

REMEMBER DRIVING THROUGH THE NAVAJO RESERVATION WHEN I WAS NINE years old as part of an epic family vacation in the American Southwest.

PEERING OUT THE WINDOW OF OUR VAN, I FIRST NOTICED THE DESOLATE BEAUTY OF SANDSTONE BUTTES AGAINST THE SEEMINGLY ENDLESS AZURE SKY. UPON CLOSER INSPECTION, I WAS PUZZLED TO SEE SMALL SETTLEMENTS OF WOODEN SHACKS, TENUOUSLY HELD TOGETHER beneath corrugated tin roofs. Cattle roamed freely, though there didn't seem much for them to graze on. A white government-issued trailer here, a badly rusted pickup TRUCK THERE, ALSO ATTRACTED MY ATTENTION.

"Take a good look around," my parents told me. "People live this way in OUR COUNTRY."

"But it's not fair," I thought to myself. "Weren't they here first?" These memories, and the strong feelings they evoked, remained with me over THE YEARS AND PROFOUNDLY INFLUENCED MY ACADEMIC PURSUITS.

Prior to entering medical school at UB in 2001, I attended Johns Hopkins University's School of Public Health, where I earned a master of health sciences' degree in molecular microbiology and immunology. As part of that program, I took a half-year course on Native American Health and was introduced to the Indian Health SERVICE (IHS).

By JESSICA SHAND, CLASS OF 2006









Y PROFESSOR was a former head of IHS and hailed from THE KIOWA TRIBE OF OKLAHOMA. MOST OF THE COURSE FOCUSED ON THE INTERPRETATION OF HEALTH STATISTICS SPECIFIC TO NATIVE AMERICANS.

I was saddened, though not surprised, to learn of very large disparities between Native Americans and the general population in terms of infant mortality, deaths from cardiovascular disease and deaths from alcohol-related illnesses and suicide.

When our professor told us that he had recently worked to install water pumps on reservations to prevent deaths from diarrheal disease, I was stunned. Many of my friends had left for India and Africa to do similar work. while I was learning that we had the same problems here at home. I remembered what my parents had told me so many years before and I dreamed of one day being able to work with IHS.

My dream came true in the winter of 2006, when I arranged a senior elective at the Winslow Indian Health Care Center in Winslow, Arizona, through the UB Department of Family Medicine.

Winslow is a tiny former railroad town just off Interstate 40 in eastern Arizona. The Navajo call it a "border town" because it is just five miles from the south ern border of the Reservation. (And yes, it is featured in the Eagles' song "Take It Easy.")

The clinic, formerly run by IHS but now operated by the Navajo Tribal Council, is a comprehensive outpatient

facility that includes a threebed urgent care center and a variety of specialty clinics for diabetes, prenatal and well-child care and walkin cases. It is also linked to

Winslow Indian Health Care Center

an impressive array of community health services and facilities, including two small field clinics, and home-visit programs that focus on childhood immunization, diabetic teaching and wound care. The Happy Healthy Life Van, a large RV outfitted with a procedures room, instruments for testing blood glucose and hemoglobin A1C and a freezer for vaccine storage, makes daily trips to various public locales on the reservation.

I spent nearly six weeks at the clinic, and it was an experience that changed my life and the way I think about medicine.

LOST IN TRANSLATION

The Navajo call themselves Diné, roughly translated as The People. In fact, most of our understanding of the Navajo language, or Diné Bizaad, is roughly translated. After several attempts to learn this phonetic, highly descriptive language from audiotapes and sympathetic bilingual friends, I understood why it was used to develop indecipherable military codes during World War II.

The Diné Bizaad belongs to the Athabascan family of languages, owing to the fact that the Navajo's ancestors migrated from Asia across the Bering Sea before settling

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further south. A Navajo guide at a national park told me that while watching a PBS special on Mongolia he was able to understand most of the indigenous language spoken on the program, including



a conversation with elder Mongolian women dressed in a manner similar to his great-grandmother.

They view their health through the concept of *hozho*, or Walking in the Beauty Way—a perspective that honors all stages of life and emphasizes harmony between people, the land and the spiritual world.

My very first patient was an elderly woman who came to the walk-in clinic complaining of left-sided chest pain. After placing her in a room, the good-natured nurse said to me, "Oh, and I

already called for the translator." As I flipped through the woman's chart, I thought, "Nothing I have ever read is going to prepare me for this ... But that's why I came here, right?"

