Diabetes Today in the Pacific: Reports from the Field

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Abstract:

The Pacific Diabetes Today Resource Center (PDTRC) was established in 1998 to assist communities in Hawai'i, American Samoa, Guam, Commonwealth of the Northern Mariana Islands, Republic of Palau, Federated States of Micronesia, and the Republic of the Marshall Islands to develop, implement, and evaluate community diabetes prevention and control activities. Between 2000 and 2002, PDTRC provided training and on-going support in 11 communities. This article includes case-study descriptions from each site, suggesting that in the first four years of this five-year project, PDTRC helped Pacific communities increase public awareness about diabetes, expand collaboration and partnership, develop the training capacities of local health leaders, sponsor new activities related to diabetes prevention and control, and secure new resources for their communities. (PHD, 2005 Vol 12 No 1 Pages 124 - 131)

partners, and the plans and activities that emerged from the group-development process.

Reports from Sites Trained in 2000

PDT_curriculum: the Territory of A

During the second year (Year 2000) of the PDTRC's program, five sites were selected to help pilot test the PDT curriculum: the Territory of American Samoa, Kosrae and Pohnpei States in the Federated States of Micronesia (FSM), the Republic of Palau, the community of Wai'anae on the island of O'ahu in Hawai'i. Each pilot site received \$8,000 to coordinate the training and was invited to take advantage of PDTRC technical-assistance services after the training.

Territory of American Samoa

The American Samoa island group consists of five volcanic islands with a total land area of 77 square miles and lies 2,300 miles south-west of Hawai'i. The administrative center and capital of American Samoa is Pago Pago. It is situated on the main island of Tutuila, with 53 square miles of land mass and is home to 92% of the territory's 67,000 residents4,5. The primary medical resources include the L.B.J. Tropical Medical Center (with 184 inpatient beds, an outpatient department and an emergency room) and the Department of Public Health with six dispensaries providing health services in the community. Diabetes is a major health problem in American Samoa as evidenced by 1994 data that show that 11% of males and 15% of females 29-44 years of age as well as 36% of males and 15% of females 45-63 years of age have diabetes. To manage the growing number of residents in end-stage renal disease, American Samoa hemodialysis capacity was expanded to 15 units. Of the 65 patients requiring dialysis in 2002, 85% had diabetes6.

Introduction

The goal of Diabetes Today (DT), a program of the Centers for Disease Control and Prevention (CDC), is to increase the competency of community groups to plan, implement, and evaluate diabetes programming1.' In 1998, the Pacific Diabetes Today Resource Center (PDTRC) was established to develop the Pacific Diabetes Today curriculum for delivery to community-based groups in Hawai'i, American Samoa and Micronesia.

In PDTRC's first year, staff convened a Pacific-wide Advisory Council and gathered data from communities throughout the region that led to the development of guidelines for developing the Pacific Diabetes Today (PDT) curriculum2. In year 2, the PDT curriculum was pre-tested and further modified based on participant feedback3. Between 2000 and 2002, PDTRC used the PDT curriculum to train 11 community groups and offer them ongoing technical assistance with group development, planning, resource identification, and project implementation. This manuscript provides a short case study for each site, which includes a description of the community, the burden of diabetes, the training

Pasa Turituri, Coordinator of the American Samoa Diabetes Prevention and Control Program, and Simini Liu, of the American Samoa Diabetes Association (ASDA), were selected as site coordinators for the PDT training. The ASDA has been in existence for a long time and its activities had been very sporadic. According to Mr. Liu, the PDT training gave the ASDA the opportunity to re-group and re-focus their efforts. Participants in the training included church leaders, political leaders, media representatives, health and community representatives, and members of the ASDA.

Since the PDT training, the ASDA obtained its non-profit tax-exempt status and received a \$25,000 grant from the American Samoa Government to implement a nutrition program for people with diabetes, organized numerous diabetes awareness campaigns, and coordinated diabetes education and screening in the villages. Financial and in-kind support also have been received from local businesses such as Star Kist Samoa and Blue Sky Communications, demonstrating a broadening commitment among business leaders as well.

