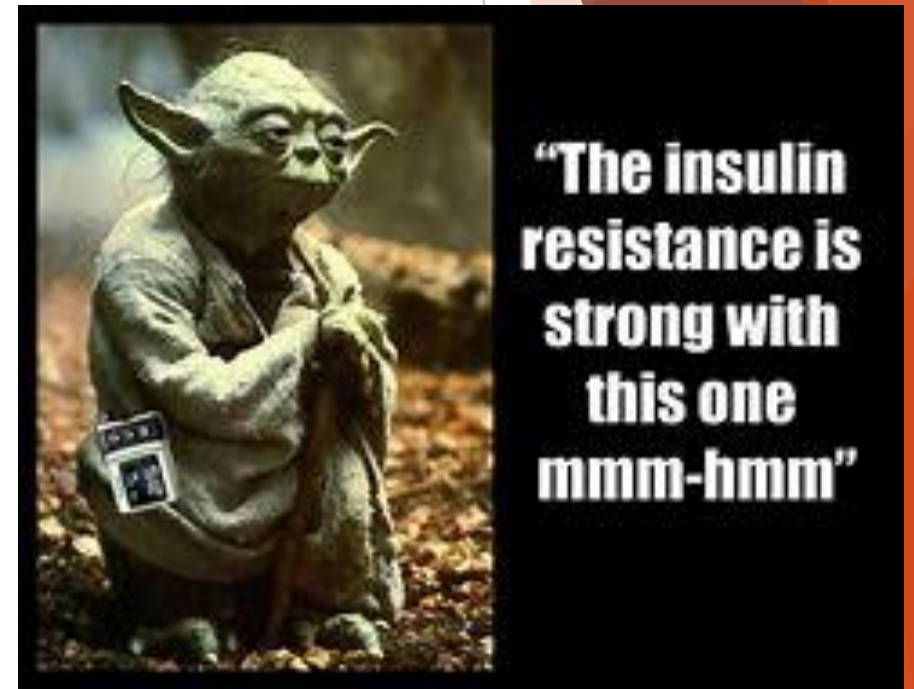


# Diabetes in Aboriginal People: Managing diabetes on reserve

Dr. Nicole CARDINAL, Family Physician/ Rural Emergency Room Physician  
Saddle Lake Health Center/St.Paul Alberta

# What is diabetes?

- ▶ [https://www.youtube.com/watch?annotation\\_id=annotation\\_3720898155&feature=iv&src\\_vid=jHRfDTqPzj4&v=X9ivR4y03DE](https://www.youtube.com/watch?annotation_id=annotation_3720898155&feature=iv&src_vid=jHRfDTqPzj4&v=X9ivR4y03DE)



# Diabetes on Reserve-Why is this important? Health trends

- ▶ Diabetes Incidence Among First Nations in Alberta
  - ▶ Diabetes incident rate among First Nations is 1.8 times higher than among non-first nations
  - ▶ Age specific rates were higher for younger populations
    - ▶ Higher in females
    - ▶ Age 30-34: 3.8 times higher
    - ▶ Age 35-39: 3.1 times higher
  - ▶ Earlier onset increases the risk of long term complications

# Health Trends: Chronic kidney dialysis among Albertans with Diabetes

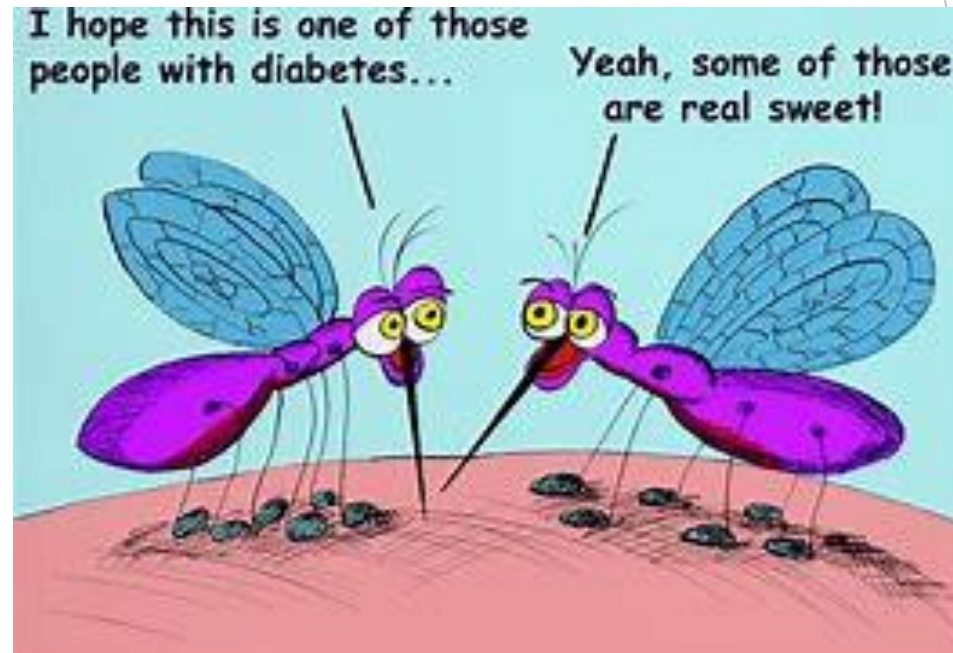
- ▶ 2006-2015: over a 10 year period the average dialysis rate was 2 times higher among First Nations and Non First Nations
- ▶ There was no difference in Chronic dialysis rates between males and females who are First Nation

