Utilization of Traditional vs Western Medicine in Global Indigenous Populations

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Conflict of Interest Disclosure

I have no conflicts and nothing to disclose

INTRODUCTION
Background & Literature Review

- Large populations worldwide with limited access to health care services and health care knowledge
- World Health Organization (WHO): ½ of the population in Africa, Asia, and Latin America still rely predominantly on traditional health systems
- In the US, similarly large healthcare access disparity exists between the American Indians, Alaskan Natives, and other cultural groups

- Complex and multifactorial: cultural and historical tensions, socioeconomic factors, and lack of access to adequate care
- Multiple ongoing intercultural healthcare initiatives to better access of care and attempt integration of traditional medicine with modern medicine— with limited success
- Almost exclusively originate from well-meaning civil society organizations rather than from the indigenous peoples they seek to empower

Introduction

- Global Medicine partnerships through Hands For Health and RVUCOM’s Global Medicine Track with:
  - Mayan communities in Guatemala since 2008
  - Quechua communities in Ecuador since 2016
  - Lakota Sioux on the Pine Ridge Reservation in South Dakota since 2017
  - Masai people of Kenya since 2012
  - And growing!
Learned that many individuals in these populations still rely on traditional health systems in addition to utilizing modern contemporary medical services.

We want to better understand the impact of cultural traditions on healthcare preferences and outcomes in these populations.

We want to better serve these populations as future global physicians.

Aims of Our Study

**Identify**
Identify the prevalence of common medical conditions among these populations.

**Assess**
Assess the utilization rates of traditional medicine versus western medicine and determine if this influences health outcomes.

**Understand**
Understand which common medical conditions might be preferentially treated with traditional medicine versus western medicine.

Hypotheses

Favorable health outcomes, measured by number of diagnoses per patient, will be more prevalent in those who use a combination of western and traditional treatments.

Populations with strong cultural traditions are more likely to rely on sources of traditional medicine than western medicine for conditions that are more difficult to treat and/or quantify, such as cancer, depression, and fatigue.
Methods

Preliminary study, Volunteer-based
Participants from free health fairs hosted by the RVUCOM Global Medicine Track on the Lakota Sioux Pine Ridge Reservation
Participants from free primary care popup clinics during RVUCOM Global Medical Outreach trips to the indigenous Quechua and Mayan communities in Ecuador and Guatemala

Anonymous, self-report questionnaire designed to:
1) Screen individuals in indigenous populations throughout the world for common medical conditions
2) Assess how often, and for which specific health issues these individuals utilized traditional medicine or a western medical provider
3) Assess substance use as indicator of health status
4) Assess aspects of traditional medicine that are being utilized

Total of 101 participants 18 or older:
- 63 females, 34 males, 4 undisclosed
- Mean age: 44; range 16-83
- 27 Lakota Sioux Native Americans
- 28 Quechua (Ecuador)
- 46 Mayans (Guatemala)
No statistically significant relationships between type of medicine utilized and prevalence of medical diagnoses

Generally no statistically significant relationships between type of medicine utilized and medical issues

For the group primarily using traditional medicine, if they have stomach pain, more likely to go to a traditional healer (p-value: .0193)

Generally no statistically significant relationship between type of medicine utilized and age

Except for broken bones, as age increased, there was a general preference for traditional medicine over western medicine

No statistically significant relationships between type of medicine utilized and alcohol consumption or tobacco use

Results for Lakota Sioux Native Americans
Results - Lakota Sioux Native Americans

- Of patients who use traditional medicine
  - 56% used natural remedies/plants
    - Bitter root
    - Red clover
  - 56% used rituals
    - Sweat lodges
  - 63% used prayer

Results for Mayans of Guatemala
Results- Mayans of Guatemala

- Of patients who use traditional medicine, 65% used natural remedies/plants
- *Manzanilla* (chamomile) for chest congestion/cold, stomach pain, nerves, sore throat, menstrual pain, headache, infection
- *Eucalyptus* for cough, fever, sore throat
- *Epazote* (Mexican tea) for stomach pain and parasites
- *Yerba buena* (mint family) for stomach pain and lung issues
- *Te de limon* (made with lemon rinds) for fever, HTN, nerves
- 80% used prayer

Results for Quechus of Ecuador
Results - Quechuas of Ecuador

- 76% of the participants reported utilizing mainly westernized medicine
- 0% reported mainly utilizing traditional healers
- 21% reported using both types of medicine equally
- 3% reported utilizing neither

Most common medical diagnosis were depression/anxiety, HTN, HLD
Conclusions

- Lakota Sioux population prefers to use traditional with many individuals utilizing both
- Common use of traditional medicine for cancer, depression/anxiety
- Mayan population in Guatemala prefers to use both Western and traditional
- Common use of traditional medicine for stomach pain, sore throat
- Quechua population in Ecuador prefers Western medicine
- HTN and depression/anxiety in top 3 for all three indigenous cultures

Indigenous populations seek out varied combinations of traditional and westernized medical care for healthcare issues
- No apparent differences in health outcomes between types of medical care
- When traditional healers were preferred, tended to be harder-to-quantify medical conditions such as depression/anxiety, stomach pain as compared to straightforward diagnoses such as a broken bone
- It is possible that the strong cultural frameworks within these populations provide support to patients in ways that westernized medicine cannot
Study Limitations

- Sample size
- Sample representation
- Combining indigenous populations from different cultures
- Truthfulness in responses
- Timing of administering surveys

Future Studies and Outlook

- We hope to use this information to improve our capacities as healthcare providers within these indigenous populations through a deeper understanding of our patients' beliefs and preferences in healthcare.
- More research needs to be done on a larger scale to determine if there are any stronger trends within these populations.
- Planned continuous studies in Guatemala, Ecuador, and with the Lakota Sioux.
- New indigenous populations: Maasai in Kenya, Navajo.

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References

