Needs Assessment for Micronesian Health Care in Hawai‘i

Produced by the Department of Public Health Sciences

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PH649 Planning and Needs Assessment

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Executive Summary

Background. Over the past few decades, there has been a significant migration of Micronesians to the islands of Hawai`i due to the complex historical relationship that many Pacific Island nations of Micronesia have with the United States. Micronesians are faced with a multitude of health care issues including infectious diseases and health challenges due to lifestyle changes. Thousands of Micronesians have sought health care in the Hawai`i since the Compacts of Free Association (1986) granted Micronesians access to health care in the United States. A result of this migration is an overwhelmed health care system in the State of Hawai`i, particularly community-based health care centers.

Methods. From January to May of 2009, the Needs Assessment and Program Planning class from the Office of Public Health Studies, University of Hawai`i Manoa, assembled a needs assessment report on the Hawai`i-based Micronesian population and their health issues. The proposal was submitted to the University of Hawai`i's Institutional Review Board and was granted permission to proceed. Several instruments were used to collect data including: document review, key informant interviews, and focus groups with Micronesians and health care workers.

Results. Through these methods, several health topics were identified as concerns for both the Micronesian community and the health care centers providing services to this population. The six topics of cancer, teen pregnancy, sexually transmitted diseases, obesity, diabetes and mental health were identified as key issues to be addressed and are discussed in further detail within this report. Concerns that were brought forth from the Micronesian community and the health care providers include: transportation and community/medical outreach, (Donna Taniguchi, Key informant, 2009), pronounced cultural differences, information dissemination and sharing, health literacy, translation and interpreter issues, and mental and behavioral health.

Introduction

In recent years, thousands of Micronesians have been migrating to Hawai`i for various social, financial and medical reasons (Pobutsky et al., 2005). This migration pattern is a result of the complex historical relationship that many Pacific Island nations of Micronesia have had with the United States, namely the Compacts of Free Association (COFA), which allow citizens of Freely Associated States (FAS) to travel to the United States as migrants without visas or other time limits (Pobutsky et al., 2005). Many serious public health issues burden Micronesian populations. Infectious diseases like hepatitis B and some sexually transmitted diseases are prevalent (Suzuki et al., 2006; Pobutsky et al., 2005). The transition to a western diet and lifestyle has also resulted in an increase of chronic diseases, including diabetes, hypertension, cardiovascular diseases, and other conditions resulting from obesity (Cassels, 2006). Many Micronesians migrate to Hawai`i because their health care systems cannot provide the same level of care that is expected in the US.

As Micronesians continue to seek health care in Hawai`i, many barriers have been cited when working with this population. Some issues that are commonly mentioned include: language barriers, limited ability to navigate the American health care system, pronounced cultural differences in communication styles, and different expectations between patients and providers (Pobutsky et al., 2005; Okamoto et al., 2008).

The purpose of this report is to assess the issues concerning Micronesian patients and their health providers in Hawai`i, and to recommend potential strategies to address these issues. The objectives for this project include: conducting a document review summary, performing key informant interviews, carrying out focus groups, and presenting and disseminating results to the stakeholders and other interested parties.

Methodology

I. Participants

In assessing the current health issues of the Micronesian community in Hawai`i, a needs assessment process was conducted by the Needs Assessment and Program Planning class from UH Manoa, consisting of 18 students. The students were divided into 8 groups and groups were subdivided between three health centers on Oahu and two community based agencies. One group spoke to a community project on Oahu and another group focused on church leaders on Maui. The study centered on Micronesian migrants mainly from the Marshall Islands and Chuuk.

II. Instruments

The methods utilized by this study included a document review, interviews with key informants who are knowledgeable and experienced in working with Micronesian communities, and focus groups. Each of the instruments used are described more fully as follows:

A. Document Review

A literature search was conducted through PubMed and other web-based online archives to identify relevant journal articles and presentations on Micronesian health topics. A summary was provided for all 54 sources and compiled into a table.

B. Key Informant Interviews

Based on information gathered from the document review, each student developed questions for a particular key informant and performed an interview. Twenty key informants in total were interviewed by the class. A synopsis was written for each interview and compiled into a summary.

C. Focus Groups

After documenting the information from the key informant interviews, each group developed focus group questions. The hour-long focus group sessions were conducted in the three health clinics and two community-based organizations. Six of the groups

conducted their focus group with the Micronesians and two groups interviewed health professionals.

