3 to 91% for a yearly incidence and 44 to 92% for relationship prevalence⁶, although few

groups, worldwide, face as many simultaneous forms of oppression as AI/AN.

This study also found that depression and PTSD symptoms were highly associated with domestic violence and male control (over finances). This is similar to higher rates of depression and PTSD found in other samples of battered women.¹¹⁻¹²

Study Limitations

The primary limitation of this study is that the sampling was not random, although the resulting sample did correspond to available population characteristics in terms of age, residence, and employment, and is the first to be done on a community (versus help-seeking) sample in Indian country. Also, we only looked at physical assault, while there are other important forms of domestic violence, including psychological and sexual abuse.

Implications

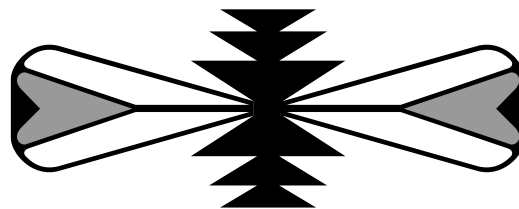
The most important outcome of this study is improved documentation of the severity of the domestic violence problem in this Apache community. More Federal and tribal resources should be earmarked for domestic violence-related research and services in AI/AN communities. Regarding intervention, these findings strongly indicate the need for screening for domestic violence for all women seeking health services. These data indicate that depression and PTSD symptomatology are very closely associated with domestic violence victimization, and adequate treatment of these problems will surely require taking a person's domestic violence history into account. Addressing the alcohol problem also seems to be key to addressing the domestic violence problem, and attempts to work on these two problems need to be better coordinated. Also, development and more rigorous enforcement of domestic violence codes is needed. The problem of domestic violence touches many aspects of reservation life and only a coordinated, multidisciplinary, community-based effort is likely to succeed in addressing the problem. □

A version of this paper was presented at the 10th Annual IHS Research Conference, Albuquerque, NM. This project was a coopera-

tive effort between the Tribe, the IHS Service Unit, the Phoenix Area IHS Office, and Johns Hopkins University. The Tribal Council, Tribal Health and Human Services Department (headed by Mr. Vernon James), and Tribal Behavioral Health Office (headed by Dr. Leslie Young) were fully supportive of the project from its beginning more than two years ago, and the authors would like to acknowledge their willingness to be in the forefront of addressing this complex problem. The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of IHS. Address for correspondence: Sherry Hamby, P.O. Box 232, San Carlos, AZ 85550; phone 520-475-2438.

References

1. Chester B, Robin RW, Koss MP, Lopez J, Goldman D. Grandmother dishonored: Violence against women by male partners in American Indian communities. *Violence and Victims*, 1994;9: 249-258
2. Straus MA, Hamby SL, Boney-McCoy S, Sugarman DB. The Revised Conflict Tactics (CTS2): Development and preliminary psychometric data. *Journal of Family Issues* 1996;17: 283-316
3. Radloff LS. The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement* 1977; 1: 385-401
4. Davidson J. Davidson Trauma Scale. North Tonawanda, NY: Multi health systems; 1996
5. Skupien MB. Domestic violence on the San Carlos Apache Reservation: Incidence and prevalence, associated depression and posttraumatic stress symptomatology, and cultural considerations. Unpublished doctoral dissertation, Johns Hopkins University; 1998
6. Hamby SL. Domestic violence in a rural Apache community: Patterns of victimization, risks, and symptomatology for women and men. Unpublished manuscript; 1998
7. Bachman R. *Death and Violence on the Reservation*. Westport, CT: Auburn House; 1992
8. Bohn DK. The health effects of domestic violence before and during pregnancy among urban American Indian women in Minnesota: An exploratory study. *Dissertation Abstracts International-B*, 54/10, 1993 (Order No. AAC 9406044)
9. Norton IM, Manson SM. A silent minority: battered American Indian women. *Journal of Family Violence* 1995; 10:307-318
10. Shinkwin AD, Pete MC. Homes in disruption: spouse abuse in Yupik Eskimo Society. Unpublished dissertation, University of Alaska at Fairbanks; 1983
11. Cascardi M, O'Leary KD. Depressive symptomatology, self-esteem, and self-blame in battered women. *Journal of Family Violence* 1992; 4:249-259
12. Koss MP, Koss P, Woodrull J. Deleterious effects of criminal victimization on women's health and medical utilization. *Archives of Internal Medicine* 1991;151:342-347



