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Type 2 diabetes in Native Americans: The influence of historical and cultural factors on incidence, prevalence, and strategies for patient education, disease prevention, and management

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Abstract
Type 2 diabetes (DM2) was virtually nonexistent among Native American, Alaska Native, and Canadian First Nations peoples prior to the 1950s. Due to historical, cultural, environmental, and psychosocial factors, Native people suffer disproportionately higher rates of DM2 than other populations. This literature review aims to examine the influence of these factors and investigate whether insight and knowledge into them, as well as culturally sensitive approaches to disease education, prevention, and self-management, can be beneficial to providers working among Native communities. The results suggested that culturally sensitive approaches are indeed of value in promoting more effective care, and that lack of cultural sensitivity can present an obstacle.

Methods: The electronic databases Pubmed, Cochrane, and CINAHL were searched. Keywords included Native American, type 2 diabetes, cultural sensitivity, historical perceptions, and traditional beliefs. A total of 19 studies and articles from peer reviewed journals, published between 1996 and 2016, were reviewed, including literature examining the influence and prevalence of DM2, the contributing historical, cultural, and environmental factors, and studies which investigated the effectiveness of cultural sensitive interventions or that identified barriers to effective diabetes care.

Introduction
It has been well established that the prevalence of DM2 among Native people is the highest of any racial or ethnic group in North America, and the incidence continues to increase among young adults, adolescents, and children. DM2 is now the fourth leading cause of death, and a major cause of disability and morbidity, including complications such as vascular disease, renal failure, blindness, peripheral neuropathy, and amputations. Disease self-management is crucial in preventing these complications. Genetic predisposition has been identified as a risk factor for the development of DM2 among Natives, but several variables also have significant influence, including environmental, historical, and cultural factors. Barriers to effective diabetes prevention and care have also been identified, including access to care, poverty, and cultural beliefs and practices, as well as healthcare provider’s lack of cultural sensitivity.

Statement of the Problem
The incidence and prevalence of type 2 diabetes among Native people continues to increase, especially in younger patients. More effective strategies in disease prevention, delay of onset, and disease self-management are needed in order to curtail this rising epidemic. CDC prediction: one in two American Indian/Alaska Native children born in 2000 will have type 2 diabetes in their lifetime unless the current trend is halted” (McLaughlin, S. 2010).

Discussion
The evidence is clear regarding the emergence of DM2 as perhaps the most major health issue facing the indigenous people of North America, who now suffer disproportionately higher rates of disease and disease related complications than any other racial or ethnic group. Type 2 DM2 is a direct result of the colonization of North America and the subsequent loss of tribal lands and ways of life. In that regard, diabetes truly is “the white man’s disease.” The literature also reveals that the problem of DM2 is many faceted, with its roots in history, and compounded by many environmental factors, including geographic isolation, poverty, historical trauma, and lack of access to healthy food choices and medical care. The multiple forces that help create and perpetuate the problem of DM2 among Native people are daunting obstacles to overcome, and will require comprehensive understanding of Native American communities, and health care providers. The studies reviewed for this paper indicated that at the provider level, culturally sensitive and appropriate interventions can be effective in improving disease management and provider and patient satisfaction, and that lack of cultural sensitivity can perpetuate miscommunication and patient distrust, an obstacle to effective care. Success in decreasing diabetes among Native peoples will be a long process, and perhaps must be measured one patient at a time.

Applicability to Clinical Practice
Based upon the studies reviewed in this paper, the evidence indicates that providers who can appreciate the cultural context in which the disease emerged will be more effective in providing care. The inherent understanding of cultural context may lead to a higher level of provider and patient satisfaction, and may result in a higher level of disease management and patient adherence.

References

Research Questions
What are some of the historical, environmental, and cultural factors that influenced the development of type 2 diabetes as a major health problem among Native communities?
Can knowledge and insight into these factors be helpful to the provider in developing a culturally sensitive approach to Native patients?
Is a culturally sensitive approach more accepted by Native patients, and more effective to healthcare providers in the prevention and management of this devastating disease?