III. Procedures

A. Literature/Document Review

Some focus areas of importance were pre-determined by the needs assessment team with regard to the health information needs of both Micronesian migrants in Hawai`i and the public health workforce or providers such as demographics, epidemiological information, cultural values and beliefs, health care seeking and concerns, and health education and resources. Each member of the team chose a topic area with regard to both the Micronesian health consumer and healthcare provider, searched the various databases, and performed a critical literature analysis and evaluation of the numerous documents. A literature review summary for each article was compiled into a table to ease the review process. Themes from the document reviews were extracted in order to be utilized for the key informant interviews.

B. Institutional Review Board

The Institutional Review Board on Human Research Subjects at the University of Hawai`i was contacted to ensure federal guidelines 45CFR46, 20CFR50, and 21CFR56 were followed in regard to research involving humans such as the key informant interviews and focus groups. Approval by the committee was granted.

C. Key Informant Interviews

Key informants were selected mainly by the course instructor based on individuals that have personal knowledge or experience with the Micronesian community in Hawai`i. A snowball approach was used to select these informants. For example, authors of some of the articles found in the literature review were contacted and provided names of relative individuals that would add to the developing informant network. Other informants were selected by students who had prior connections to experts in the field. Questions for the interviews were then developed based on the themes discovered from

the literature review and were peer reviewed. Next, each member of the needs assessment team was assigned a key informant and asked to contact them either by phone or e-mail. Interviews were conducted utilizing the approved questions and responses were documented. Each key informant interview was summarized and submitted in a pre-established format in order to make later compilation of data easier.

Also, some experienced providers with Micronesian health consumers in Hawai`i were guest lecturers. Within the class setting, they provided information and testimonies on the topic. Information from those lectures was utilized in the assessment.

D. Focus Groups

After documenting the information from the key informant interviews, each group developed focus group questions. The hour-long focus group sessions were conducted in the three health clinics and two community-based organizations. Five of the groups conducted their interviews with the Micronesians and two groups interviewed healthcare professionals.

The Micronesian group was comprised of:

- 2 Pohnpei (female)
- 1 Guam (female)
- 1 Saipan (female)
- 1 Palau (male)
- 14 Chuuk (5 male, 9 female)
- 9 Republic of the Marshall Islands (1 male, 8 female)

The Maui deacons were Marshallese men (6 male)

Participants ranged in age from 18 to over 60.

IV. Analysis

Qualitative Data Analysis Process:

Data analysis was a two stage ongoing process. First, data was collected, legitimized, summarized and analyzed for key findings, patterns, trends, deviations and unanswered questions by assigned individuals or groups. The second stage was a

collective analysis by the entire public health class and instructor. Both stages were performed after each data collection method. Once all data methods were analyzed, results were posted and recommendations were formulated.

V. Limitations of the Study

The study has several limitations. Given that the class is a three-credit and one-semester long course, the time constraints limited the scope of the assessment. The sample was a convenience sample of those who were interested and willing to participate and therefore not necessarily representative of the issues faced by Micronesians and health care providers in the State of Hawai`i. Those who would not likely visit a health clinic are not represented in this study. Several of the selected participants in the focus groups were absent or unable to attend.

