

Commentary on Diabetes and Tongans in Aoteroa

Abstract: Diabetes is a global challenge without universal personal solutions. A special diabetes clinic of the Tongan Health Society Incorporated, at Langimalie Health Centre, Onehunga, Auckland has about 1166 Tongans with diabetes in its register. This experience is very much the experience with Tongan diabetes patients and may be common to other Pacific ethnic groups. The characteristics of these diabetic patients can be explained through an understanding of the ethnic specific characteristics of Tongan populations.

Among Tongans, illness and diseases are synonymous with symptoms. Non-communicable diseases have been labeled as the diseases of affluence in Pacific countries. Food is a high priority cultural commodity. Food consumption at personal level is determined and controlled at household level. Therefore patients with diabetes have little control over food preparations and meals. The study showed that the common sense association between food preference and food consumption was incorrect, mostly due to the inability to access the preferred food.

The universal personal solution for diabetes is embedded in the ethnic specific fabric of populations. There should be more research by Tongans on Tongans so that ethnic specific nuances of language and behaviours of Tongan diabetes patients may be better understood and disentangled. (Pacific Health Dialog 2003, Vol. 10 (2); Pg 96 - 98)

Sitaleki A. Finau*
Eseta Finau**

Introduction

Diabetes is a global challenge without universal personal solutions¹. Among indigenous and migrant Pacific populations, there has been a rapid increase in diabetes and its complications.² This has occurred in spite of the improved understanding of risk factors, and improved pharmacological agents for the control of blood glucose, high blood pressure, hyperuricaemia, hypercholesterolaemia and high serum triglycerides. ^{1,2,3} The gaps between knowledge, management and prevention of diabetes and its complications is a function of the search for one-model-to-fit-all individuals and ethnic groups. Therefore to progress with the control of diabetes it is essential to examine the determinant of individual behaviour towards risk factors, diabetes and their management. This demands an understanding of ethnic specific traits of populations and their effect on the profile of individuals. We need to identify the ethnic specific

ideations around concepts of illness; sick role; the sociocultural dimensions of compliance; accessing health facilities; choice of care giver; sources of information; threats of disability and death; resilience; and vulnerability. That is, the socio-cultural environment becomes paramount over the current dominance of the bio-medical approach.

The Langimalie Clinic Experience

A special diabetes clinic of the Tongan Health Society Incorporated, at Langimalie Health Centre, Onehunga, Auckland has about 1166 Tongans with diabetes in its register. This is about 17% of the total enrolled clinic clients at Langimalie. The experiences at this clinic have provided an ethnic specific profile of the Tongan diabetes patients as follows: greater than 45 years old (89%) and mostly female (57%); each patient have multiple serious pathologies; problems with communicating in English; poor compliance with diet and medication; difficulty accessing the clinic; lives with other family members who dictates food choices; low physical activities; and enjoys indiscriminant food consumptions. This experience is very much the experience with diabetes patients in Tonga and may be common to other Pacific ethnic groups. A rather worrying feature is that 129 (11%) patients are 15-44 years old with a couple aged less than 24 years. There are 27 (2%) Type 1 diabetics in this total group. The characteristics of these diabetics patients can be explained through an understanding of the ethnic specific characteristics of Tongan populations. For example, as Tongans grow old they are expected to be more sedate and have sedentary roles. It is culturally respectable and prestigious for the elderly to sit, chat and supervise the young at work. They also have the first choice of any food being served at the occasion. Tongan females in

*School of Public Health and Primary Care, Fiji School of Medicine, Suva. (s.finau@fsm.acfj)

**Eseta Finau (e.finau@auckland.ac.nz) Pacific Health Unit School of Population Studies University Auckland New Zealand

population studies have consistently been shown to have higher body mass index than men^{4,5}. This contributes to gender differences in diabetes and other non-communicable diseases⁶. The perception of body size being directly proportional to wellness and absence of disease are also important contributing factors to this milieu⁷.

The other factor may have to do with men being under diagnosed due to utilization of health services for treatment of symptoms rather than screening of diseases. Culturally it's feminine to overtly complain of seemingly minor symptoms like those of early undiagnosed diabetes.

Illnesses among Tongans

Among Tongans, illness and diseases are synonymous with symptoms⁸. The absence of symptoms means that one is well and disease free. So there is no need to comply with treatment and inhibitory advice. During discussions of the dangers of diabetes Tongan patients have often respond with "We are all going to die some day". So why not enjoy life choices now and perhaps die imperfect later? These are deep rooted life attitudes affecting compliance and give low priority to utilization of health services, especially for diseases that has no perceptible symptoms and, as yet, incapacitating effect.

Non-communicable diseases have been labeled as the diseases of affluence in Pacific countries⁹. However, these diseases have also been called the diseases of poverty among migrant Pacific populations¹⁰. Both cases are due to a sedentary lifestyle and increased consumption of calorie dense and fatty processed foods. The end result is a shift to excess energy intake and an overworked digestive system, including the pancreas. It has been suggested that excessive eating and perhaps an overtaxed the pancreas, which eventually fails from overwork, generate diabetes¹¹. This is rather in contrast to the "Thrifty Gene Hypothesis".