Dentist Use of the Internet

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Today, computers are a valuable part of our dental practice that keep us on the cutting edge of technology. The computer and the Internet are very valuable tools for dentists and their staffs to access a world of limitless information. For example, the well known dental care products Crest (www.dentalcare.com), Colgate (www.colgate.com), and Oral-B (www.oralb.com) each have a website filled with information about oral care for adults and children. Each February is "Children's Dental Health Month." Why not download information from these sites and distribute them to the Women, Infants, and Children (WIC) program staff or the nurse or pediatrician at your hospital or health care facility? At our facility, the hygienist and dental assistants have downloaded information on various topics and have given it to teachers, parents, and children at the local schools. Here are some other sites we have found useful:

Ask the Dentist (www.parentsplace.com)

Ask Dr. Tooth (www.dentistinfo.com)

The Wisdom Tooth (www.unanitoba.ca/outreach/wisdomtooth)

The Public Health Service stands for prevention. The more you educate and enable people to actively practice oral hygiene, the better off your patient's oral health will be. The goal of prevention is to decrease the number of restorations, extractions, or other operative procedures you'll have to place in the future.

Also of value is access to MEDLINE that is now free of charge. As of June 1997, the National Library of Medicine's (NLM) MEDLINE database of nearly nine million references to articles published in some 3,800 biomedical journals, including all those in the Index to Dental Literature, may be accessed by anyone on the World Wide Web. MEDLINE can be found on the NLM's website at <http://www.nlm.nih.gov/databases/freemedl.html>. The database is accessible through either Internet Grateful Med or PubMed, among other methods. MEDLINE is easy to use. If you have a question about a topic, just type in the key words and you will obtain the results of a search done on articles as far back as 1966. You can print an abstract at no cost, but there is a fee if you need the full text of the article.

Continuing education can also be obtained via the Internet. I recently participated in a pilot study done by Paul Lang, DDS, of the University of Michigan Department of Informatics. Dr. Lang held a discussion forum on periodontal disease similar in format to IHS mailman except that it included a live chat room.

In fact, some dentists even scanned in photos and x-rays of problem cases for evaluation. It was great to hear input from dentists throughout the U.S. in both the private and public sectors. There was also a series of articles on periodontal disease and a ten question quiz at the end of each one. A total of 16 hours of continuing education credit was given for submitting all of the quizzes and surveys. Temple University has a site with a similar program (www.temple.edu/dentistry). Unfortunately, not all states will allow you to complete all of your continuing educational requirements through such correspondence courses.

Several places on the Internet list CE courses available throughout the U.S. and Canada. Try www.sybertooth.com, www.agd.org, or www.ada.org. If you are adventurous, try www.webdent.com/education; you'll find out where courses are available throughout the world. Some of the foreign dental websites I've found interesting are:

Niigata University School of Dentistry (www.dent.niigata-u.ac.jp)

Dental Association of South Africa (www.dasa.co.za)

Canadian Dental Association (www.cda-adc.ca)

Multimedia in Dentistry (www.DERweb.ac.uk)

Australian Dental Journal (www.ada.org.au/publications)

You can also join electronic forums and meet with dentists throughout the world. Try the sci.med.dentistry newsgroup or Dental-Chat (www.dental-connect.com). You are able to interact with specialists and e-mail them questions you may have. You have the opportunity to discuss your problems with general dentists. You will be introduced to new techniques, or you can inquire about products not available here in the U.S. For instance, did you know Colgate's "new" Total™ toothpaste has been available in Canada for the past four years?

The medical and dental fields are constantly being flooded with new prescription drugs. If your patient is taking medication you are not familiar with, you can look it up at any of these websites:

Internet Drug Index (www.rxlist.com)

Pharm Info Net (www.pharminfo.com/pin_hp.html)

World Wide Drugs (www.community.net/~neils/new.html)

The Physician's Desk Reference, a reference book listing and describing virtually all pharmaceuticals, is only published once yearly. Access to a computer database will keep you current with newly available drugs. I personally find that using the Internet is more convenient, more accessible, and easier to read than thumbing through a large textbook.

Our hospital in Belcourt is now set up with "Telemedicine" access to a hospital in Minot, ND. We are just

breaking ground with this project, but consultation with dental specialists should be possible in the future. Since our facility is over 100 miles from a major city, this should prove to be a substantial benefit to patients and health care providers. We will no longer have to rely solely on the mail system because now x-rays and photographs can be transmitted instantaneously. The military has been using "Teledentistry" in a limited fashion both in the US and overseas. For more information about this, check out their Total Dental Access website (208.135.213.111/home.htm).

