Migrating Medicine: How Shifting Woodlands Affect Navajo Health
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Health Challenges

The Navajo Nation is about 4,000 square miles larger than West Virginia but only has twelve health care facilities. Finding medical care off the reservation is especially hard since the Chinle Agency is surrounded by the Navajo Nation and Hopi Nation. In 2013, the Navajo Epidemiology Center, and Navajo Department of Health conducted a health survey on the Chinle Agency. In the report the survey concluded that:

• 48% of residents who could not make it to a clinic was due to transportation issues (e.g. no car, no gas, roads too dangerous)
• 30% of residents have one person they think of as a personal doctor
• 63% of residents have visited the doctor in the past twelve months
• 94% of residents have electricity and only 33% have running water
• Diabetes, high blood pressure, depression, and arthritis were the top four chronic diseases

Ethnomedicine

According to a survey conducted by the Navajo Epidemiology Center, 60% of adults within Chinle Agency said they use either traditional medicine or see traditional healers. In 2013, the Navajo Epidemiology Center, and Navajo Department of Health conducted a health survey on the Chinle Agency. In the report the survey concluded that:

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Navajo Nation and Juniper Locations

References


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Health Effects

Adding juniper ash to food is common place in the Navajo Nation. As stated earlier, juniper ash has 28% of the RDA for iron, 9% of the RDA for magnesium, and 36% of the RDA for calcium in just a gram (Christensen et al. 1998, 1). Carrying facilities, such as nursing homes, put ash into food (e.g. bread, oatmeal) in place of other foods typically not preferred (e.g. dairy). Facilities also prefer to use dirt instead of prescription drugs. Calcium supplements double the risk of a heart attack, burns the kidneys, and can hinder the absorption of iron, magnesium, and zinc (Arthritis Foundation n.d.). The heart risk associated with supplements stems from calcium blood levels spikes. In contrast, when calcium is absorbed from food the increase is gradual enough that it does not pose the same risk as supplements (Arthritis Foundation n.d.).

Studies link magnesium levels in the body to depression. In youth, high magnesium is associated with higher rates of depression but in elders it can be used as a depression preventive (Tarleton and Littibuerg 2015, 254). Navajo people knew how to treat themselves before Western medicine. Much of the reservation use both Western and traditional medicine in conjunction with each other. Now, however, the redistribution of vegetation is threatening the viability of ethnomedicine.

Conclusion

Incorporation of traditional ecological knowledge (TEK) can be an important aspect of conservation and restoration efforts. TEK projects focusing on the restoration of Canyon de Chelly should include prescribed burns and foraging. Future mining, especially strip mining for coal, should be limited.

Woodland restoration efforts should continue. Prior studies have found that juniper can be invasive species, even after successful treatment, due to lack of long-term planning and funding. Future projects should also address the role of climate change on woodland communities.

Eubanks et al. 2015. “Native Vegetation (GAP) shapefile.”

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