Food is a high priority cultural commodity¹². Its use is culturally determined and synonymous with the good life⁹. Food consumption at personal level is determined and controlled at household level¹³. Therefore patients with diabetes have little control over food preparations and meals. These choices are determined mostly by ability to access and purchase the appropriate food. A recent study in Tongan showed that people did understand the need for a healthy diet but could not afford to obtain the appropriate foods¹⁴. The study showed that the common sense association between food preference and food consumption was incorrect, mostly due to the inability to access the preferred food. Even at this cursory overview level, it is obvious that to improve

diabetes prevention and control there is a need to contextualize and target management of individuals at ethnic specific level. This must include validating instruments for social research to increase applicability at the ethnic specific levels. It is not sufficient to just translate languages. A standard process of translation and back translations must proceed validation for cross-cultural use of any social research instrument. The language for research for diabetes is still Tongan. To decrease the incidence of diabetes Tongans need to focus almost exclusively on youth and children as pre-diabetics. In a situation of paucity of resources, there is a need to ensure that diabetic patients can make informed decisions about managing their own secondary and tertiary prevention and be able to die with dignity. The pre-diabetic groups need to be coaxed by the community to redefine the good life, status foods, physical activities as norm, and provide the non diabetogenic socio-cultural and physical environments for the prevention of diabetes.

Conclusion

The universal personal solution for diabetes is embedded in the ethnic specific fabric of populations. Social research has the potential to provide the mechanism for unpacking and resolving the current dilemma. There should be more research by Tongans on Tongans so that ethnic specific nuances of language and behaviour of Tongan diabetes patients may be better understood and disentangled. It is no longer sufficient to address diabetes and health problems with global solutions and a single model to fit all¹⁹. We need to address individual idiosyncrasies and their ethnic specific determinants. This is going against the flow of globalization, economy of scale and the "one-model-fit all" approaches¹⁵, but it's the only Tongan way to fight bitter sweet diabetes mellitus.

References:

1. Foliaki S, Pearce N. Prevention and control of diabetes in Pacific people. *BMJ*, 2003; 327: 437 — 439.
2. McCarty DJ, Zimmet P. Pacific Island Populations. In: Eboe J-M, Zimmet P, Williams R (editors). *The Epidemiology of Diabetes Mellitus. An International Perspective*. Chichester. Wiley, 2001:239 — 245.
3. Prior IA, Rose BS, Harvey HP, et al. Hyperuricaemia, gout and diabetic abnormality in Polynesian people. *Lancet*, 1966; 1:333-338.
4. Finau SA, Stanhope JM, Prior I, et al. The Tonga cardiovascular and metabolic study: demographic aspects, survey design and medical findings. *Community Health Studies*, 1983; 8 (1): 67 — 77.

- 5.Colagiuri 5, Colagiuri R, Na'ati S, et al. The prevalence of diabetes in the Kingdom of Tonga. *Diabetes Care*, 2002 August; 25(8): 1378— 83.
- 6.Brewis A, Schoeffel — Meleisia P. Gender and non-communicable diseases in the Pacific. *Pacific Health Dialog*, 1996; 3 (1): 107 — 112.
- 7.Metcalf PA, Scragg RKR, Willoughby P, Finau SA, Tipene — Leach D. Ethnic differences in perception of body size in middle aged European, Maori, Pacific peoples living in New Zealand. *International Journal of Obesity*, 2000; 24 (5): 593 — 599.
- 8.Leslie HY. Producing what in transition? Health messaging and cultural constructions of health in Tonga. *Pacific Health Dialog*, 2003; 9 (2): 296 — 302.
- 9.Zimmet P. Globalization, Coca-colonization and the chronic disease epidemic: can the Doomsday scenario be averted? *J Int Med*, 2000; 247: 301 - 310.
- 10.Finau SA. Marching from the margin: a vision for Pacific Health in New Zealand. *NZ Medical Journal*, 2001; 114: 296 — 298.
- 11.Firiau SA, Prior I, Evans JG. Ageing in the South Pacific: physical changes with urbanization. *Social Science and Medicine*, 1982; 15: 1539 — 1549.
- 12.Finau SA, Finau E. The food triad: an approach to eating. *SSED Review*, 1986; 7 (14): 48 — 54.
- 13.Finau SA, Prior I, Madel J. Food consumption patterns among urban and rural Tongans. *Journal of Food and Nutrition*, 1987: 43 (2): 78 — 84.
- 14.Evans M. Sinclair RC, Fusimalohi C, Liava'a V. Diet, health and nutrition transition: some impacts of economic and socio economic factors on food consumption patterns in the Kingdom of Tonga. *Pacific Health Dialog*, 2002; 9 (2): 309 — 315.
- 15.Finau SA, Wainiqolo I, Cuboni G. Health transition and globalization in the Pacific; vestiges of colonialism. *Perspective of Global Development and Technology*, 2004; 3(1-2); 109-130

[The man who does things makes the biggest mistakes, but he never makes the biggest mistake of all - doing nothing
Benjamin Franklin (1706-1790)