Unlike the military, the Indian Health Service (IHS) does not have the resources to send recruiters to every dental school to entice students to join our organization. However, the IHS

webpage can be an effective interactive marketing tool that increases the visibility of the IHS and provides a vast amount of information for interested applicants. The IHS webpage is listed under Yahoo (a favorite search engine) Dentistry-Employment. Among other things, the IHS page provides access to a list of vacancies, maps of locations, and a detailed description of pay, rating, and responsibilities of the positions available. The website address is www.dentist.ihs.gov.

Computers and the Internet have had a great impact on our life and the way we do things at home or at work. Take advantage of the vast amount of information on the Internet. It can be a fun and enjoyable learning experience. □

FELLOWSHIP OPPORTUNITIES □

Editor's note: As a service to our readers, The IHS Provider will publish, on a space available basis, notices of clinical fellowships that pertain to health professionals in Indian Country. Fellowship programs should send brief announcements on an organizational letterhead to: Editor, The IHS Provider, The IHS Clinical Support Center, 1616 East Indian School Road, Suite 375, Phoenix, Arizona 85016. Submissions will be run for two months, but may be renewed as many times as necessary. The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.

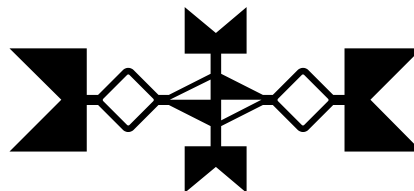
Fellowship to Train Indian Physicians for Medical School Faculty Positions

The University of Washington School of Medicine Native American Center of Excellence is accepting applications for a two-year fellowship. The purpose of this program is to train Indian physicians to join medical school faculties. Applicants must be a member of a federally recognized Indian tribe and

must have an MD degree. Preferred applicants will be those who have completed a primary care residency program in family medicine, pediatrics, or internal medicine. Other specialties will also be considered. Fellows will take coursework to further faculty development and research training skills. A competitive salary and benefits package will be offered.

The mission of the Center of Excellence is to facilitate the identification, recruitment, retention, and professional development of Native American students who are interested in medicine. The center also aims to enhance their educational experience while integrating western medicine and the Native American way of life, to promote interest in research and academic medicine, and to develop the students for medical school faculty positions while complementing their cultural heritage.

Those who are interested should contact the Native American Center of Excellence, Office of Multicultural Affairs, Box 357430, University of Washington, Seattle, WA 98195; phone (206) 685-2489; or e-mail bnf@u.washington.edu. □



Extended Care in Rural Hospitals: The Swing Bed Program

Robin Miller, RN, CS, Clinical Nurse Specialist and Staff Educator; and Bruce Finke, MD, Staff Physician, both at the Zuni-Ramah Service Unit, Zuni, New Mexico

Introduction

In May of this year, the Elder Health Care Initiative had the pleasure of hosting a training course on the subject of Medicare Swing Beds for Indian Health Service (IHS) and tribal personnel. As we have become more involved with the IHS Swing Bed demonstration sites, it has become evident that many people working in Indian health care are unclear on what a swing bed is. Many misconceptions exist about the program generally, and about its application to Indian country facilities in particular. This article will explain what swing beds are, how they developed, and how they are regulated and reimbursed. **This information is not IHS specific**, but rather is a brief overview of the Swing Bed program in rural hospitals across the US.

The Swing Bed reimbursement program was initiated by the Health Care Financing Administration (HCFA) as a response to two factors. First, as fiscal resources for healthcare have become more limited, small rural hospitals, which often have limited acute care capabilities, have had increasing trouble surviving with low occupancy rates. Second, rural elders in need of skilled nursing care often have had no inpatient facility available to provide these services, and alternative methods of providing skilled care on an outpatient basis are also often not available in rural settings.

Enabling legislation for swing bed reimbursement was included in the 1980 Omnibus Budget Reconciliation Act ("OBRA" or PL 96-499), and implementation began in 1982 after the regulations were published. There has been broad participation, with more than 50% of the eligible facilities enrolling.

What are "Swing Beds"?

The Swing Bed program allows rural hospitals with 50 beds or less to "swing" beds from acute care use to skilled nursing facility (SNF) use under the Medicare Part A criteria for SNF reimbursement. These criteria allow Medicare to reimburse for skilled nursing and rehabilitative services provided in response to needs that immediately resulted from a recent acute illness episode. Medicare does not underwrite the costs of "custodial" care needed to support chronic functional dependency, and therefore the Swing Bed program only pays

for short-term skilled services. Therefore, swing beds are not nursing homes and cannot be used for long-term placements.

