

## Meeting the Challenge of HIV Clinical Training within 2.5 million Square Miles of the Pacific Ocean

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### Abstract

*In the U.S. Affiliated Pacific Islands, an area that encompasses 2.5 million square miles of ocean, the incidence of HIV is unknown. The area is susceptible to increased HIV activity because of high birth rates, high STD rates, a sexually active younger population, and a mobile population. The Hawai'i AIDS Education and Training Center (HAETC) has provided training in clinical care to the providers in the area since 2000. HAETC is part of the Pacific AIDS Education and Training Center that is part of a nationwide effort to educate and train professionals in HIV care. An adaptive multi-faceted curriculum appeared to be the best approach for training. HAETC has used conferences, mini-residencies, clinical consultations, and satellite conferencing. (PHD 2007 Vol 14 No 1 Pages 57 - 65)*

### Introduction

The U.S. Affiliated Pacific Islands (USAPI) can be described as many small inhabited islands scattered over 2.5 million square miles of Pacific Ocean comparable in area to that of the continental U.S. The approximately 500,000 inhabitants of the Republic of the Marshall Islands (RMI), the Federated States of Micronesia ([FSM] includes Kosrae, Pohnpei, Chuuk, and Yap), the Republic of Palau, the Commonwealth of the Northern Mariana Islands, and Guam are cared for by dedicated health professionals with limited diagnostic and therapeutic options. HIV/AIDS threatens this culturally diverse area. Although HIV incidence in the region is difficult to discern because many local health departments do not publicly report HIV/AIDS cases, the

rapid rise of HIV to epidemic proportions in the Pacific Island nation of Papua New Guinea may indicate problems for the rest of the region.<sup>[1]</sup> The jurisdictions are vulnerable to HIV infection because of high birth rates, sexually active young populations, the increased incidence of sexually transmitted diseases, and mobile populations.<sup>[2, 3]</sup>

The Hawai'i AIDS Education and Training Center (HAETC) has played a role in providing HIV education and training in the USAPI since 2000. HAETC is a sub-site of the Pacific AIDS Education and Training Center that received initial support from the U.S. Department of the Interior and subsequent funding from the Health Resources and Services Administration's Minority HIV/AIDS Initiative. In 2000, a needs assessment in this area revealed low familiarity with and apprehension about HIV and insufficient resources for diagnosis, prevention, and care. To improve clinician ability to recognize HIV and understand treatment, HAETC developed innovative ways of training and building capacity. This is a report of our experiences with these clinicians.

## Methods

Over the five years of the program, we collected evaluation and needs assessment data for our trainings and multiple capacity building activities. These data were collected in a variety of ways, including site visit reports, post-training quality assessments, knowledge tests, interviews, and focus groups. In addition, we developed annual work plans to guide the content and format of our trainings. In the following section, we use the various records to present a full picture of the processes, as well as some of the outcomes, of this project.

## Findings

The HAETC created a multi-faceted clinical training program consisting of: 1) annual HIV clinical conferences; 2) week-long mini-residencies; 3) on-site consultations; 4) bi-monthly satellite-based teaching; and 5) ongoing clinical consultation with HIV specialists. Whenever patients were involved, standard privacy and confidentiality procedures were followed. One physician and two nurses were selected from each jurisdiction to be trained in HIV care and as educators for their area. In this cohort of providers, over 75% have been participants in these trainings from the beginning.

Guam hosted the first conference in January 2001 because of its proximity to the region, availability of HIV positive patients for interviews, and its multicultural society. The conference included 12 didactic sessions and two full days of observing specialists taking care of and interacting with patients. Similar annual conferences have followed in Guam or Hawai'i. The contents of the conference has changed yearly, as the needs have changed, but have always included patient interactions primarily employing interviews and history taking. There is ample opportunity for clinicians to network with each other and to share their experiences in HIV treatment. Both community and government partners are sought and are key participants in presentations and problem solving break-out sessions. An example of this is a session on incorporating HIV prevention in the medical care of HIV patients that was given by speakers from the Centers for Disease Control and Prevention (CDC) "Prevention for Positives" program. Another example would be the Association of Asian Pacific Community Health Organizations co-sponsoring the conference with HAETC.

The annual conferences have revealed several challenges. Although the curriculum is driven by needs

assessment and current HIV treatment developments, obtaining the services of appropriate educators has been difficult. For example, finding an HIV and nutrition speaker who understood the unique Pacific Island diets and could integrate that knowledge with practical guidance proved challenging. Speakers also had to be aware of the limited availability of medications and diagnostic tests. Some islands have no antiretroviral medications and most do not have CD4 cell measurements. However, participants valued the broader learning spectrum afforded by the conference's HIV positive speakers since many had not cared for an HIV patient. When they did, the patient often presented late in the disease so treatment consisted primarily of palliative care. A participant from Kosrae said that he felt more empathy for HIV positive patients because of what they went through and he was amazed at how long they had HIV.

For the mini-residencies, several clinicians per rotation were immersed in a week-long training. The clinicians observed high-volume HIV specialists providing primary care, and participated in case-based discussions and problem solving. These Hawai'i and California specialists consulted with the trainees to help them address HIV issues using the resources available in their region in a culturally appropriate manner. The patient centered curriculum emphasizes: treatment of HIV and opportunistic infections; complications and side effects of therapy; treatment of co-morbid conditions; prevention strategies; and social issues like stigma and discrimination are covered. The lesson from the nearly 40 mini-residencies was clear: attention to detail was critical for successful outcomes. Without comprehensively briefed mentors, trainees can become lost in the hectic shuffle of routine patient care. The mentor must regularly ascertain if the trainee was being inundated with excessive information, or if the material was out of context. Additionally, the case-based study sessions needed to be reviewed to insure that material was challenging, but still comprehensible to the trainee. Terminology and acronyms were assessed for applicability to the trainee's usual medical lexicon. Producing an effective curriculum relevant to each trainee's need evolved over time. A participant said that "In the beginning no one wanted to be involved with the program. I felt uncomfortable. Since I have been in the program, I have a different perspective."

