TEXAS MEDICAL ASSOCIATION
Physicians Caring for Texans

TexMed 2016 Clinical Abstract

Please complete all of the following sections:

Procedure and Selection Criteria

- Submissions not directly related to quality improvement or research may be accepted and should follow the standardized format outlined below. Content should enhance knowledge in the field of clinical care and be relevant to a given patient population.

PROJECT NAME: Zoonotic Knowledge of Santa Cruz, Bolivia Locals of Hansen's Disease and Armadillo Contact

Institution or Practice Name: Trinity University

Setting of Care: Biology Department

Primary Author: Anthoula Christodoulou

Secondary Author: *Robert V. Blystone, PhD*

Other Members of Project Team: *Miguel J Martinez, Jr. MD*

Is the Primary Author, Secondary Author or Member of Project Team a TMA member (required)?
X Yes ☐ No
Please provide name(s): *Miguel J Martinez, Jr. MD*

☐ **Enhanced Perioperative Recovery/Future of Surgical Care program**

Clinical

Background (15 points max): *Describe the purpose for sharing the content. What caused this subject matter to be approached? Why is this content important to share? What is the potential impact if this content is not shared?*

Armadillos (Dasypus novemcinctus) are the only animals besides humans that can carry the leprosy bacillus (Mycobacterium leprae). In 2011 it was shown that humans can contract Hansen's disease by handling armadillos or eating armadillo meat. There were 175 new cases reported in the United States in 2014 out of which 16 (9.14%) were in Texas and 124 new cases in Bolivia in 2010. The objectives of this study were to (a) identify what percent of people, in Santa Cruz, Bolivia, are aware of the above association of armadillos and Hansen's disease and (b) what percentage of people have direct contact with armadillos such as hunting, skinning, or eating the meat of armadillos. Of the 175 cases reported in the United States, 62% were foreign-born. It is important to educate people around the world about this association, especially in countries where armadillo meat is consumed. Making people aware of this risk, will hopefully reduce the number of Hansen's disease cases worldwide and thus reduce the number of imported cases to the United States.

Intended Stakeholders (15 points max): *Identify those individuals, organizations, or interest groups that could be potentially impacted by this information or benefit by obtaining this information.*

Any state or federal organization treating Hansen's disease and any organization dealing with the prevention of Hansen's disease.

Description of Accomplished Work (25 points max): *Provide an overview of the work that was accomplished, including any specific methods, tools or techniques. Also, include any milestones or key accomplishments. Note charts, graphs and tables here and send as addendum with abstract form.*

We interviewed 303 locals (116 males and 187 females) in Santa Cruz, Bolivia with a population of 1.5 million people. Of the 303 people we interviewed, 88.4% had seen an armadillo before. Of those, 34.5% had hunted armadillos, 28.2% had skinned armadillos, 62.8% had tried armadillo meat at least once in their lifetime and 9.9% had seen an armadillo in their backyard. Furthermore, 88.3% of the interviewees did not know that armadillos can transmit Hansen's disease to humans. It is important to note that 85.5% of the interviewees responded that they are either willing to end all future contact with armadillos or educate themselves and consider doing so. On the other hand, 14.5% of the interviewees refused to discontinue contact with armadillos.

Timeframe and Budget (20 points max): *Provide the start and end dates for the work along with any financial implications that were incurred due to the work accomplished. Note charts, graphs and tables here and send as addendum with abstract form.*

Initial Data collection:

August 07-30, 2015
Data analysis: January 2016

Budget: $0

Intended Use (25 points max): *Describe how this information could be used moving forward to impact patient care.*

This information can be used to inform NGOs and Public Health organizations that although locals in Bolivia consume armadillo meat, only 11.7% of the interviewees were aware that handling armadillos can transmit Hansen's disease to humans. Furthermore, once informed of this association, the vast majority of interviewees were willing to discontinue all contact with armadillos.