

2017 Navajo Nation Human Research Review Board Conference

Helicobacter Pylori and Stomach Cancer:

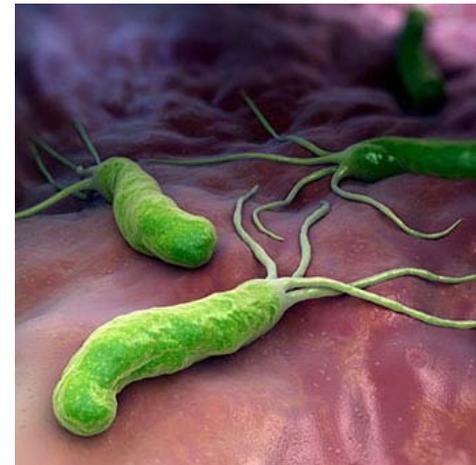
Assessing knowledge, attitudes, and practices among
Navajo people in Northern Arizona

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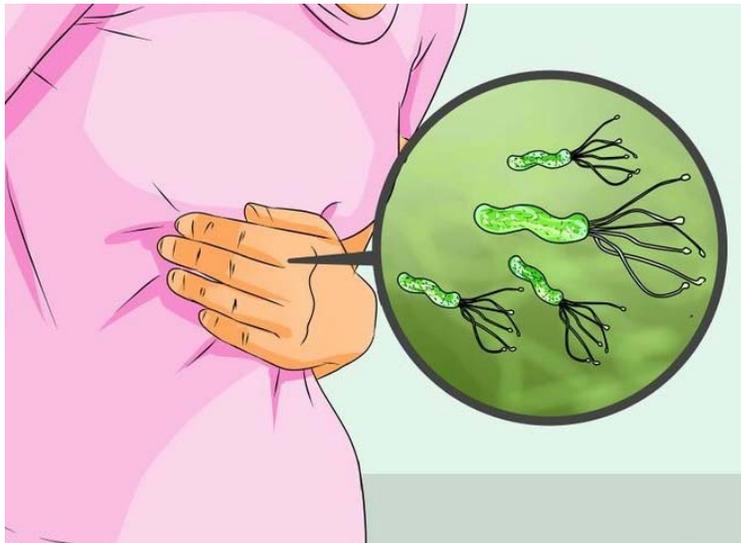
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What is *Helicobacter pylori*?

- ▶ *H. pylori* is a bacteria commonly found in the human gut.
 - ▶ Can cause infection, which can begin in childhood and persist into adulthood
 - ▶ One of the most common bacterial infections in the world.
- ▶ **Untreated infections** can lead to chronic health outcomes.
 - ▶ Chronic gastritis, ulcers, stomach cancer
- ▶ Leading infectious cause of cancer worldwide.



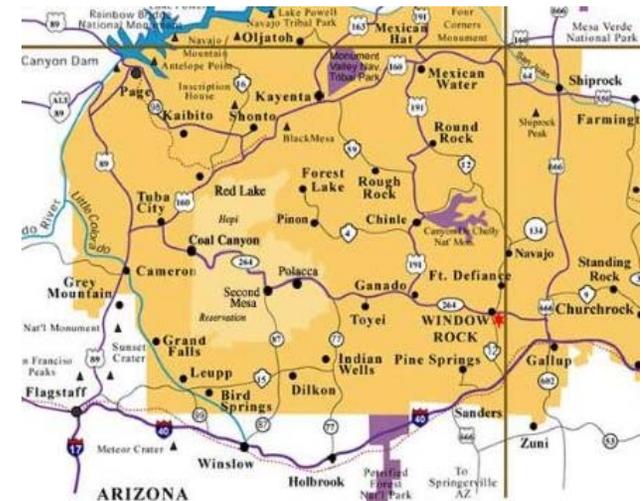
Background on Stomach Cancer



- ▶ 3rd leading cause of cancer death, globally.
- ▶ Development of gastric cancer clearly associated with *H. pylori* infection

Why is this a concern for the Navajo Nation?