# Lower leg Amputations

- ▶ Lower leg amputations among diabetics 20yrs of age or older; an average of 46 and 416 amputations per year for first nations and Non-First Nations respectively.
- ▶ Over 12 year period the rate was 3 times higher for First Nation than Non-First Nation
- ▶ Majority occurred in males regardless in population; 2-3times higher than females among First Nations
- ▶ Amputations generally increase with age b/w 20-84 but were highest in 65-84 yr. olds

# Issues specific to diabetes management on reserve

- ▶ Screen and diagnose
- ▶ Lifestyle
- ▶ Burnout
- ▶ Complications
- ▶ Access to services



# Who do we screen?

- ▶ Who is First Nation?
  - ▶ SCREEN!
- ▶ Who is >40?
  - ▶ SCREEN!
- ▶ Who has a 1<sup>st</sup> degree relative with DM?
  - ▶ SCREEN!
- ▶ Who would say they are overweight?
  - ▶ SCREEN!

# Other risk factors include:

- ▶ History of pre diabetes
- ▶ History of Gestational diabetes
- ▶ Delivering a macrosomic infant (bw greater than 4000g)
- ▶ Organ damage from diabetes (eyes, nerves, kidneys, heart)
- ▶ Darkened skin
- ▶ PCOS
- ▶ Psychiatric disorders, chronic stress
- ▶ Medications associated with diabetes (steroids, antipsychotics ect)



# How often do we screen?

- ▶ Guidelines say “ every 3 years”
- ▶ Guidelines do not represent First Nation people
  - ▶ Canadian diabetes association states:

“Screening for diabetes in adults should be considered every 1 to 2 years in Aboriginal individuals with  $\geq 1$  additional risk factor(s). Screening every 2 years also should be considered from age 10 years or established puberty in Aboriginal children with  $\geq 1$  additional risk factor(s), including exposure to diabetes in utero.”

# Lifestyle

- ▶ Diet
  - ▶ Diabetic diet
  - ▶ Low income families
  - ▶ Eating healthy: high cost of groceries, no transportation, cheap foods
  - ▶ Homes not having fridge, stove, running water
- ▶ Checking blood sugar
- ▶ Physical Activity
  - ▶ Unsafe in the community
  - ▶ No designated gyms, equipment
- ▶ Overweight



# Burnout from Diabetes

- ▶ Feeling Overwhelmed
- ▶ Not caring about your health anymore
- ▶ Not following up with appointments
- ▶ Stopping your meds
- ▶ Depression
- ▶ Always becoming sick
- ▶ Sick of feeling sick
- ▶ Not coping with side effects of drugs
- ▶ No support from family or community





**I really try to be strong and not let my Type 1 Diabetes get me down. But the truth is that there are days when I wish my life was still as easygoing as it was before my diagnosis. And on those days I can't help but feel sad.**

# Complications of Diabetes



# Access to Services

- ▶ Lab testing
- ▶ Regular physician to monitor your diabetes
- ▶ Eye Care
- ▶ Foot Care
- ▶ Referral: Transportation
- ▶ Missing appointments

# What is your responsibility?

- ▶ Learn about diabetes
- ▶ Be an advocate for your health!
  - ▶ Demand to be tested yearly
- ▶ Understand your medications
  - ▶ When to skip your meds
- ▶ Educate your family members about diabetes and if you have diabetes the signs of when your blood sugar is too low or high
- ▶ ASK QUESTIONS!!

# Working on Reserve barriers

- ▶ Poor follow up with appointments
- ▶ Denial about being diagnosed with diabetes
- ▶ Difficult for myself and our program to get others to care about their health when we care/worry about our patients
- ▶ Overcoming social issues
- ▶ Fear in screening for diabetes
- ▶ Fear of having diabetes
- ▶ Being related to community members
- ▶ Diabetes in the Elderly



# Once screening is done...now what?

- ▶ First follow up visit
  - ▶ We discuss what diabetes is?
  - ▶ We talk about how YOU feel about this?
  - ▶ We talk about others who have diabetes
  - ▶ We start slow...one medication and sometimes 2 (depends on the receptiveness)
  - ▶ We talk about why we treat diabetes
  - ▶ We meet back in 2 wks
  - ▶ Go meet the ladies in the Diabetes program

# Traditional Medicine and Diabetes

- ▶ Get regular lab work
- ▶ Continue to watch your diet
- ▶ Encourage exercising in conjunction with traditional medicine
- ▶ Work with your health care professionals for monitoring

# Fasting with Diabetes

- ▶ There are guidelines to fast safely....discuss with your family physician
- ▶ DO NOT fast if the following describes you:
  - ▶ Poor blood sugar control
  - ▶ Hypoglycemia (low blood sugar) unawareness
  - ▶ Severe hypoglycemia in the last 3 months
  - ▶ Experience low blood sugar regularly
  - ▶ You have alertness problems
  - ▶ Other medical illnesses in addition to diabetes
  - ▶ Complications of diabetes
  - ▶ Pregnant or breast feeding

# Why is low blood sugar important in fasting?

- ▶ It can lead to confusion, loss of consciousness, seizures, dehydration and diabetic ketoacidosis which require medical treatment
- ▶ Symptoms can be mild to severe:
  - ▶ confusion and drowsiness
  - ▶ Dizziness and weakness
  - ▶ sweating
  - ▶ Fast heart beat
  - ▶ Trembling
  - ▶ Headache
  - ▶ hunger

# Thank you!

▶ Questions?