Federated States of Micronesia (Kosrae State)

Kosrae, one of four states in the single island state. It is the second largest island in the FSM, with a landmass of 42 square miles and a population of 7,800 residents. The state is divided into four geopolitical municipalities, each headed by a mayor and a municipal council4-5. Medical care services are provided

by the Kosrae State Hospital and the Public Health Department clinics and municipal dispensaries provide health care services in the community. Prevalence data suggest that 22% of adults over 40 years of age and 33% of adults over 50 have diabetes. In Kosrae, diabetes is the leading cause of morbidity and the second leading cause of mortality among adults. Diabetes accounts for more than 75% of the surgical admissions to the hospital and is the cause for mote than 90% of lower limb amputations and surgical complications annually7.

Dr. Vita Skilling and Kun Mongkeya, employees of the Kosrae State Department of Health, were selected as site coordinators and coordinated the PDT training. Presenters at the training included Dr. Hirosi Ismael, Director of Health; Satoma Kawada, Japanese Overseas Volunteer Corps nurse, and Dr. Rivelee Alokaoa, staff physician at the Kosrae State Hospital. Participants in the training included representatives from the Departments of Health, Agriculture, and Community Development; the Association of Businesses; the State Legislature; the Mayor's Office; the College of Micronesia; senior

citizens groups; the Interdenominational Church Committee; women's groups; the Sports Council; and youth organizations.

Since the training, the participants have formed a coalition, Kosrae Diabetes Today, that has collaborated with the Department of Agriculture and the Peace Corps volunteer to plan and implement monthly nutrition workshops. The group worked with the Community Affairs Office to provide gardening workshops and free seedlings to plant in gardens and has conducted clean up campaigns in collaboration with the Kosrae's Women's Center. Other activities included fin walks for 60-100 participants in the villages, seasonal softball and volleyball tournaments, and diabetes awareness and prevention education booths at health fairs and special events.

Federated States of Micronesia (Pohnpei State)

The island of Pohnpei and its eight outlying atolls comprise the State of Pohnpei in the FSM, situated about halfway between Honolulu and Manila. Pobnpei is the capitol of the FSM and, of the four FSM states, has the largest in landmass with 133 square miles. Polmpei State's population is approximately 37,0004,5. The prevalence of diabetes among Pohnpeians has

increased dramatically. A survey conducted by the U.S. Navy 50 years ago found no evidence of diabetes among the residents. By 2000, however, the incidence among residents 45-54 years of age was 19% (compared to 9.5% in the U.S.). According to data from

the Pohnpei State Hospital for 1994 to 1999, diabetes was the third leading cause of hospital admissions and the fifth leading cause of off-island medical referrals8.

Staff from the Micronesian Seminar, a not-for-profit organization in Pohnpei, coordinated the PDT training with Dr. Immaculada Gonzaga and Wally Hadley as the site coordinators. The site coordinators expressed interest in hosting the PDT training because it provided an opportunity to bring the awareness of the burden of diabetes to the community. Participants in the training included traditional leaders, people with diabetes, and representatives from the public and private sectors.

Following the training, participants formed the Pohnpei Lipaiere, a coalition of government programs, community agencies, and community representatives to address the problems of diabetes. (Lipaiere is the lid of a coconut made ready for drinking that keeps out contaminants. Adopting it in their name suggests that the group will serve to help protect Pohnpeians from diabetes.) Between 2000 and 2003, Pohnpei Lipaiere

Dr. Vita Skilling and Kun

Mongkeya, employees of the

Kosrae State Department of

Health, were selected as site

coordinators and coordinated

the PDT training.

collaborated with the Lions Club in Polmpei to raise funds for Glucometers, organized health walks in various municipalities around Pohnpei developed and translated diabetes educational materials, and provided diabetes outreach, education and screening in collaboration with Pohnpei State Hospital.

Republic of Palau

As part of the western Caroline Islands, Palau is the westernmost part of Micronesia, lying 470 miles east of the Philippines. The Republic of Palau consists of about 340 volcanic islands, of which nine are ini-iabited. It has a total land area of 188 square miles and a population of 19,409 people4,5. The primary medical resources in Palau consist of a hospital (with 82 inpatient beds, an outpatient department and an emergency room), four privately owned health clinics, and the Department of

PublicHealthwithitsninedispensaries that provides health services in the community. The burden of diabetes is apparent in Palau, in that diabetes is one of the ten leading causes of death, one of the four leading causes of hospitalization. As reported in

2000, the crude incidence rate of diabetes was 29.2 per 1,0009.