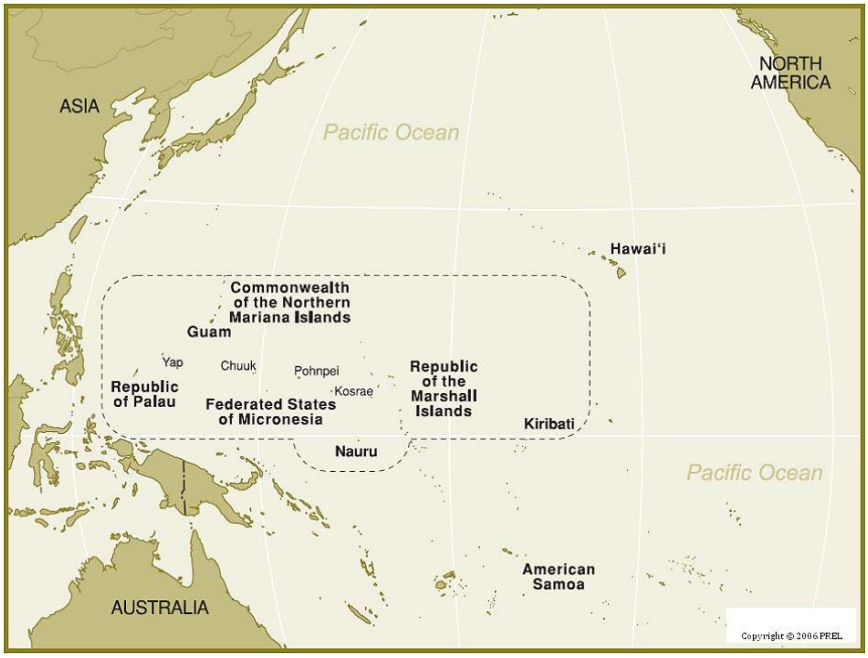
Background

The Geographic Region of Micronesia

Micronesia is a geographic term that refers to an entire region of several different groups of islands and atolls in the western Pacific Ocean. These include the former U.S. Trust Territories of the Pacific Islands (TTPI), which later became known as the Freely Associated States (FAS) of Micronesia in 1986, when the Compacts of Free Association (CFA) went into effect. (Pobutsky et al., 2005). For the purpose of this paper, all references to Micronesians in Hawaii pertain to people from FAS.

- ●Freely Associated States of Micronesia (FAS)
  - ▪Federated States of Micronesia (FSM)
    - -Yap
    - -Pohnpei
    - -Kosrae
    - -Chu'uk
  - ▪Republic of Palau (ROP)
  - ▪Republic of the Marshall Islands (RMI)
- ●Guam
- ●Commonwealth of Northern Marinara Islands (CNMI)
- ●Nauru
- ●Kiribati

Figure 1. Map of the Geographic Region of Micronesia



Source: Heine (n.d.). © PREL, 2006

History of Micronesia and the US:

Micronesia has a long history of occupation having experienced Spanish, German, and Japanese control until coming under the US administration in the 1947 (British Broadcasting Corporation, 2008). Japan occupied much of Micronesia in 1914, and following Japan's defeat during WWII, Micronesia fell under the administration of the US as a Trust Territory of the Pacific Islands. In the 1970's the Northern Mariana Islands, Marshall Islands, and Palau respectfully separated from the islands of Kosrae, Pohnpei, Chuuk, and Yap. These latter islands became independent from the US in 1979 as the Federated States of Micronesia. In 1986, Micronesia and the US signed the Compact of Free Association stipulating assistance from the US in return for continued use of Micronesian land for military operations.

Compact of Free Association

1986 - FSM signs a "Compact of Free Association" with the US

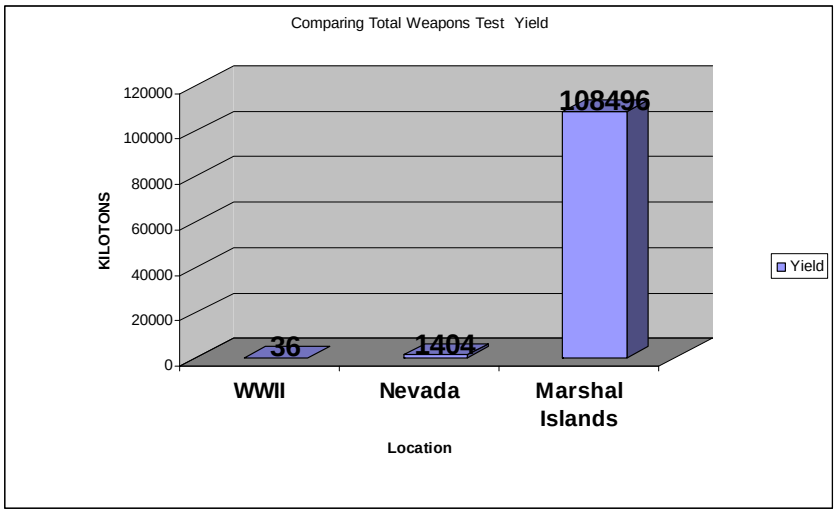
- FSM receives economic and military assistance

- Micronesians can work, live, attend school, and access some social services in the US without a VISA or health clearance upon entry
- Use of land for US military operations in Micronesia

2003 - New 20-year compact with US signed, worth $3.5 billion to FSM and Marshall Islands

In the Marshall Islands, the US performed 67 atmospheric nuclear weapons tests from 1946 to 1958. The total yield for testing in the RMI amounts to 108, 496 tons compared to the 36 tons nuclear weapons used by the US in WWII . This testing has rendered the land and the food it produces dangerous to Marshal Islanders (PREL, 2007). The weapons testing and secondary outcomes of the US military presence in the RMI have been associated with increases prevalence of diseases in Marshall Islanders (Yamada, 2005).

