

Sigma's 30th International Nursing Research Congress

Risk Factors and Prevalence of STI Symptoms in Rural Mayan Villages in Guatemala

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Purpose: To identify and describe the risk factors and symptoms of sexually transmitted infections (STIs) in rural Mayan villages of Guatemala.

Background: More than one million sexually transmitted infections (STIs) are acquired around the world on a daily basis (World Health Organization [WHO], 2016). Risk factors for STIs in Guatemala include gender inequity, lack of economic independence among women (Smith, Sabido, Came, Batres, & Casabona, 2015), lack of access to health resources due to socio-geographical constraints, and travel and migration (Challion et al., 2017). Indigenous Guatemalan women have a higher rate of STIs when their partners are migrant workers (Ikeda, Schaffer, Ixcot, Page, & Hearst, 2013). Many STIs are curable, while others have symptoms that can be treated or reduced with medication. When untreated, chlamydia and gonorrhea for example can lead to significant consequences, compounded by their asymptomatic nature (Frej-Mądrzak et al., 2018). These infections can cause serious complications for women including pelvic inflammatory disease, ectopic pregnancy, and miscarriage, as well as infertility in both women and men (Haggerty et al., 2010). Pregnant mothers with chlamydia can pass on eye infections and pneumonia to their newborns, or the pregnancy could result in a stillbirth (WHO, 2018). While high-income countries have diagnostic tools including point of care testing to accurately and quickly test for STIs, low-income countries such as Guatemala have limited STI testing resources. The WHO's syndromic protocols for management of STIs (2011) therefore present viable assessment and treatment options for rural inhabitants such as those in remote underserved regions of Guatemala. This approach relies on clinical algorithms to identify consistent, easily recognizable signs and symptoms (e.g., vaginal discharge, urethral discharge, genital sores, and abdominal pain) to guide treatment without the use of laboratory tests. A three-way collaborative partnership between Guatemala Village Health [GVH] (a Seattle-based nonprofit organization), a School of Nursing at a public university in the United States, and a local Guatemalan nonprofit organization, Aldeas Sanas Guatemala paved the way for the implementation of this project at mobile clinics in eight remote Guatemalan villages in the Eastern Caribbean Coast. This study aims to describe the symptoms presented and the risk factors that predispose men and women to STIs in rural Guatemalan villages.

Methods: This cross-sectional descriptive study utilized a pictorial STI-specific survey to determine symptoms among patients. Additional observational data on socio-economic and environmental factors that could affect exposure to risk of STI infection were collected through environmental scans and walking surveys of the villages. The survey data were analyzed using descriptive statistics. Key community health assessment findings were extracted from the summary of observational data. Participants were all indigenous Mayans who presented to the mobile clinics in rural villages served by GVH.

Results: Among 103 study participants aged 16-45 years old, only 2 were men and the men reported no symptoms. Seventy five percent of the participants presented with one or more symptoms. The most common symptoms were abdominal pain, followed by vaginal discharge, itching and genital sores. Younger participants between the ages of 16 to 22 years presented with the most symptoms (36%) followed by those between 23 and 27 years (25%). Participants over 40 years old had the least symptoms (8%). Overall, 46% of participants reported being sexually active and had positive symptoms, while 12% of the participants reported they were not sexually active and the other 43% provided no information. Nearly half of those with symptoms received treatment following evaluation by a medical provider. The majority of those treated with symptoms were married (71%). Key risk factors for positive symptoms of STIs

include lack of access to health care services and resources, lack of sexual health education and the subservient role of women in a machismo culture.

Conclusion: Women are significantly at risk of STIs in remote villages. Sexual health education and STI prevention programs must be inclusive and target both women and their male sexual partners. The WHO's syndromic protocol used in low-resource settings presents increased possibility for misdiagnosis. There is a clear need for routine screening with point of care test kits to enable on-site testing and appropriate treatment for those who test positive for STIs in very remote locations. Policy strategies focused on educating all indigenous communities about sexual behaviors that can lead to STIs are imperative.

Title:

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Keywords:

Indigenous Mayans in Guatemala., Sexually Transmitted Infections and Sexually transmitted diseases

References:

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Abstract Summary:

This study investigates the prevalence of sexually transmitted infections (STIs) in rural Guatemalan villages as well as the risk factors that predispose the population particularly women to STIs.

Content Outline:

- The abstract title includes key words that that are reflective of the abstract content.

- The abstract topic and the content align clearly with the theme of the research congress.
- Effort was made to present a very clear abstract with appropriate titles.
- The methodology used in the research is clear, as well as the analysis of the result. The policy implications are well outlined.
- The submitted abstract content is de-identified.
- References are per APA guidelines.
- Seven references were used in the abstract. Five were 5 years old and later. One of the articles was published in 2010 and it is an important article that is specific to the region studied. Another WHO (2011) reference is the most current protocol for STI management that has not been updated by the World Health Organization.

First Primary Presenting Author

Primary Presenting Author

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Author Summary: Dr. Ezeonwu is an Associate Professor in the School of Nursing and Health Studies at University of Washington, Bothell. Her research and teaching interests center on global health and community partnerships. Her global health work focuses on nursing workforce and maternal health. She also engages in community-based partnership projects to promote access to primary health care for underserved populations.

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Author Summary: Heidi is not the presenting author. However, she has participated fully by being a leader in completing the study being presented. She has provided primary care in Guatemala while also conducting research.

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Author Summary: Lauren is currently completing her Masters of Nursing and is very passionate about global health and health disparities. She travelled to Guatemala as a part of the research team that also provided primary care in rural villages.

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Author Summary: Ronald is currently completing his Masters of Nursing at University of Washington Bothell. He is passionate about research and global health and was part of the team that collaborated on the Guatemala research project and primary care.