Piya Wiconi:

We're going to live better again

A family-centered prediabetes project for American Indians

August 25, 2007

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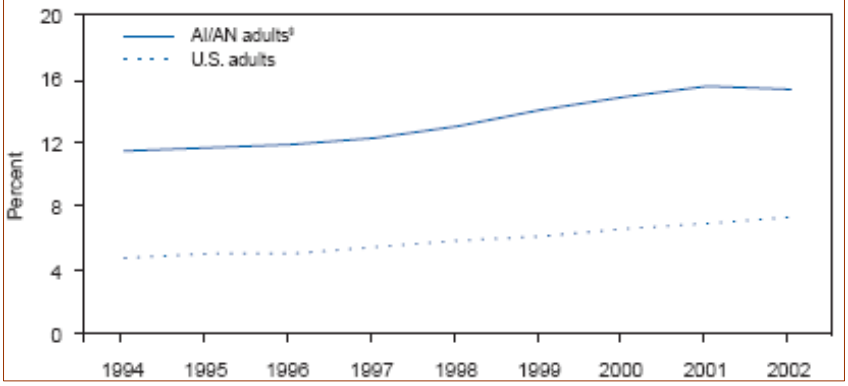
The Diabetes Epidemic

among American Indians

American Indians

- suffer rates 3 times higher and mortality 4 times higher than the U.S. population
- get diabetes at younger ages & the trend is getting worse
- women have higher rates than males at most ages
- certain tribes suffer much higher rates

FIGURE. Age-adjusted prevalence* of diagnosed diabetes among American Indian/Alaska Native (AI/AN) and U.S. adults aged ≥20 years, by year — United States, 1994–2002†

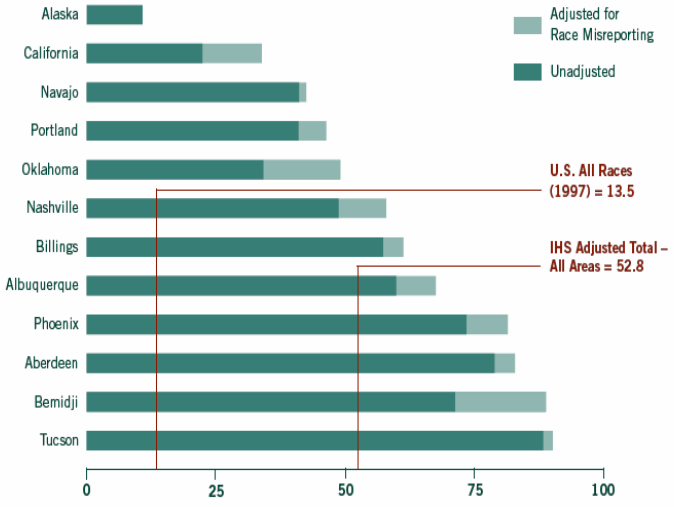


Diabetes Age-Adjusted Mortality Rates and Disparity Ratios, American Indian Females / American Indian Males & US General

Age	AI Female Mortality	AI Male Mortality	U.S. All Races Mortality	AI Female to Male Disparity Ratio*	AI Female to US All Races Disparity Ratio*
25-34	3.4	2.1	1.3	1.6	2.6
35-44	11.5	16.6	3.6	0.7	3.2
45-54	60.7	57.2	10.7	1.1	5.7
55-64	172.3	162.5	36.3	1.1	4.7
65-74	355.6	249.3	83.3	1.4	4.3
75-84	484.9	348.1	154.1	1.4	3.1
85+	491.7	292.7	273.1	1.7	1.8

Data source: IHS Special Report, American Indian 1994-1996 compared to US 1995, American Indian rates are adjusted for racial miscoding
*The disparity ratio is a measure of the difference between two groups used in disparities studies. If no difference exists, the ratio is 1.

Age-Adjusted Diabetes Mellitus Death Rates, 1996-1998 Indian Health Service Areas compared to U.S. All Races



Why are rates so high in our community?

Our Traditional Foods
(what our grandparents ate)

Our Current Foods
(what we often eat now)

Root Causes

- ***Removal***
  - Loss of lands for hunting & gathering
- ***Assimilation***
  - Provided high fat foods through commodities (canned meat, cheese, white flour)
- ***Historical trauma***
  - Outlawed religious and spiritual practices
  - Breakdown of family structure and roles
- ***Social factors***
  - Unemployment, poverty, limited access to quality foods

What are we doing about it now?

