

# Addressing Diabetes in Global Communities through the Practical Implementation of Lifestyle Education: Lessons Learned from the Pacific Islands

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## Perspective

Volume 4 Issue 4

**Received Date:** November 01, 2019

**Published Date:** November 11, 2019

**DOI:** 10.23880/doi-16000212

## Abstract

It is well known that chronic diseases are strongly linked to poor lifestyle practices. These conditions are especially striking among low income, minority communities who bear a disproportionate burden of disease. Though practice guidelines for chronic disease prevention and management recommend that treatment begin with evidence-based lifestyle medicine, many physicians cite inadequate confidence and lack of knowledge and skill as the major barriers to counseling patients about lifestyle interventions. Furthermore, time constraints, clinical and administrative demands often make it challenging for primary care providers to deliver appropriate lifestyle related recommendations. Current changes in the healthcare climate and reimbursement structure, however, demand that we rethink current healthcare delivery models and prioritize preventive and lifestyle interventions so that sustainable positive health outcomes can be attained especially among vulnerable communities. Lifestyle medicine, defined as the evidence-based therapeutic approach to prevent, treat and reverse lifestyle-related chronic diseases. It offers promise in achieving this goal through community based offering and primary care integration utilizing multidisciplinary teams. Lifestyle education, among minority populations, however, requires thoughtful cultural considerations and adaptations. This article highlights strategies learned from international work among Pacific Islanders who suffer from a disproportionate burden of non-communicable diseases; and offers recommendations on how diverse populations can be positively engaged to curb the rising diabetes epidemic both locally and internationally.

**Keywords:** Global Health; Pacific Islands; Behavior Change; Non-Communicable Disease; Lifestyle Medicine; Diabetes

## Perspective

Non-communicable diseases disproportionately afflict Pacific islanders and accounts for over 36 million deaths each year [1]. In addition, there has been considerable increase in its prevalence over the last few decades when compared to the rest of the world [2,3]. Research shows that the vast majority of deaths in Pacific islands such as Guam, Palau, Pohnpei and the Marshall islands, is caused by chronic diseases and can be linked to poor dietary and lifestyle patterns [4]. Diabetes, in particular, is increasing at an alarming rate with diagnoses occurring at progressively younger ages [5]. It is among the top leading cause of morbidity and mortality in the Pacific islands, and directly affects other major causes of death, such as heart disease and stroke [6]. Given these statistics, the prevention and control of diabetes is of major public health concern in these US territories.

Training on diabetes self-management education has been recognized as a vital component of clinical treatment for diabetes and research trends show significant improvement in glycemic management with positive lifetime effects on diabetes management outcomes [7]. Evaluations eliciting perspective of diabetic patients in Guam, however, show that while a high percentage of patients were aware of the duration of their diabetes, several had not received diabetes self-management from their health care providers and key interventions such as nutritional counseling, brief interventions and regular eye and foot examinations were not routinely provided. In addition, patients were more likely to be satisfied with preventive and lifestyle management and less likely specialized care for diabetic complications or support services such as mental health counseling- identifying diabetic service gaps around education, prevention and lifestyle management [8,9].

Observations of trends to address this topic show that there have been considerable efforts to change the trajectory of these disease outcomes, however, with modest success [9,10]. Evaluation of strategy and underlying social and cultural constructs in these communities, may offer suggestions on how to elicit more positive and sustainable options. We offer humble reflections on personal lessons learnt that may be employed to more effectively address lifestyle education to combat diabetes in diverse communities.

While it is largely agreeable that health education is an important ingredient to be addressed, we have found that

there is need to explore culturally effective strategies to successfully implement health programming that will best improve health. Often, the traditional Western approach is implemented, with an attitude geared at teaching others 'a better way'. Optimal health education strategies, however, go beyond this, and involve a ready engagement in the lives and stories of communities, so that tailored and most effective strategies can be developed and implemented.