Julita Tellei of Palau Resource Institute (PM), a nongovernment organization, coordinated the PDT training in Palau. PM's mission is to promote a communityfocused and culturally sensitive approach to disease prevention and health promotion. Training participants

included representatives from the political and business sectors, the Bureau of Public Health, the Palau CommunityActionAgency,theBureau Stevenson Kuartei, Dr. Caleb of Women's Interest, and various religious organizations. Presenters and motivational speakers included

Dr. Stevenson Kuartei, Dr. Caleb Otto, Dr. Victor Yano and Emais Robert.

After the PDT training in Palau, the training site coordinator moved to a new position within health services, and the leadership transitioned to a new coordinator, Augusta Rengiil, who is also the coordinator of the Palau Diabetes Prevention and Control Program. Since the training, the Palau group has translated diabetes materials, organized a diabetes conference for physicians, health care providers and people with diabetes; and established an "Active Community Lifestyle" program.

State of Hawai'i (Island of O'ahu — Wai'anae)

O'ahu is the third largest and most populated island in

the state of Hawai'i. Located on the arid western edge of O'ahu is the Wai'anae Coast, a community comprised of four Native Hawaiian Homestead populations. The Wai anae Coast is 58,472 acres in size with a population of 37,657, in which a majority are Hawaiian or part Hawaiian. The prevalence of diabetes in Hawai'i (58 per 1,000) is higher than that of the U.S (54 per 1,000). Although diabetes affects all ethnic groups in the state, Native Hawaiians have the highest prevalence rates at 63 per 1,000. The mortality rate also differs significantly by ethnic group. While the mortality rate for non Hawaiians is at 50 per 100,000, the mortality rate for Hawaiians is more than double at 117 per 100,00010.

Nicole Amorin of Ke Ola Mamo (KOM), the Native Hawaiian Health Care System for the Island of O'ahu, coordinated the PDT training in Wai'anae. Participants included health care professionals; health and community

> organizations representatives; community leaders; Native Hawaiian elders; and people with diabetes. Ululani Young, Certified Diabetes Educator, presented the "What is Diabetes?" portion of the training and motivated the group to take charge

of their diabetes.

Julita Tellei of Palau

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Presenters and motivational

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Otto, Dr. Victor Yano and

Emais Robert.

Following a change in staffing at KOM, participants formed a diabetes taskforce called Halau Ola O Mimiko No Waianae (Hawaiian for "group for the well-being of people with diabetes"). The group's leaders included U'ilani Kaikuana Chow, Michelle Kaikuana, Aunty Edna Keohuhu, and Aunty Margaret Enos. One of the group's

> main activity in 2001 and 2002 was planning and implementing a diabetes workshop for people with diabetes and their family members. Out of the workshop, a diabetes support group was established for residents of the Wai'anae coast. Additionally, KOM

and the Ko'olauloa community of the north shore of O'ahu planned and implemented a diabetes workshop under the direction of site coordinators Dede Alo and Moana Allen. More workshops are being planned with other rural communities on O'ahu's north shore.

Year 3 Training Sites

In 2001, three sites were selected for PDT training: the Commonwealth of the Northern Mariana Islands (CNMI), the Republic of the Marshall Islands (RMI) and Maui. Like the previous year, each site received \$8,000 to coordinate the training and was eligible to receive posttraining technical assistance. The primary change made to the curriculum based on the 2000 pilot phase was to encourage sites to deliver the five training modules in two or three sessions over several months time, allowing the group to do "homework" between sessions3.

Commonwealth of the Northern Mariana Islands

The Commonwealth of the Northern Mariana Islands (CNMI) stretches north from Guam in a 426-mile-long chain with a total landmass of 176.5 square miles. Included in this chain is the main island of Saipan, where 90% of CNMI's 59,000 population resides4,5. About 40% of CNMI residents are Chamorro or Carolinian, and these ethnic groups have disproportionally high rates of diabetes11. Diabetes is a major health problem in the CNMI, and morbidity due to diabetes is taking its major tolls with increasing rates of blindness and end-stage renal disease, two of the most serious complications of diabetes. The Department of Health reports that CNMI's rate of blindness in at least one eye is 14 per 1,000 residents, which is significantly higher than the US rate of 2.2 per 1,000 residents. In 1994, 1.1% of the people in the CNMI with diabetes had end stage renal disease, and by 1998, that number increased to almost 10%. The economic burden of diabetes is also significant

in that for 2001, the cost of treating diabetes in the CNMI reached \$U528 million and of this amount, 53% was spent on hospitalization and 21% on dialysis12.