Community Based Programs

- Tribes have created community programs
  - *Special Diabetes Program for Indians* (SDPI)
  - *National associations spearhead initiatives*
    - National Indian Health Board
    - Association of American Indian Physicians
- **Office of Women's Health prediabetes special project funding**

Our Project-

Training family members to spread prevention messages about diabetes

Program Development

Draw equally on

- **"Evidence based" knowledge**
  - Diabetes Prevention Program
  - Native American Diabetes Project
- **"Cultural-based" knowledge**
  - Cultural learning (stories, talking circles)
  - Personalizing the learning (Indian leadership, reflective activities)
  - Culturally diverse team create curriculum with focus on cultural strengths and resilience factors

Program Components

1. **Training (4 sessions)**
   - 2.5 to 3 hour sessions included interactive activities on prediabetes, core messages & communication
   - Homework that reinforced training objectives
2. **Education materials & personal journals**
   - Educators shared journal entries on their prevention sessions with family (10 required)
3. **Booster activities & incentives**
   - Newsletters, phone cards, pedometers, events
4. **Celebration & reflection sessions**
   - 4 month booster session and chance to reflect

Program Implementation

- **Participants**
  - 20 community members from age 17-78 completed or exceeded requirements
  - Diverse tribes
    - Ojibwe, HoChunk, Dakota, Sioux, Cherokee
  - Each received a $500 stipend
- **Naming of the Project**
  - Piya Wiconi-“we’re going to live better again”

Program Implementation

- **Core Messages**
  - **Move More!**
  - **Eat Healthy!**
  - **Draw on Cultural Strengths**
  - **Get Tested for Prediabetes**

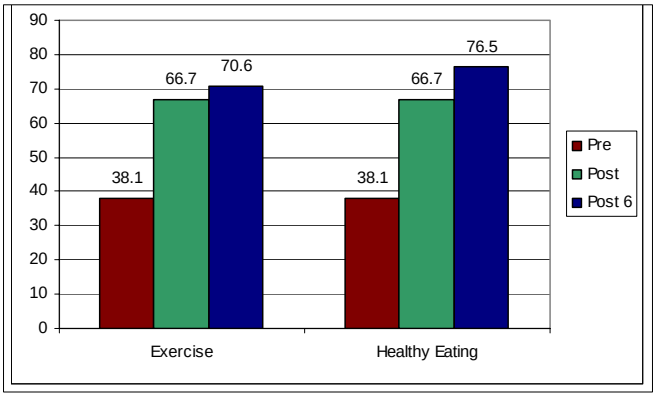
Program Evaluation Methods

- **Process**
  - Survey questions on satisfaction
    - collected at 2 points –post (last day) and post 6 month training
  - Observations during training
  - Notes from “debriefing” session
- **Outcome**
  - Journals written by family educators
  - Talking Circle at 4 months post training
  - Surveys collected from family educators
    - at 3 points: pre-training, post (last day) and 6 month

Program Evaluation Results

- **The project prepared Family Educators**

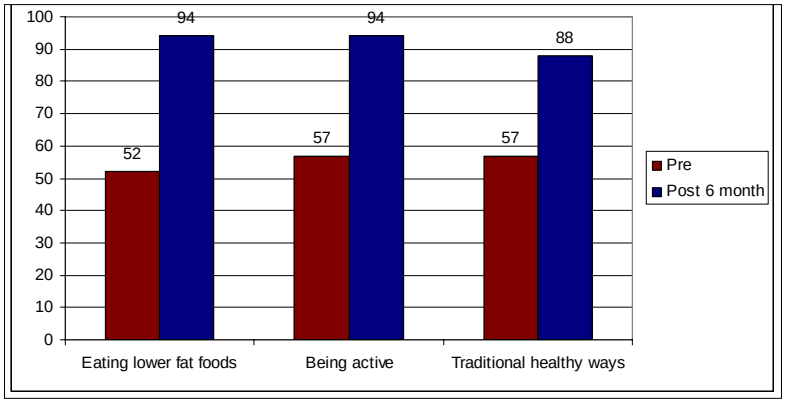
Percent Very or Completely Confident to Discuss Topic with Family, Pre vs. Post and Post 6 months



Program Evaluation Results

- **Family Educators reached 255 loved ones**

Percent Talking to Family about Prevention, Pre vs Post 6 months



Program Evaluation Results

- **Family Educators made healthy changes**
  - **Family educators reported significantly higher consumption of fruits and vegetables, moving from a mean of 1.9 fruits per day to 2.8 by the post 6 month survey, and from a mean of 1.6 veggies per day to a mean of 2.5 at 6 months.**

"I used the step counter to increase walking, and started walking around the lake with my co-worker. My goal is to get up to 15,000 steps or more. I do use the stairs more than the elevator. I've reached 14,000 with my friend at work!"

Lessons Learned

Implementation Lessons

- More training and preparation.
- Use stipends and creative support.
- Find Native speakers and create a caring, culturally-responsive environment.
- Draw on cultural assets.
- Focus on personal learning and demonstration, rather than written materials.

Lessons Learned

Evaluation Lessons

- Journaling benefits both intervention and evaluation.
- Use in-person interviews.
- Build in time and effort needed for follow-up.

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