- ▶ Rate for stomach cancer is **3-4 times higher** among Navajo Nation residents in Arizona.
 - ▶ In comparison with non-Hispanic white population
- ▶ Incidence rates highest in southwest IHS Region.
 - ▶ 10.6/100,000 among all counties
- ▶ **Incidence rates are higher in Navajo Nation**
 - ▶ 14.2/100,00 (after adjusting for age)
 - ▶ 2nd only to colorectal cancer for incidence



Project Team & Study Goal



- ▶ Eyal Oren, PhD
- ▶ Robin Harris, PhD, MPH
- ▶ Carmenlita Chief, MPH
- ▶ Alfred Yazzie



- ▶ Priscilla R. Sanderson, PhD



- ▶ Greg Jarrin, MD

Goal

To assess and increase understanding of Navajo people's knowledge, attitudes, and practices (KAP) regarding *H. pylori* infection and stomach cancer.

Focus Group Aims

- ▶ Conduct 3 focus groups
 - ▶ 1 focus group per community (Birdsprings, Leupp, Dilkon)
 - ▶ 8-10 participants per group
- ▶ Findings will be important to provide a foundation for future studies focusing on *H. pylori* infection
 - ▶ i.e. screening, treatment, education



Recruitment Efforts



Time Period

Activities

In Advance of FG

- Flyers posted in public places
- Word of Mouth

Day of FG

- 22 x 28-inch poster board sign in front of chapter house
 - Balloons to capture attention
 - In-person recruitment of visitors & passersby (in and around chapter house)
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Indigenous-Based Approaches

Kinship

- Give participants some time to reconnect before focus group.
- Provide breakfast for participants (“feed your relatives”).

Direction

- Introductions take place in clock-wise direction.

Spirituality

- Prayer before focus group & data analysis sessions.
- Seek protection & understanding for a culturally sensitive & powerful topic.

Consensus

- Collaborative analysis; all members have equal stature & acknowledge kinship relationships among team.

The vast majority have never heard about stomach cancer and *H. pylori*.

[Knowledge]

On Stomach Cancer:

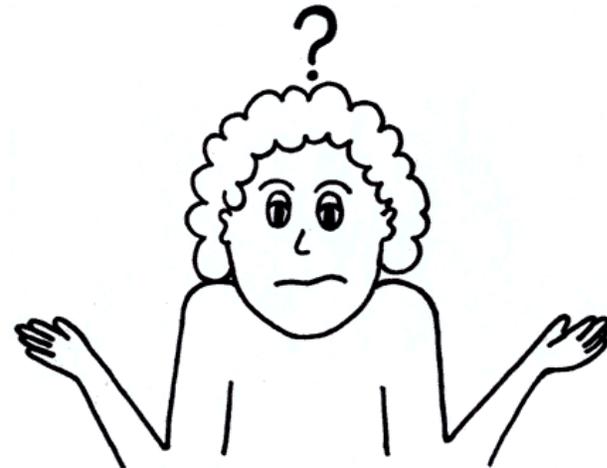
- ▶ Most thought their **medical providers did not have adequate knowledge** to suspect stomach cancer or *H. pylori* infection.
 - ▶ *I've been in and out of the hospital all the time, and doctors and people don't tell you. Nutritionists, and...they don't bring up stuff like this to me.*
- ▶ Many were **guessing** on what they thought were symptoms of stomach cancer – often giving **generalized descriptions**.
 - ▶ *No, because all they'll say is, "Oh, I have a stomach ache. I have a stomach ache. Or they'll say, "I'm bloated."*

The vast majority have never heard about stomach cancer and *H. pylori*.

[Knowledge]

On *H. pylori*:

- ▶ **Focus Group A:** The focus group discussion was the actually the first time they heard of it.
- ▶ **Focus Group B:** Only one person had heard of it because they had been infected and received treatment.
- ▶ **Focus Group C:** 1-2 people said they heard of it because of family members who had ulcers.



Environmental concerns are perceived to be associated with community health issues.