Berthilia John, of CNMI's DPCP, coordinated the PDT training in 2001. Participants included representatives from the government, businesses, and members of CNMI's two indigenous communities (Chamorro and Carolinian). Dr. Brostrom, CNMI Director of Health, presented "What is Diabetes?" and Ed Diaz, Health Statistician presented diabetes statistics in the CNMI, Pacific, and the world. To customize the CNMI training, special attention was given to the diabetes needs of the Chamorros and the Carolinians.

Since the training, the CNMI Diabetes Group changed leadership to Lyim Tenorio, the new DPCP coordinator. The group partnered with the Northern Mañana College and the public health nurses to coordinate diabetes awareness activities, cooking demonstrations, and health screening. During Diabetes Awareness Month in November 2001, the group organized month- long activities with the support other organizations. The group also participated in other diabetes- related events in the CNMI, such as the "Walk Away From Diabetes" health walk.

Republic of the Marshall Islands

The Republic of the Marshall Islands (RMI) consists of more than a thousand slender, flat landmasses that group together into 29 major coral atolls and five islands. The atolls and islands run roughly north-south for 800 miles in two nearly parallel chains about 150

miles apart. Although the RMI has only 70 square miles in land area, its atolls and islands are scattered across 750,000 square miles of ocean. The majority of the Marshall Islands' 60,000 residents live on the main island of Majuro and Kwajelein4,5. As in other Pacific jurisdictions, diabetes is a major health problem in the Marshall Islands. According to hospital data, diabetes is one of the leading causes of illness among adults, resulting in secondary complications as eye disease, foot infections, and amputations. Between 1994 and 1997, the leading cause of death was diabetes, and nearly one out of five Marshallese died of diabetes-related conditions13.

Julia Alfred, staff with the DPCP with RMI's Ministry of Health and Environment (MOHE), coordinated the PDT training. Participants included health educators, physicians, MOHE leaders, and representatives from the Community Health Department, Salvation Army, Healthy Start Program, the Department of Agriculture, the Rita Youth Group, and Missionary Ventures Marshall

Islands. Dr. Robert Maddison presented information on diabetes awareness, prevention and control. To assure the cultural relevance of the training in the Marshall Islands, Ms. Alfred and co-facilitators introduced each module in Marshallese, served

only local foods during the training, incorporated Marshallese singing and dancing in the modules, and included healthy cooking demonstrations during lunch.

Between 2001 and 2003, the RMI group collaborated with other organizations to plan and implement activities such as ffin walks and softball tournaments. Ms. Alfred translated the PDT curriculum into Marshallese and used the translated curriculum to train groups on two other RMI communities, Ebeye and Jaluit. After the Ebeye training, participants started a diabetes task force and sold raffle tickets to raise funds to buy Glucometers, and organized World Diabetes Day activities. The group in Jaluit focused its efforts on a gardening project and an anti-smoking and drinking campaign targeted for youth

State of Hawai'i (Island of Maui)

in the community.

The island of Maui is one of seven inhabited islands in the Hawaiian Island Chain with a landmass of 728.8 square miles and a population of 121,997; 25% of Maui residents are Native Hawaiian. As previously stated, diabetes is a major health problem in the State of Hawai'i, and the prevalence of diabetes of varies markedly among ethnic group. Native Hawaiians have the highest rates. Although Native Hawaiians comprise only 18% of the state's population, they comprise 35% of all diabetes cases in Hawai'i. As for Maui specific diabetes statistics.

Julia Alfred, staff with the

DPCP with RMI's Ministry

of Health and Environment

(MOHE), coordinated the

the 1998 Hawaii Diabetes Data Network reported the prevalence rate of 37.2 per 1,000 residents14.

