

WADE Feature Article Section – Creating Relevant Diabetes Education in Rural China

SUBMITTED BY DON MILLER, RN, CDE This article is the winner of this newsletter's WADE Feature Article; Don's prize is one paid conference fee to the 2010 Annual Conference in Bellevue, WA. Congratulations Don!



One of our audiences, a mix of villagers and healthcare professionals

Recently I had the opportunity to travel with Dr. Peter Jiang, oncologist at Providence Regional Cancer Partnership, to his home village in Henan Province, China. Dr Jiang, during his yearly family visits also provides medical services and resources to the people of his home village and the rural health system. I was asked if I could help with a diabetes presentation. Though not really knowing the needs I said “sure” and began researching for this opportunity he created. In this era of cyber communication I began my investigation, but it was not as easy as I had hoped. When he told me there had not been foreigners to his village before, this began to make sense. He also said they sometimes take shortcuts. For example they never had telephone service until they had cell phones. Similarly, they have no medical

records, but may

soon have electronic medical records. I said, “we may have to develop some of this after we get over there. See what they eat, take pictures, and show changes they could make for diabetes”. “Good idea”, he replied.

In rural China they eat what they grow. In the locale of his village we saw corn, watermelon, beans, squash, a variety of greens some of which we have no equivalents in the USA. From fall to spring wheat is grown. While there is the perception that in Asia everyone eats rice, there was no rice. There were noodles, noodles of many varieties, all made locally from grain or beans ground in a one room mill in their own village. Noodles were the carbohydrate of choice. Most of the foods are not preserved but are eaten as they become available. Except, of course, noodles.



As guests we were treated with lavish traditional cuisine but this was not the typical food for the local villagers

As foreign guests we were treated to 20 or more food dishes at every lunch and dinner. Cuisine unlike anything I had ever had in the USA, many of them local specialties. I brought out my camera, this is great, I thought. “Well, actually, the people in my village don’t usually eat this way” I heard. So we made our way out to his aunt’s home and explored her kitchen and caused some laughter as I photographed noodles, tofu, cakes made out of ground corn, and peanuts. We made different arrangements showing portions they usually had (lots of noodles) then less noodles but more tofu, etc.



Interview by television crew after one of our presentations on the left Peter YZ Jiang, MD, PhD myself on the right

These photos became a key part of my presentation. It seemed well received. Some health professionals took copies on their flash drives, our picture was in the paper, and I think we might have been on TV.

In Dr. Jiang's village we screened 109 adults for diabetes. Thirteen percent were found to have elevated blood glucose; mostly these were new diagnoses. The average blood glucose for these villagers was 16.2 mmole (291 mg/dl) and ranged from 11 to 25.6 mmole (198 to 460 mg/dl).

For our next trip we are planning a pilot project for instructing insulin use for some of the villagers. The health services available in rural areas are primarily through small acute care hospitals. When symptoms are severe enough to

present to the hospital they may start on insulin but do not have resources for follow-up. Our goal is to demonstrate that with screening and an appropriate education program we can improve blood sugars and prevent hospitalization for some of the villagers. There are numerous challenges. Many villagers do not read or write or are not familiar with Arabic numerals. The cost of the insulin and testing supplies is also an issue. While typically the rural farm areas of China are poor in many areas of China rapid economic growth is occurring. We are communicating with Chinese businesses in the urban area of the province for potential financial assistance on the project.



Screening for diabetes in the village, Dr Jiang's son, Jerry, is assisting on the right; RN Linda Jacobson is assisting on the left



Don Miller presenting one of the slides of local food, Dr. Jiang translated



Mill in village where wheat, corn, and beans were ground to make noodles

From ancient academic sites to ultra modern Shanghai, China is a country of great diversity and rapid change. With some new partners and we hope to make some change for diabetes.