Chart 1. Comparing Total Weapon Test Yield



Source: Nuclear Claims Tribunal: Republic of the Marshal Islands http://www.nuclearclaimstribunal.com/

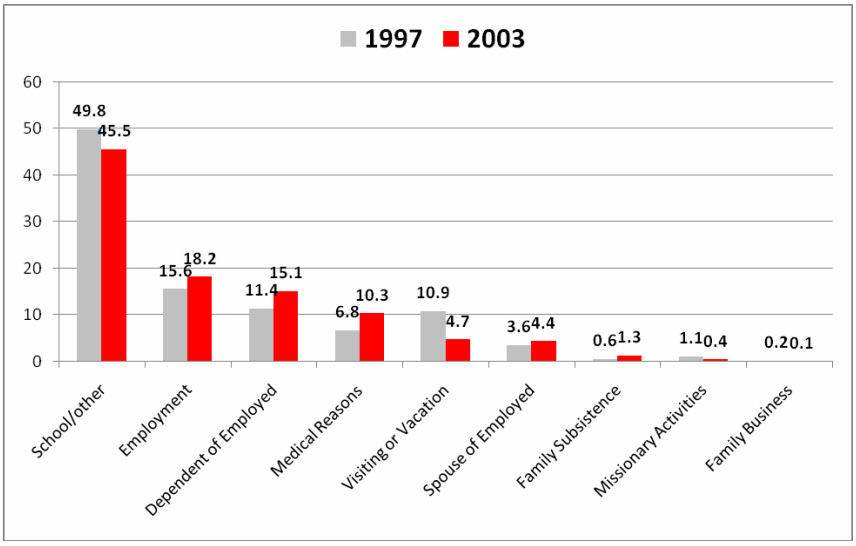
In 2003, the US renewed the Compact of Free Association with FSM and RMI for another 20 years, with the US providing $3.6 billion in assistance through 2023 (United

States Government Accountability Office, 2006). The compacts allows citizens of the associated territories to enter, work, and study in the US without a VISA.

Why do Micronesians come to Hawaii?

Micronesia is comprised largely of agricultural societies. The shift from subsistence economies to cash economies created new opportunities and new problems for Micronesian natives. Micronesians leave their homeland for a variety of reasons. Generally, migrating to American offers more opportunities for employment, better access to health care, and better educational opportunities. US military atomic weapon testing also caused forced a Marshallese islanders into migration since, "the nuclear tests on their home islands that caused contamination of their land and destruction of their communities and culture." (PREL and McInery, 2007). The top reasons for migration include school/other, employment, being a dependent of an employee, and medical reasons.

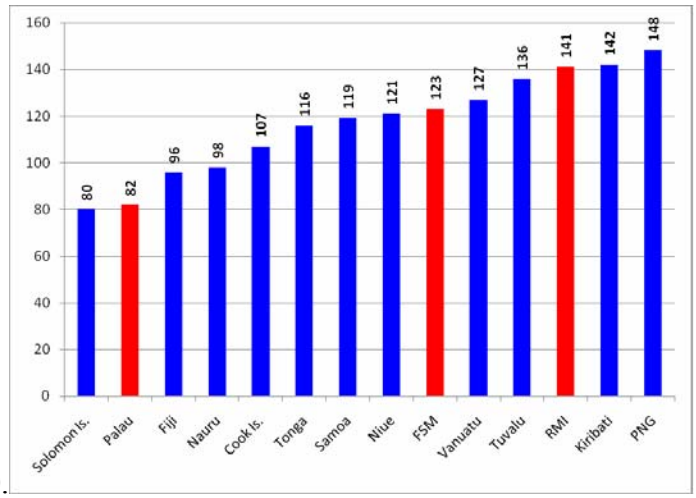
Chart 2. Reasons for Micronesian Emigration



Source: Graham, 2008. Determinants and Dynamics for Micronesian Emigration.

Health is becoming as increasingly important factor for migration to Hawaii (Graham, 2008). The following graph summarized the health care systems in Micronesia according to the World Health Organization (Graham, 2008).