Napualani Spock of the Hui No Ke Ola Pono, the Native Hawaiian Health Care System of Maui, coordinated the PDT training. Participants included people with diabetes and representatives from local hospitals, clinics, the

Department of Health, and other communityorganizations. To customize the Maui training, a number of local guest speakers were asked to provide information on Native Hawaiian culture and traditions. For example, Oliver Dukelow from Kahakuloa Valley spoke about the traditional ahupua'a (land

division) system, Bula Logan gave a presentation on Native Hawaiian traditional healing practices, and Sam Kaai presented on the connection of Native Hawaiians to the Pacific and to other Pacific Islanders. The training also included presentations by Daniel Garcia, MD and Rose Feranda, RN about diabetes and its impact on Maui, Hawai'i, the US, and the world. To accommodate the participants' work schedule, the site coordinator decided to conduct the training after normal working hours and on the weekends. The site coordinator and participants also decided to conduct the training in three phases, stretched over three months time.

After the PDT training, participants formed a coalition, the Maui Native Hawaiian Diabetes Coalition (MNHDC) under the leadership of two dedicated community members, Tasha Kama and Pauahi Lozano. The MNHDC has participated in health fairs to promote diabetes awareness and conducted diabetes workshops in the community. In 2002, they started pursuing a 501(c)3 non-profit status for their group.

Year 3 Training Sites

In 2002, three additional sites were selected to be a PDT training site: Chuuk State (FSM), Territory of Guam, and Moloka'i island in the State of Hawai'i. As in previous years each sites received \$8,000 to coordinate the training and were eligible to request PDT technical assistance. But unlike previous sites, Year 3 training included Regional Trainers as co-trainers, i.e., site coordinators from previously trained communities joined PDTRC staff to train new communities3.

Federated States of Micronesia (Chuuk State)

The State of Chuuk is the largest of the four states that comprise the Federated State of Micronesia. Chuuk State includes 192 outer islands in addition to the 15 islands and more than 80 islets that make up the Chuuk Lagoon. Chuuk is one of Micronesia's most populous island with nearly 58,000 people of which approximately

one-third live on the island of Weno4,5. Like the other Micronesian islands, diabetes is a primary health concern in Chuuk. According to 2000 data, the crude rates of diabetes in Chuuk were 9% for people age 35-44, 22% for people age 45-54, 18% for people age 55-64, and 9% for people age 65-74. Although diabetes was the third-leading cause of death for the FSM as

a whole, it was the second leading cause of death in Chuuk State15.

The Chuuk Women Advisory Council (CWAC) coordinated the training on Chuuk with Christina Stinnett and Shinobu Poll as site coordinators. CWAC, an umbrella organization

representing 39 women's groups, serves as an advocacy body to promote gender awareness in the Chuuk communities. CWAC has 39 chapters and a membership of over 400 women who represent church groups, health providers, and community groups. To customize the Chuuk training, site coordinators and co-facilitators translated the Pacific Diabetes Today Guidebook to Chuukese. The training was then conducted in Chuukese by Julia Alfred (the PDT Regional Trainer from RMI), Dr. Vita Skilling (the PDT Regional Trainer from Kosrae), and local site coordinators and co-facilitators. Participants included representatives from various islands, religious leaders, government officials, and people with diabetes.

Since the training, the Chuuk site coordinators and co-facilitators have conducted Pacific Diabetes Today trainings on other islands in Chuuk State, group members on the main island began working with the Department of Health to plan community education and outreach programs.

State of Hawai'i (Island of Moloka'i)

The island of Moloka'i, part of Maui County, is the fifth largest island in the Hawaiian islands with an area of 260 square miles and a coastline of more than 100 miles. The population of Moloka'i stands at 7,000 residents, of which the majority (62%) is Native Hawaiian. The prevalence of diabetes and the resulting economic and social burden of diabetes in Moloka'i are well documented. The prevalence of diabetes is 37% higher in Hawai'i than in the rest of the U.S. On Moloka'i, the prevalence is almost double the state at a rate, at 42.4 per 1,000. Diabetes is the leading cause of endstage renal disease (ESRD), one of the most expensive complications of diabetes. The estimated cost to maintain a patient on dialysis is \$58,000 per year. Hawai'i has the highest rate of ESRD in the nation at 9 per 10,000 and Moloka'i has the highest of any island in the state at 19 per 10,00016.