Swing Beds can be an important component of the continuum of care for elders and other Medicare recipients in rural communities. Short-term placements for rehabilitation, subacute care, and skilled nursing care are difficult to arrange in most rural areas due to high occupancy rates in the limited nursing facilities available. Subacute and rehabilitation facilities are usually located in urban or suburban areas, so that rural dwellers in need of these services may have difficulty accessing them. A Swing Bed program can fill the gap between acute care hospitalization and home-based care, and thus eliminate the need to decide between premature discharge to home care and waiting for placement in a facility far from home.

How do "Swing Beds" work?

In order to obtain approval from HCFA to participate in the Swing Bed program, a hospital must:

- Be located in a rural area as designated by the Census Bureau
- Have a Medicare provider agreement as a hospital
- Be granted any necessary Certificate of Need for provision of extended care services if required by the state
- Comply with the SNF conditions of participation for patients rights, specialized rehabilitation services, dental services, social services, patient activities, and discharge planning
- Not have in effect a 24 hour nursing waiver
- Not have been terminated from the Swing Bed program within the 2 years prior to applications.¹

If these criteria are met by a hospital applying to participate in the Swing Bed program, HCFA surveyors will grant preliminary approval for swing bed admissions. After the facility has admitted and discharged at least one swing bed resident, the surveyors make a site visit in order to evaluate the hospital's compliance with the conditions of participation. Examples of areas surveyed include the care planning and discharge planning processes, the provision of extended care services such as recreational and therapeutic activities, and compliance with the resident's rights provisions.² The surveyors, once satisfied that the hospital is substantially in compliance, certify the Swing Bed program for reimbursement.

The criteria for Medicare reimbursement for services provided in a Swing Bed program are listed in Figure 1. When a Medicare Part A beneficiary has fulfilled the listed requirements, a provider makes a determination that the patient requires ongoing skilled level care in order to return to baseline, or to a safe level of health and function for discharge. The patient is then discharged from acute care and admitted to

the Swing Bed program. (In actuality, the patient rarely moves to another bed or room; the discharge and admission are on paper and involve care planning issues, not a physical relocation).

Figure 1. Medicare Part A swing bed coverage criteria⁴

<p>Three day prior hospitalization requirement</p> <ul style="list-style-type: none">• Acute care stay, not counting the day of discharge, of at least three consecutive calendar days (total; could include admissions to more than one acute care facility) <p>30 day transfer requirement</p> <ul style="list-style-type: none">• Admission to swing bed must occur within 30 days of discharge from a qualifying acute care stay <p>Conditions for care requirements (ALL must be met)</p> <ul style="list-style-type: none">• Condition must require daily skilled nursing or rehabilitation services that can only be provided in a skilled nursing setting• Three day prior hospitalization (see above)• 30 day transfer (see above)• Swing bed care must be for the condition treated during the qualifying acute hospitalization, or for a condition that arose while receiving swing bed care for a condition that was treated during the qualifying hospitalization• A medical professional certifies that the patient needs and receives skilled nursing or skilled rehabilitation services on a daily basis• Medicare fiscal intermediary does not disapprove the patient's stay.
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Stays in Swing Bed programs are usually in the neighborhood of 7-10 days, and the types of skilled services provided include physical therapy, wound care, ongoing teaching of family and patient in self-care, and other similar interventions. HCFA has a detailed and very clear outline of how they define skilled level services in order to qualify for swing bed reimbursement. Most facilities that participate in swing beds designate a coordinator for the program, often a utilization review (UR) professional or discharge planner. This coordinator identifies eligible patients and ensures that the requirements for skilled services and other compliance issues are met in order to access this benefit for patients.

Swing Bed Standards of Care

Short-term hospitalizations carry risks of increased morbidity and declines in functional status for at-risk persons such as elders. Swing bed placements allow at-risk persons to receive the extended care services necessary to recuperate from acute hospitalization. The optimal outcome of a swing bed stay

is a return to baseline health and functional status, or at least to a level of function which will allow a safe discharge to community-based services.

The regulations and interpretive guidelines used by HCFA to survey and certify Swing Bed programs are based on the similar regulations in place for freestanding skilled nursing facilities. They enforce a different standard and philosophy of care, based on the fact that when patients are living in a facility for an extended period of time, providers must look at the patient as a resident who is living in the health care facility.