Chart 3. World Health Organization Global Rankings on Overall Performance of Health Systems (191 countries):



2000.

Source: Graham, 2008. Determinants and Dynamics for Micronesian Emigration. World Health Organization. 2000. *Global Rankings on Overall Performance of Health Systems.*

Quick Facts about Micronesians in Hawaii:

- The 2006 census of Micronesians in Hawaii was estimated around 14,000 (Aitaoto, 2009).
- There has been a 251% increase between 1990 and 2000. (DBEDT, 2005).
- The majority of Micronesians live in the county of Honolulu (73%). Others live in the counties of Hawaii (15%) and Maui (11%).
- Within Honolulu County the majority of Micronesians live in Honolulu (55.8%) and Ewa (27.6%). (PREL and McInery, 2007).

<u>Background of Micronesian Culture:</u>

As mentioned earlier, the geographic region comprising Micronesia contains separate island nations with distinct languages and cultures. There are similarities between these cultures but also differences within them.

Cultural Norms:

Food:

- Food is an integral part of celebrations, meetings, and other important events in all Micronesian cultures
- There has been a shift from traditional food (i.e. seafood, chicken, fruits, and starches such as yams and taro) to imported diets (i.e. rice, canned meats, pastries, etc.) Family:
- Family plays a large role in an individual's decision making
- Family units at least include grandparents, parents, and children

  -Chuuk and Yap include extended families
- Head of household is generally the eldest male. Influence is stratified by age and sex.

Gender:

- Traditionally roles have been very restricted
- People from the geographic region of Micronesia often feel uncomfortable with the opposite sex
- Males often have higher status and females are restricted more than males

Examples:

- In the RMI females are traditionally not allowed to walk near males or wear pants and shorts
- Chuukese women from the focus group said that when they enter a room containing men, they have to lower themselves as they enter the door (Pacific Resource for Education & Learning, Project REACT)

Communication:

- Physical contact is inappropriate
- Direct, prolonged eye contact is seen as invasive or challenging
- Conflict is often avoided by saying "yes" even when one means "maybe" or "no"
- When community members meet, there is often a hierarchy to who sits where and who may speak (Filibert, 2009).

Just as there are many different islands and cultures that make up the geographic region of Micronesia, there are also several mutually unintelligible languages spoken there as well. At least 20 different languages are spoken in the region as well as several dialects, as seen in the table below (Heine, n.d.)

Table 1. Island, Political Status, Ethnicity/ Cultural Groups, Languages in Micronesia

Island Area	**Political Status**	**Ethnicity/ Cultural Groups**	**Languages Spoken**
CNMI	Commonwealth in political union w/U.S.	Chamorro and Carolinian	Chamorro and Carolinian
FSM: Chuuk Kosrae Pohnpei Yap	Constitutional government in free association with the U.S.	Chuuk: Chuukese, Mortlokese, and Puluwatese Kosrae: Kosraean Pohnpei: Pohnpeian, Pinglapese, Nukuoro, Kapingimarangese, and Mokilese Yap: Yapese, Ulithian, and Woleaian	Chuuk: Chuukese, Mortlokese, and Pulwatese Kosrae: Kosraean Pohnpei: Pohnpeian, Kapingimarangese, Mokilese, Pinglapese, Ngatikese, Nukuoro, and Mortlokese Yap: Yapese, Ulithian, Woleaian, Satawalese, and Pulwatese
Guam	Unincorporated territory of U.S.	Chamorro	Chamorro
Republic of Kiribati	Independent	Kiribati	Ikiribati
RMI	Constitutional government in free association with the U.S.	Marshallese	Marshallese
Republic of Nauru	Independent	Nauruan	Nauruan
ROP	Constitutional government in free association with the U.S.	Palauan	Palauan

Sources: * From *Information on the Federated States of Micronesia: People*, by the FSM Mission to the United Nations, 2002.