On-site and on-going distant consultations are two types of consultations provided by HAETC. The on-site consultations consist of an HIV specialist from Hawai'i or

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California reviewing and discussing medical records of patients receiving HIV care on a one-on-one basis with the treating clinician. In distance consults, the clinician contacts an HIV specialist in Hawai'i or California with questions regarding care of an HIV patient via telephone or the internet. These consultations helped the clinician put into practice what they had learned through didactic sessions and served as direct measurements of the success of educational opportunities provided by the HAETC.

The on-going distant consultations remain the most challenging component of the training strategy. It is a strategy that is underutilized by the HIV coordinators and clinicians in the region. This appears to be changing over time as the consultants who provide the training are recognized as a resource to the clinicians. The key to using a consultant appears to be establishing a personal rapport with clinicians. When properly cultivated, it becomes a powerful strategy for learning on an ongoing basis outside of the conference or mini-residency. Contact information for available consultants has been disseminated to each jurisdiction. Lack of antiretroviral medications may also diminish usage. There may be more consultations in the future for choices of medication and dealing with side effects.

Satellite technology was used to facilitate bimonthly trainings via the Pan-Pacific Education and Communication Experiments by Satellite (PEACESAT) located at the University of Hawai'i, Manoa. Video conferencing is used for case based discussions across the region and is facilitated by an HIV specialist based either in Hawai'i or California, and coordinated by the HAETC. One of the cases discussed was that of a woman from Chuuk who had chronic conjunctivitis. This led to a discussion of a similar case in Kosrae and a more global discussion about how common illnesses that present in unusual ways could raise the suspicion for an HIV diagnosis. Recently, protocols such as perinatal care of an HIV infected mother have been discussed and developed as a result of this technology. PEACESAT also offers a vehicle for the clinicians to discuss common problems such as the processing and shipment of lab specimens and the acquisition of medications.

## Discussion

It was important to build rapport and foster dedication to HIV care with the clinicians. The islands have had a history of foreign interventions without consideration for

sustainability. Recognition of what is important to the participants culturally would enhance the training process and build a network that would be useful in the future. HAETC tried to do this by being culturally sensitive using island appropriate behavior like greeting participants at the airport with leis, preceding the conferences with social activities, and opening the conference with a welcoming prayer or chant. Conference participants also shared examples of their local culture such as a Samoan war dance/chant and a Kosraean dance at an evening gathering. Since many of these participants have been with the program since the start, they have developed a professional camaraderie. They recognize that HIV currently is just a fraction of their concerns, but they are dedicated to learning about it, preventing its spread, and obtaining treatment for it as best as they can.

Although they are expensive, the annual HIV clinical conferences have been appreciated by participants and educators alike and felt to be a necessity. Finding educators who understand the unique cultures of the region remains challenging. An instructor's HIV knowledge and teaching ability mean little when the presentation is of modest applicability to the region. The content of the conferences continue to evolve with a shift toward: case presentations; capacity building on topics, such as how to obtain medications; mentoring new leaders for regional HIV care; and problem solving with the active involvement of other agencies like the CDC.

The HIV mini-residency offers participants an opportunity to immerse themselves in HIV care and education. The chance to augment or hone skills is tempered by the possibility of being lost in a sea of new information. Thorough preparation and constant attention to the daily experiences helps curtail ineffective learning sessions. This strategy has been useful for the new HIV clinician.

Satellite-based training offers educators economical access to clinicians, but technological limitations and insufficient financial resources curtail its usefulness. Persistent technological problems include omission of locations and intermittent reception. When working on sensitive topics, such lapses can frustrate the learning process. There needs to be consideration of the use of the internet for discussion and communication in the future.

Comprehensive program evaluations have been limited, but are planned for and will soon be implemented.

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Evaluations using pre- and post-conference tests and clinician interviews have been started. Goal specific evaluations are important to modify and improve education and training. Continued support with long term funding will insure long term program stability that will hopefully improve sustainability of HIV care in the region as well as foster a long term evaluation plan.

A major outcome for the project has been the establishment of a sub-site in Chuuk, FSM. The sub-site has a team of clinicians that has provided training to multiple groups in Chuuk as well as in other states in Micronesia and in the RMI.

#### NEXT STEPS

Although a one-size-fits-all Western medicine-styled training can be an option, an approach to education and training that considers the unique attributes of Pacific healthcare and culture can provide an experience that empowers trainees to meet the task of HIV care. It is important for organizations and funding agencies to make long term educational commitments. The HAETC

feels that the use of a combination of strategies that is continually analyzed for its effectiveness and modified over time is the best way to provide education and training in the Pacific. In the often under-resourced USAPI, sporadic educational efforts initiated with the best of intentions are no substitute for sustained commitments to meet the regional challenges facing clinicians. The development of regional educators and resource clinicians in HIV care remains one of the primary goals for the region. Assisting the region in obtaining HIV medications through various resources remains one of our capacity building efforts.

### **The development of regional educators and resource clinicians in HIV care remains one of the primary goals for the region**

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*13 years ago in Pacific Health Dialog, Bishop P. Finau stated, "...encourage a permissive society in the Pacific with the Western condom culture - a con culture really - a you are courting not only physical death, but also the death of the spirit of people, you are also promoting a host of social ills...." PHD, 1995; 2 (1): 81*