We have additionally found that health education recommendations need to be delivered in a language that locals can understand. Complicated methodologies are often best replaced by simple instructions that are relevant to a community's way of living with the use of culturally appropriate examples. For instance, in the island of Guam local fiestas are quite common. Though it is often a festivity laden with many sugar-sweetened foods, it would be ill advised to inform an individual not to attend, or to attend and not partake of the food. Alternatively, instruction to choose and or bring healthful variations those others can prove to be much more effective. Another example can be found in the Marshall Islands, where large family gatherings are common. Here, instead of solely targeting individually recommendation, understanding and sharing recommendations with leaders and head of homes, in our opinion, will prove far more successful in changing health habits and behaviors.

Next, we find that there is need for clear and consistent messaging in diabetes health recommendations. Frequent adaptations and changes, though technically correct, often become confusing, and our personal experience has shown best results when messages are both consistent and concrete. Lack of knowledge is often cited, as a challenge, however, perpetuated myths around disease processes frequently need to be addressed and corrected. Fortunately, many cultures within the Pacific islands have healthful, nutritious and rich foods that they may safely return to. Creating a sense of cultural pride, through natural foods that are rich in nutritional value not only help to curb the stem of disease from unhealthy foods but also makes recommendations more achievable and accessible.

Finally, in addressing health education, there is need for a marked change in approach from that of expert to coach. The transtheoretical model teaches us that engaging patients in identifying motivations for behavioral change is often more effective than prescriptive recommendations. As experts in their own

cultures and practical knowledge of their way of life, community members are often in a good position to partner in developing effective methods of change. Furthermore, their engagement offers ownership of the strategies recommended. Cultural levels of education can additionally be used, in areas where trust is built and developed such as schools, churches and families.

While much can be offered through long and short-term international work, we have found that these opportunities are best used for training, reinforcement and support. Increasing experience shows that partnership with local champions who can continue the work and become ambassadors for change among their peer groups often most effective and sustainable.

With the high prevalence of diabetes in the Pacific Islands, successful prevention and control planning is paramount in effectively addressing the communities' public health needs. Optimized health care delivery models and community based programming with varying modalities need to be a part of diabetic self-management efforts and outreach. Education regarding effective interventions and healthy lifestyle practices are needful along with practical demonstrations of how changes in lifestyle and behavior can improve blood sugar control. Appreciation of cultural norms and practices can improve the way healthcare is delivered in these communities, so that healthful lifestyle principles can be incorporated in a way that promotes positive and long lasting changes, both in individuals and their communities.

## References

1. Hawley NL, McGarvey ST (2015) Obesity and diabetes in Pacific Islanders: The current burden and the need for urgent action. *Curr Diab Rep* 15(5): 29.
2. WHO (2015) Noncommunicable diseases. World Health Organization, Geneva, Switzerland.
3. The World Bank Human Development Network (2011) The growing danger of non-communicable diseases. Acting now to reverse course.
4. Win Tin ST, Kenilorea G, Gadabu E, Tasserei J, Colagiuri R (2014) The prevalence of diabetes complications and associated risk factors in Pacific Island countries. *Diabetes Res Clin Pract* 103: 114-118.
5. Chan JC, Cho NH, Tajima N, Shaw J (2013) Diabetes in the Western Pacific Region-past, present and future. *Diabetes Res Clin Pract* 103(2): 244-255.
6. WHO (2012) Non-communicable diseases in the Western Pacific Region: profile. World Health Organization.
7. American Diabetes Association (2009) Executive summary: Standards of medical care in diabetes-2009. *Diabetes Care* 32: S6-S12.
8. Win Tin ST, Gadabu E, Iro G, Tasserei J, Colagiuri R (2013) Diabetes related amputations in Pacific Islands countries: a root cause analysis of precipitating events. *Diabetes Res Clin Pract* 100(2): 230-234.
9. David AM, Rubio JM, Luces PS, Zabala RV, Roberto JP (2010) Getting the patient's perspective: a survey of diabetes services on Guam. *Hawaii Med J* 69(6S3): 45-49.
10. Centers for Disease Control and Prevention (CDC) (2005) Diabetes-related preventive-care practices: Guam, 2001-2003. *Morb Mortal Wkly Rep* 54(13): 333-335.
11. Ichiho H, Aitaoto N (2013) Assessing the system of services for chronic diseases prevention and control in the US-affiliated Pacific Islands: Introduction and methods. *Hawaii J Med Public Health* 72(5S1): 5-9.