** From *The World Factbook 2001*, by the Central Intelligence Agency, 2002.

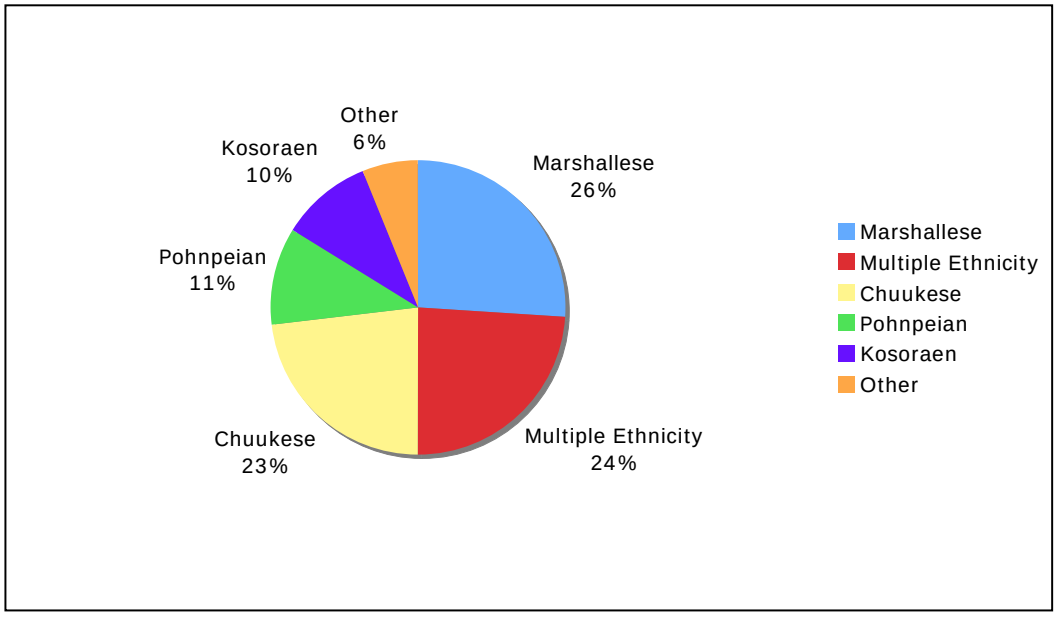
***Table from Heine, n.d.

Demographics of Micronesians Living in Hawaii

Place of Origin:

- According to the 2003 OIA Census, people from the FSM (5,092 people) make up the majority of the Micronesian population in Hawaii, followed by those from the RMI (2,931 people), and then Palau (334 people) . Figure X below illustrates a breakdown of the most common Micronesian populations living in Hawaii.

Chart 4. Ethnicity by Percentage in Hawaii 2003



Pacific Resource for Education & Learning, 2007. *A study of individual &families in Hawaii from the Federated States of Micronesia, Republic of the Marshall Islands and other Northern Pacific Islands.*

Age

▪The average age of the Micronesian population is 23 years old which is relatively young compared to the State of Hawaii's average which is 36 years old (DBEDT, 2005 and OIA2003).

Table 2. Highest Level of Education

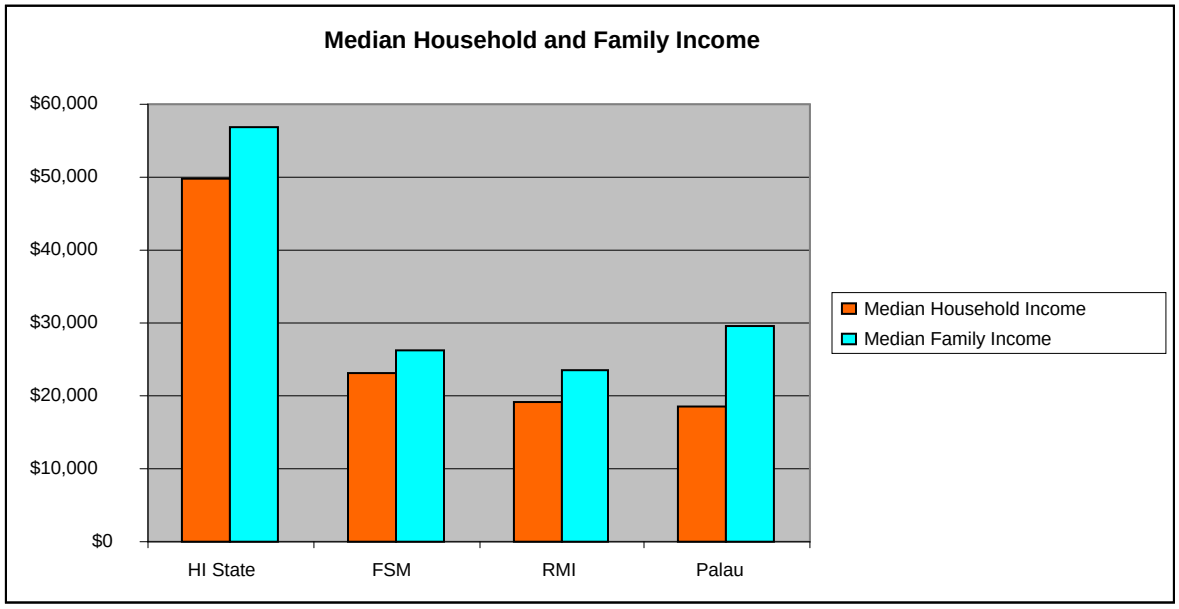
Educational attainment (25 years+)	Total	FSM	RMI	Palau
Less than high school	21%	22%	22%	4%
High school graduate	24%	22%	14%	25%
Associate degree	6%	6%	5%	10%
Bachelor's degree	3%	3%	1%	2%