The translator, an affable young Navajo man who doubled as a nursing assistant, accompanied me into the room where our patient sat on a chair opposite the examining table. Like most women of her generation she wore a long skirt, a velvet shirt adorned with a large turquoise pin and a scarf that covered her long silver hair.

As I stood before her with my fitted pants and short hair, she looked at me with a mixture of curiosity and disapproval.

"My name is Jessica, and I am going to help the doctor figure out what is causing your chest pain," I explained awkwardly. She said something rapidly to the translator, who paused then stated: "She says she knows why the pain is there, because the hata'ali [Medicine Man] already told her."

Early in my medical training, I was taught certain seemingly infallible principles about the medical interview. To start, I learned I must use open-ended questions. When a patient complains of pain, I must ask for how long, if it can be localized, whether it radiates, what the modifying factors are and if they can rate it on a scale of 1 to 10.

I quickly learned that this line of questioning results in a very low-yield exchange with elder Navajo patients for reasons that extend beyond a simple language barrier. Navajo people think of their bodies not as discrete entities with compartmentalized muscle groups and organ systems, but as spiritual embodiments that began at the moment of The Creation. or Diné Bahané.

Two medicine men affiliated with the clinic treat patients in this hogan, which is of modern construction. To the right is the framework of a sweat lodge, also used as needed for traditional healing practices.

They view their health through the concept of *hozho*, or Walking in the Beauty Way—a perspective that honors all stages of life

and emphasizes harmony between people, the land and the spiritual world. Thus, it is not uncommon to be told the 50-year history of a disagreement between clan members or a difficulty with grazing rights in response to an open-ended question such as, "Tell me when the problem [with your chest pain] began?"

Elder patients will sometimes grow impatient with questions such as "How much?" and "How long?" because the hata'ali can "know" what is wrong without asking such questions. In addition, medical terminology is exceedingly difficult to translate. An older woman I examined at a field clinic once told me in response to a question I asked her about diabetic screening, "I don't know about sugar in the blood, but I am Bitter Water [Todích'íi'nii, a large family clan]."

In talking with my patient who was experiencing chest pain, something else I learned in medical school proved to be most reliable: a sincere compassion for the social circumstances of medical illness.

After several failed attempts to rule out the dreaded angina-at-rest, I enlisted the help of my preceptor, a brilliant family physician who left his 20-year-old private practice on the East Coast to work with the Navajo.

"Ya' át ééh" [hello], he spoke softly to the woman, making little eye contact and gently touching her shoulder in contrast to the firm, reassuring handshake I had given her. Within minutes, we learned that she was a weaver and had been experiencing left-shoulder pain, not chest pain, for years when reaching up from the traditional seated position to pull the comb down her loom. She was very upset because she was no longer able to work through the pain and it was affecting her spiritual and economic value as an artisan.

When we assured her that she did not have to stop weaving altogether, she was quite open to conventional medical treatment. To my knowledge, she never missed a physical therapy appointment.

BILAGAANA MEDICINE

Early one morning I was particularly hungry after my onehour commute across the desert and so was drawn to two middle-aged Navajo men selling roasted piñon nuts from their usual spot on a picnic table near the clinic entrance. I paid \$4 for a bag of nuts and smiled with satisfaction thinking of the \$7.50 I would have spent for a much smaller jar of *pignoli* at my local Italian importer.

Moments later I ran into my paramedic friend Thom, a full-blooded Navajo, who asked with a smile, "How much they selling for today?" His smile exploded into a hearty laugh at my reply, as he paused to explain that I had paid "the Bilagaana price, without the Navajo discount."

Only slightly accustomed to Thom's characteristic Navajo humor (always good natured, often self-effacing, sometimes accompanied by song), I nursed my bruised feelings until my husband paid \$10 for a similarly sized bag at a Native roadside stand later that week.

Bilagaana is the Navajo word for White Man. I had seen the word many times in my father's beloved Tony Hillerman books and in texts about Navajo history. It has many connotations, from affectionate to malicious, that reflect the deeply complicated relationship between the Diné and dominant white society. I knew that in order to forge a meaningful rapport with my Navajo patients, I had to begin to understand this relationship. I also knew that this would be a difficult task, and one that could very well last a lifetime.