Long term overall health issues, such as psychosocial problems or underlying chronic diseases and self-care deficits, must be addressed as a part of high-quality extended care. The focus of care shifts from treatment of acute illness to the maintenance and restoration of function. As residents return to their prior states of health and function, they naturally resume their prior lifestyles and activities. In a swing bed placement (as in a rehabilitation facility or SNF) the transition back to usual activities takes place, at least in part, during the institutional stay.

Cost and Reimbursement Issues

Medicare Part A reimburses qualifying swing bed days for beneficiaries up to the 100 day per year benefit limit that applies to all skilled nursing and rehabilitative services. The rate is set by HCFA, and includes a fixed amount for ancillary services. Where a patient has Part B coverage or Medicaid, additional reimbursement for the services provided in swing beds may be available. It is important to understand, however, that swing bed rates are intended to only cover the incremental costs of the care, with the assumption that the operating overhead of the hospital is not significantly affected by swing bed residents. This assumption clearly only makes sense for low volumes of swing bed admissions. Financial analysis has found that swing bed programs are indeed only financially viable at low census.³ Since the intention is not to compete with nursing homes, but to provide limited, short-term services when they are not otherwise available, this counterincentive to high swing bed census fits the intent of the program.

At present, swing beds receive flat per day reimbursements. In the near future, however, this system will change to a system similar to the acute care DRGs. In extended care, residents are categorized into Resource Utilization Groups (RUGs) based on a mandated assessment data set, the Minimum Data Set or MDS. Currently, skilled nursing facilities are being moved into a RUG-based reimbursement system. Swing beds are expected to follow, but the details of the mandated MDS will probably be different because of the generally shorter lengths of stay in swing beds. HCFA has not yet issued a notice of proposed rule making for swing bed MDS and RUG implementation.

Conclusions

Swing Bed programs have successfully met the need for

skilled extended care services in many rural communities. Provision of skilled services in the hospital setting allows for better discharge planning and a safer return to home for at-risk persons in communities where nursing home beds are not available to provide transitional care. With the change in care focus to restoration of function, these programs enhance the quality of life for the residents and for their family support systems. These programs can also help stabilize census and income for rural facilities, and thus contribute to the hospital's ability to provide services to the entire community. □

References

1. Health Care Financing Administration. 1994 State Operations Manual: Provider Certification; transmittal no. 264, sections 2036 and 2038
2. Health Care Financing Administration. 1994 State Operations Manual: Provider Certification; transmittal no. 264, Appendix T (Guidance to Surveyors, Swing Bed Hospitals)
3. Schenkler RE, Schaughnessy PW. Swing-bed hospital cost and reimbursement. *Inquiry*. 1989;26:508-521
4. Rowland C. Lecture notes for presentation on "Medicare Swing Beds," May 1998

MEETINGS OF INTEREST □

Diabetes Conference September 21-23 Anchorage, Alaska

The Alaska Area Diabetes Program is holding its annual Diabetes Conference September 21-23, 1998 at the Alaska Native Medical Center. The conference will focus on the pathophysiology of Type 2 diabetes, organizing a diabetes clinic, uses of the RPMS, new medications, and a full day workshop on wound management and foot care. There is no conference fee, but advance registration is requested so that adequate materials for hands-on training are available. For more information, contact Joan Hastie, Diabetes Program Secretary, at (907) 729-1125, or Jane Kelly, MD, Alaska Area Diabetes Consultant, at (907) 729-1126.

Gathering Our Wisdom: American Indian Nursing Summit IV October 18-20 Polson, Montana

The purpose of the 1998 American Indian Nursing Summit is to provide a unique forum for the exchange of dialogue, experiences, and knowledge regarding American Indian and Alaska Native nursing practice. This year's theme, "Expanding the Circle: Enhancing our Nursing Practice and Nursing Roles," will build upon last year's summit research on defining the essence of Native American nursing and will offer insights into expanded nursing roles. American Indian nurses from throughout the nation are invited to participate in this Summit. Student nurses are encouraged to attend to heighten the opportunity to network with Indian nurse leaders to develop future guiding relationships. The meeting will be held at the KwaTaqNuk Resort on Flathead Bay, Polson, Montana. For additional information please contact Sandy Haldane at 1903 Toklat Street, Anchorage, Alaska 99508; phone (toll free) (888) 566-8773.



Disease Management Guidelines: a Step Towards Improving Care?