The Chuuk Women

Advisory Council (CWAC)

coordinated the training

on Chuuk with Christina

Stinnett and Shinobu Poll

as site coordinators.

Judy Mikami and Laura Rapoza of the Moloka'i Diabetes Task Force (MDTF) coordinated the PDT training on Molokai. MDTF is comprised primarily of three organizations: Lamalama Ka'lli (an outpatient education program from the Moloka'i General Hospital), Na Pu'uwai Native Hawaiian Health Care System, and Hawai'i State Department of Health's public health nurses. To accommodate the working schedules and learning styles of the participants, the site coordinators decided to conduct the training in five phases over six months. To further tailor the training, the site coordinators and group decided to sponsor one-day health fairs during their training sessions and to plan an actual activity during the training sessions that was implemented immediately following the final meeting.

Since the training, the MDTF planned and implemented the largest health fair and screening event on the island of Moloka'i. In 2003, the group began planning support groups for people with diabetes and their family members.

Territory of Guam

The Territory of Guam, Micronesia's largest, most-populous and most-developed island, is the southernmost island in the Mariana Islands chain, with a landmass of 212 square miles and a population of 160,000 residents4,6. According to Department of Health records, diabetes was the sixth-leading cause of death on Guam in 1999, accounting for 3% of deaths. The diabetes mortality rate in Guam, at 19.6 per 100,000 population, is 44% higher than for the U.S., at 13.6 per 100,000 population. Behavioral Risk Factor Surveillance Survey (BRFSS) data from 2001 show Guam's overall prevalence of diabetes to be 90 per 1,000 adults17.

The Guam Diabetes Association (GDA), a non-profit community group consisting of persons and families at-risk or already diagnosed with diabetes, coordinated and sponsored the PDT training. Participants included representatives from the government, churches, health department, and the community. Presenters included religious and political leaders who motivated participants to be more proactive with diabetes-related issues and health professionals who presented on diabetes prevention and control. Included in the training team was Napualani Spock, PDT Regional Trainer from Maui, Hawai'i. Site Coordinators, Winnie Butler and Gil Suguitan, who is also the DPCP Coordinator, customized the Guam training by including several physical activities, games, and door prizes.

Since the training, the GDA planned and conducted the largest-attended diabetes conference in Micronesia to educate the public on how to prevent or manage diabetes. More than 1,300 people from Guam and neighbouring islands attended this event. Additionally, GDA coordinated a Family Fun Run/Walk/Wheel for Diabetes to raise fund to offset the cost of the conference.

Discussion

PDTRC was successful in its efforts to assist communities to plan and implement activities in the Pacific. In the first four years of this five-year project, PDTRC helped Pacific communities increase public awareness about diabetes, expand collaboration and partnership, develop the training capacities of local health leaders, sponsor new activities related to diabetes prevention and control, and secure new resources for their communities (Table 1).

Table 1. Activities Sponsored by Pacific Diabetes Today Programs in 11 Pacific Communities

	Physical	Nutrition	Translations	Edu cation	Supp ort	New
	Activity	Programs		&	groups	Resources*
,				Training		
American Samoa	√ √	√		√		√
Kosrae, FSM	√	√	√	√		√
Palau	√ .		√	√ √		
Pohnpei, FSM	√	√	√	√		√
Wai'anae, Hawai'i				- √	√	√
CNMI				√ √		
RMI	√	√	√	√		√
Maui, Hawai'i				1		√
Chuuk			√	√ √		
Guam	1			1		
Moloka'i, Hawai'i				√	√	1

In addition to resources provided through PDTRC for training and technical assistance.

A first and most immediate impact of the PDT training was increasing community awareness of diabetes. Local physicians presented information about diabetes during the training, assuring that participants got correct information about the disease in their language. All eleven groups identified lack of diabetes awareness as a problem in the community, and all conducted activities to raise awareness, such as conferences, workshops, and health fairs.