In the mid-nineteenth century, Anglo-American pioneers and entrepreneurs realized the enormous potential of Diné land for grazing and the building of westward railroads. Eventually, the U.S. army decided to gather all Navajo people and send them to Fort Sumner, Colorado. The legendary Kit Carson was appointed to enforce the relocation.



Most physicians I encountered through the Indian Health Service felt the best remedy for this mistrust was to be aware of it and to try to understand it through the eyes of people who have suffered so much for so long.

Many Navajo people hid in sacred places like Canyon de Chelly in the northeast corner of Arizona and refused to surrender despite the army burning their villages and killing

their families. In 1864, those who survived were sent to Fort Sumner on the infamous "Long Walk," which claimed over 200 lives.

This action taken by the U.S. government has resulted in bitter memories for the Diné. Although the Treaty of 1868 allowed the Navajo to slowly return to their homes, the seeds of mistrust and resentment had been sown.

The trauma of these events has not been forgotten and continues to impact the Navajo today. It underlies the "identity crisis" that many of their young people experience when they are forced to leave the reservation to attend college or work in the cities in order survive. It is manifested in the depression and alcohol abuse that plagues many Native American reservations, where there are few job opportunities and little hope for the future. It fosters a general mistrust of "bilagaana medicine," with its cold instruments and calculating diagnoses.

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THE ROAD HOME

Without question, my most profound experiences in Dinétah involved making home visits for diabetic teaching and wound care. The ability to make home visits is critical on the reservation, where many patients live in sparsely populated settlements and do not have access to transportation.

The coordinator of the home-care program is a remarkable Navajo woman named Lita who is, as she likes to say, "double-educated." She is a licensed registered nurse with special training in wound care, and also comes from a long line of Medicine Men. Like many professional Navajo people, she lives between two worlds and has managed to be an indispensable resource to both.

One afternoon I accompanied Lita as she drove her government-issue 4X4 along a road that turned from interstate to gravel to rutted dirt tracks, ending in a precarious canyon *arroyo* (gully) where one would not

This is the clinic's Diabetes Education Office, where Lita, the nurse who coordinates the home-care program, has her office. The ability to make home visits for diabetic teaching and wound care is critical on the reservation, where many patients live in sparsely populated settlements.

want to be caught should a thunderstorm break overhead.

We drove up to a small settlement of three old trailers and a *hogan*, a traditional eight-sided Navajo dwelling with an adobe roof and a single door that faces east. Even the most modern Navajo settlements have hogans, used either for ceremonial purposes or to house elders who prefer to live in the traditional fashion.

We knocked on the door of one of the trailers and while we waited Nina explained to me that the patient inside was diabetic and recently underwent a below-theknee amputation after a wound failed to heal. He had also contracted a bad case of *c. difficile* colitis postoperatively.

I had a hard time imagining what it would be like to have this notorious diarrhea without a working toilet (there was an outhouse about 100 yards away), or how he could keep his wound clean without any running water.

I soon found out, when his wife answered the door. "Ya' át ééh" I said, having learned the effectiveness of a proper greeting. The woman smiled broadly, took my hand and led me inside, all the while speaking rapidly in Navajo. I looked at Lita, who explained that the woman was anxious to show us how well her husband was healing.

Once inside the one-room trailer, I immediately noticed a hospital commode placed conveniently next to the bed. Apparently, someone from the home-care staff had transported it in their pickup truck from a medical supply store. I also noticed a very large supply of woundcare materials stacked neatly in Tupperware bins.

Lita had taught the patient's wife how to do basic dressing changes and had stocked them with extra supplies from the clinic. Her excellent instruction had paid off, as the patient's wound was healing remarkably well.

The patient himself was a quiet elder man, with deep lines on his face that reflected many years of sheep herding and hard drinking. We said very little to one another, but the Navajo know that so much can be said without words. As we left, Lita confessed her profound concern that the road leading to their home would be impassible in the winter, making it impossible for him to get to the hospital if the wound became infected.





SELF-DETERMINATION

One of the first things I observed when I began working at the clinic was that everyone wore pink ribbons on their identification badges.

"It's great to see that everyone is so supportive of breast cancer awareness," I said to one of the nurses, slightly confused by her response, which was a chuckle.

"Pink ribbons aren't for breast cancer out here," someone later explained.

Over time, I learned that they are instead symbolic of the day, several years ago, when the clinic officially became owned and operated by the Navajo Nation.