- ▶ Concerns about various types of environmental contamination in the local area.
 - ▶ i.e. coal combustion & mining, pesticides, air, water, polluted run-off
 - ▶ **Uranium** contamination of water sources
- ▶ Concerns about potential exposure of people & livestock to harmful environmental chemicals.
 - ▶ Irrigation and farming
 - ▶ Uninformed about water quality



Feeling vulnerable and afraid.

[Attitudes]

- ▶ Vulnerability, fear, and anxiety (worry).
 - ▶ *Since hearing this today, it's kind of just worrying me a little...like the food I eat and the water I drink. So, I'm just listening, trying to find out more.*
 - ▶ *We're afraid of it [cancer], that's why we say, 'Yes!'*



Confusion

[Attitudes]

Two (2) types of confusion:

1. Not knowing what was happening with body/health.
2. Inaccurate or unsubstantiated info regarding the stomach and its disorders.
 - ▶ *I know a couple of people that got a chili seed stuck in their throat or somewhere, and that chili seed will burn a hole through the lining of the stomach, and they get ulcers from it...*



Frustration toward medical providers

[Attitudes]

- ▶ Frustration over the quality of health care received.
 - ▶ *I lost my brother in-law recently. He said he's been vomiting a lot. Every time he eats, he vomits, and the doctor couldn't find out what the problem was. He just kept saying, 'Naw, nothing is wrong with him.' They keep saying 'Go home,' and finally one of my relatives got mad at the doctor, and says, "Examine him!" Then they finally find out what, what cause...was the cancer in there.*

Experiences with exhaustive medical evaluation & diagnosis procedures led patients' to passively accept quality of health care services



- ▶ Many participants described with some **emotional resignation**, the following:
 - ▶ **Not getting proper medical care** within an appropriate time period.
 - ▶ **Excessive wait** for appointments (months).
 - ▶ *Like I said, it took them a long time to diagnose. And I kept going back. I could tell something was wrong with my body. Something's not right! But they didn't know how to treat it or what to look for. So it went undetected for a while.*

Low socioeconomic status drives behavioral and nutritional choices

[Practices]

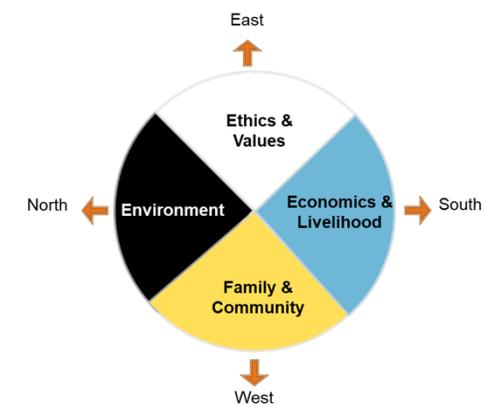
- ▶ **Low SES constraints**
 - ▶ Healthy foods not widely available locally
- ▶ **Lack of refrigeration**
 - ▶ Store & prepare only certain types of food.
 - ▶ Increased risk of food-related illnesses.
- ▶ **Distance to clean drinking water sources is too far (\$\$)**
 - ▶ Use of closer, but potentially unsafe, drinking water sources.



Want to make individual/community level changes

[Practices]

- ▶ Individual solutions
 - ▶ Healthier food choices, practice spirituality, & increase physical exercise.
- ▶ Prefer **community-led education**
 - ▶ Community discussions = community solutions
 - ▶ *H. pylori & stomach cancer education*: Talk about the entire process and relationships. Don't break down into pieces like Western education does.



Recommendations

- ▶ Increase education and outreach
 - ▶ More community discussions in community spaces, guided by community members
 - ▶ Increase culturally-appropriate communication of information
 - ▶ Inform on entire continuum of disease & relationships
 - ▶ Increase broader awareness of *H. pylori* and stomach cancer among medical providers
 - ▶ Provide more training opportunities with CEU credits
 - ▶ Strengthen environmental protection policies to mitigate and prevent contamination.
 - ▶ Increase the evidence base detailing the extent of *H. pylori* and associated risk factors among Navajo Nation population.
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Ahéhee'!

**'Aoo', feel free
to contact us!**



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