To the Editor:

In the July 1998 issue of *The IHS Provider* ("Disease Management Guidelines: Promoting Quality Care and Cost Effective Prescribing Behaviors," Volume 23, Number 7, pages 85-87), Dr. Stephen Heath provides a review of an exciting process of improving clinical care through implementation of Disease Management Guidelines (DMG). Dr. Heath states that the DMG process is similar to the Staged Diabetes Management™ (SDM) process developed by the International Diabetes Center, and that DMG is not intended to replace the SDM efforts already in place. Indeed, SDM and DMG have a lot of similar features. Both processes utilize guidelines to promote therapies that are scientifically-based and cost-effective; both processes encourage local customization of the guidelines so there is local buy-in; both processes promote systematic changes to address barriers to implementation; and both emphasize the importance of program evaluation.

The principle distinction between DMG and SDM is the implementation process: DMG uses a system-wide approach and SDM uses a local community process.¹ The DMG are being distributed IHS-wide through a wide range of methods including mass mailings, publication, and website posting. In contrast, SDM is disseminated on an individual community basis. After extensive site preparation, the guidelines are customized using a consensus process that includes input from providers, administrators, and community members. Specific treatment goals are negotiated between patients and providers, and the guidelines are used as a roadmap to reach those goals.¹ To date, SDM has been implemented in 58 IHS, tribal, urban program sites, and has been associated with improved outcomes such as glycemic control² and complications.³ Rather than as an alternative to SDM, DMG could be serve as an introduction to the SDM concept, with the next step focusing on community customization.

Dr. Heath recognizes that practicing physicians have an intuitive resistance to adopt practice guidelines, as they appear to reduce individualized patient care to a "cookbook" or "one-size-fits-all" formula. He stresses that the guidelines need to be flexible enough to accommodate a range of patient and provider preferences. This underscores the importance of local customization of guidelines with consumer input. In actual practice, many patients who have worked with SDM find it comforting when they see that their care conforms to community standards. Moreover, the energy saved by facilitating the clinical decision making process can be directed at addressing barriers to adherence of negotiated care.

One of the risks associated with practice guidelines is the potential for them to be utilized out of context, such as for cost containment rather than for optimizing patient outcomes. Due

to cost constraints of IHS pharmacy budgets and the rising cost of the newer diabetes medications, many facilities within the IHS are faced with the choice between restricting the use of these very effective agents or depleting their budgets. The long-term consequences of such a stopgap measure would be even more devastating: worse outcomes at greater cost.⁴⁻⁵

Clearly there is a role for the use of these newer agents that target specific defects in type 2 diabetes related to metabolic control, and guidelines should be used to direct their appropriate use. Dr. Heath also stresses that guidelines need to be continuously updated with scientific advances in practice. Since the Diabetes DMG was distributed last fall, there are new classes of, and new indications for anti-diabetic agents. Currently, the IHS has limited infrastructure to maintain the Guidelines. The clinical consequences of an outdated guideline could be disastrous if they are utilized for directing formulary choices. As a measure to direct health care policy in American Indian communities, the utilization of practice guidelines needs to be closely scrutinized to keep the focus on the intended purpose of improving clinical outcomes.

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References

1. International Diabetes Center and IHS Diabetes Program. At the crossroads, our next challenge in the IHS: Staged Diabetes Management. *The Provider*. 1994;19:177-181
2. Mitchell P, Pipemeyer J, Glass M, Mazze R, Gohdes D, Bradley R. Long term impact of Staged Diabetes Management to improve metabolic control in an American Indian community. *Diabetes*. 1998;47(suppl. 1) A183
3. Rith-Najarian S, Branchaud C, Gohdes D, Simmonson G, Mazze R. Reducing amputation due to diabetes in a primary care setting. *J Fam Pract*. 1998;47(8): in press
4. Gilmer T, O'Conner P, Manning W, Rush W. The cost to health plans of poor glycemic control. *Diabetes Care*. 1997;20:1847-53
5. DCCT Research Group. Lifetime benefits and cost of intensive therapy as practiced in the Diabetes Control and Complication Trial. *JAMA*. 1996;276:1409-1415

To the Editor:

I enjoyed the Sweat Lodge article, well researched by Berger and Rounds. It reminded me of a story I heard 20 years ago. A man fainted while taking a sweat. He was taken to the local IHS emergency room, where the doctor was baffled by his condition. Prior to transferring the man out, the physician started a normal saline IV, which saved the patient's life.

He had Addison's disease!

Thanks for the memories,

Jon Hauxwell, MD
Billings Area IHS, Billings, Montana



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