The Winslow Indian Health Care Center is one of several clinics on the reservation known informally as "638 clinics" in reference to the Indian Self-Determination and Education Assistance Act of 1975 (Public Law 638), which transferred ownership from the IHS to the tribal government.

What this means is that the Navajo government is responsible for the allocation of resources for community health and education programs, rather than Congress. As a result, the Navajo Tribal Council now contracts with physicians and staff from either the IHS or the U.S. Commission Corps to provide health care.

Many Navajo people celebrated the fact that they were finally empowered to respond to the specific health-care needs of their community. A surprising number, however, Pictured here with me outside the clinic's Happy Healthy Life Van is my paramedic friend, Thom, one of the few Navajo I met who was comfortable having his picture taken.

View outside one of the clinic's satellite facilities on the reservation.

NAME AND FOUND DESCRIPTION

HEALTH CARE IN THE NAVAJO NATION

POPULATION STATISTICS	Navajo	US
Median Age (1990)	22.3	32.9
Annual Per Capita Income (1999)	\$6,123	\$21,181
People Living Below Poverty Level (1990)	56.1%	13.1%
Unemployment Rate (2000)	43.4%	4.3%
People >25 years with HS Diploma (1990)	41.3%	75.2%
Native Language Spoken at Home	82%	

Adapted from "Health Care In the Navajo Natlon Fact Sheet 2004" Source: Navajo Area Indian Health Service George Joe, Senior Public Information Officer, Navajo Division of Health

DEMOGRAPHICS

DEMUGNATHIGS	
Number of people claiming Navajo ethnicity	298,197
Percent officially enrolled tribal members	86%
Percent living on reservation	60%
Percent speaking native language at home	82%
Percent public roads that are unpaved	78%
Percent homes lacking complete plumbing	32%
Percent homes lacking complete kitchen facilities	28%
Percent homes lacking telephone services	60%

Adapted from: "Health Care in the Navajo Nation Fact Sheet 2004" Source: Navajo Department of Transportation, Division of Economic Development, 2000–2001 US Census.

didn't want their health care turned over to the tribal government. They feared that the quality of care would suffer under the weight of a bureaucracy lacking the infrastructure to set appropriate standards.

Many IHS physicians questioned the security of their jobs, salaries and benefits.

Although the Winslow clinic has been a "638 clinic" for several years, these issues are still being resolved. Fortunately, through all the red tape, both the IHS staff and the Navajo government continue to work toward a

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diabetes. I have to dream that my people will heal and that this sickness of alcohol and suicide will be gone. And in order to dream, I have to forgive."

There is no doubt in my mind that she, and others like her, represent the future of Navajo health. I know that I

> would be honored to join her and countless others working to serve the Diné in mind, body and spirit.

Acknowledgements I would like to thank Drs. Carol Barlage, Perry Mitchell and Frank

common goal of providing the best care possible to this extraordinary group of people.

As I reflect on the future of Navajo health care, I return to something Lita once told me as we bumped along a rutted road on our way to a patient's home.

"I have to dream big," she said, "and I can't be afraid. I have to dream that one day there will be no more Morgan for their incredible teaching and invaluable insight on caring for the Diné. Many thanks also to Rhonda Davis, FNP, for her perspective on living between two worlds; Lita Scott, RN, for her truly inspirational fieldwork, and Thom for letting me ride shotgun in the mobile van. Without Dr. David Holmes and Karen Devlin in the Department of Family Medicine, this experience would not have been possible.



Jessica and Daniel Shand

ABOUT THE AUTHOR

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She earned a bachelor of arts degree (1998) and a master of health sciences degree (1999) in molecular microbiology and immunology at Johns Hopkins University.

Prior to entering medical school at UB, Shand worked as a staff scientist in the Immunology Division at Advanced BioSystems, Inc. in Manassas, Virginia, where she studied the immune response to emerging pathogens and potential therapeutic targets for biodefense.

In 2003, she took a year off from medical school to participate in the prestigious Howard Hughes Medical Institute-National Institutes of Health (HHMI-NIH) Research Scholars Program. Through this program, Shand spent a fully-funded year at the NIH, where she conducted research in cancer immunotherapy at the Pediatric Oncology Branch of the National Cancer Institute.

Following graduation, Shand will

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Shand is married to Daniel Peter Shand, MD '05, who is currently an emergency medicine resident at UB.

Once their training is completed, the couple plans to return to the Navajo Reservation.

-S.A. Unger