Second, sites reported an increase in collaboration around the issue of diabetes. PDT action groups collaborated with local political leaders and government agencies, especially their departments of health, education, and agriculture. They worked with local health organizations,

such as hospitals and clinics, as well as with professional and traditional health providers. PDT groups also partnered with other community organizations, such as women's groups, sports clubs, church groups, youth groups, volunteer organizations, and senior citizens groups. Many were

successful at getting local businesses to donating the monetary and in-kind resources.

Another measure of success is the extent to which the PDT curriculum was embraced by local health leaders, translated into local languages, and offered by them to new communities utilizing local resources. For example, Julia Alfred of RMI and Christina Stinnett of Chuuk translated the PDT Guidebook into Marshallese and Chuukese, respectively, and trained rural communities in their jurisdictions. Other PDT trained community groups are planning to do the same. Expanding the training capacity of local health leaders was facilitated by the development of the Regional Trainers Group, through which site coordinators joined with PDTRC in training new communities.

The number of diabetes-related programs increased across the region. PDT groups sponsored educational activities, including conferences, workshops, and health fairs. More people learned about the importance of exercise in communities that planned and implemented physical activity projects, such as walking clubs, community-wide walks, fun runs, volleyball leagues, and softball tournaments. Other communities developed nutrition-related projects, focusing on gardening and healthy eating.

Finally, communities that participated in PDTRC secured new resources for their community. Each of 11 communities received \$8,000 to host PDT training. h addition to covering meeting- related expenses, these

funds allowed site coordinators to devote time to working with PDTRC to prepare for the training, enlist local copresenters, and learn the content so they could serve as co-facilitators. All communities were eligible to apply for additional training funds through PDTRC's technical assistance service. Additionally, several communities obtained fund through business, grant writing, and raffles.

The long-term outcome of the PDT training is yet to be seen. But this report of PDTRC's first four years of activity suggest that the 11 groups trained in 2000-2002 were still meeting on a regular basis to plan and implement activities to decrease the burden of diabetes in their Pacific communities.

PDT groups also partnered with other community organizations, such as women's groups, sports clubs, church groups, youth groups, volunteer organizations, and senior citizens groups.

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References

- Centers for Disease Control and Prevention, Diabetes Today Program. (www.cdc.gov/diabetes/projects/d_ today.htm) (accessed January 28, 2003).
- Braun KL, Kuhaulua RL, Aitaoto NT, Ichiho HM. Listening to the community: a first step in adapting Diabetes Today to the Pacific. to *Pacific Health Dialog*, 2004..
- Kuhaulua R, Braun KL, Aitaoto NT, Ichiho HM. Pacific Diabetes Today: a community plaining curriculum and technical assistance adapted for Hawai'i and the Pacific. to Pacific Health Dialog, 2004.
- Levy N. Micronesia Handbook 5th Ed. Emeryville, CA: Avalon Travel Publishing, 2000.
- Galbrait K, Bendure G, & Friary N. Micronesia 4th Ed. Melbourne, Australia: Lonely Planet, 2000.
- American Samoa Diabetes Control Program. PDTRC Training Application, Feb 2000.
- 7. Kosrae State Hospital. PDTRC Training Application, Feb 2000.

- 8. Micronesian Seminar. PDTRC Training Application, Feb 2000.
- 13. Republic of the Marshall Islands, Minister of Health and Environment, PDTRC Training Application, Jan 2001.
- 9. Pa Resource Center. PDTRC Training Application, Feb 2000.
- 11. ABC Radio Australia News "Diabetes strains Marianas' coffers". Go Asia Pacific Jul 11, 2002.

Application, Feb 2000.

- The long-term outcome of the 10. Ke Ola Mamo. PDTRC Training PDT training is yet to be seen. But this report of PDTRC's first four years of activity suggest that the 11 groups trained in 2000-2002 were still meeting on a regular basis
- Hui No Ke Ola Pono, PDTRC Training Application, Jan 2001.
 - Chuuk Women Advisory Council (CWAC), PDTRC Training Application, Jan 2002.
 - Moloka'i Diabetes Task Force. PDTRC Training Application, Jan 2002.

- 12. Commonwealth of the Northern Mariana Islands Diabetes Control Program. PDTRC Training Application Jan 2001.
- 17. Guam Diabetes Association, PDTRC Training Application, Jan 2002

Without stirring abroad one can know the whole world: Without looking out of the window one can see the way of heaven. The further one goes the less one knows