Source: OIA (2003)

Income

▪The state of Hawaii's household income is more then twice the household income in three of the different Micronesian communities.

Chart 5. Micronesian Household and Family Income



Sources: DBEDT, 2005 and OIA, 2003

Table 3. Percentage below Poverty Level

	Total Micronesian	FSM	RMI	Palau
Percentage of Families Below Poverty Level	42.1%	39%	49.6%	30%

Source: OIA, 2003

*For a more in-depth overview of the background information on the geographic region of Micronesia, please see the PREL website at http://www.prel.org/teams/background-FAQs.asp

Medical Issues Overview

The five topics of cancer, teen pregnancy, sexually transmitted diseases, obesity, and diabetes were identified as key issues to be addressed in this report.

Cancer

Hawaii and Micronesia Combine Resources

Due to various social, economic and resource limited health care infrastructure challenges, the awareness of cancer incidence has risen in Micronesia, with mortality ranking as the second most common cause of death (Cancer Council of the Pacific, 2007). As the burden of cancer continues to increase, the current health care's infrastructure in Micronesia is unable to provide effective cancer treatment to serve the population (Cancer Council of the Pacific, 2007). This lack of resources forces Micronesians to seek healthcare outside of the Pacific islands (Pobutsky, 2005). As a result, the Pacific diaspora puts a tremendous financial strain on Hawaii's health care system. In 2001 the U.S General Accounting Office estimated nearly $86 million was spent from 1996-2000 with Hawaii one of the top providers for cancer treatment to Micronesians (Pobutsky, 2005). With costs of treatment high, it is extremely important that healthcare providers in Hawaii are prepared to provide optimal services in the face of financial challenges.

Committed stakeholders from the Pacific and the U.S worked diligently to establish the Pacific Cancer Initiatives (PCI) to assist in reducing the burden of cancer in the Pacific Islands and Hawaii. In 2002, the PCI launched its first cancer needs assessment of the Pacific Islands allowing stakeholders to set priorities to combat cancer (Cancer Council of the Pacific, 2007).Preliminary analysis has determined there are 26 cancers associated with the Pacific U.S. nuclear weapons testing between 1946 -1958 (Palafox, 2008). In addition to the exposure to nuclear testing, the U.S. forced de-colonization of the Pacific Islands influenced lifestyle changes throughout Micronesia, which also attributes to higher cancer rates (Cancer Council of the Pacific, 2007, Pobutsky, 2005).

In 2007, as a result of the PCI, the Pacific Regional Central Cancer Registry (PRCCR) was established and funded through the Center for Disease Control (Palafox). Hawaii's

cancer surveillance program, the Hawaii Tumor Registry, is mentoring the PRCCR with expertise in cancer surveillance. The PRCCR will provide an invaluable resource through the collection of quantifiable data to the Pacific Islands. To date, there is scarce epidemiological data in the Pacific and Hawaii, limiting substantial analyses of cancer in the regions (Hughes, 2000). Hawaii's resources combined with solid committed partnerships with Micronesia are crucial for the healthcare systems both in Micronesia and Hawaii in the effort to reduce cancer.

Challenges for Healthcare Professionals in Micronesia:

- Resource limited
- Lack of funding and supplies
- No pathologists or radiologists and often no oncologist
- No radiation oncology
- Many regions unable to maintain chemotherapy
- Medication in short supply
- Traditional medicines preferred
- No resources to ship (or test?) laboratory specimens
- Communicating and coordinating over time zones

(Cancer Council of the Pacific)

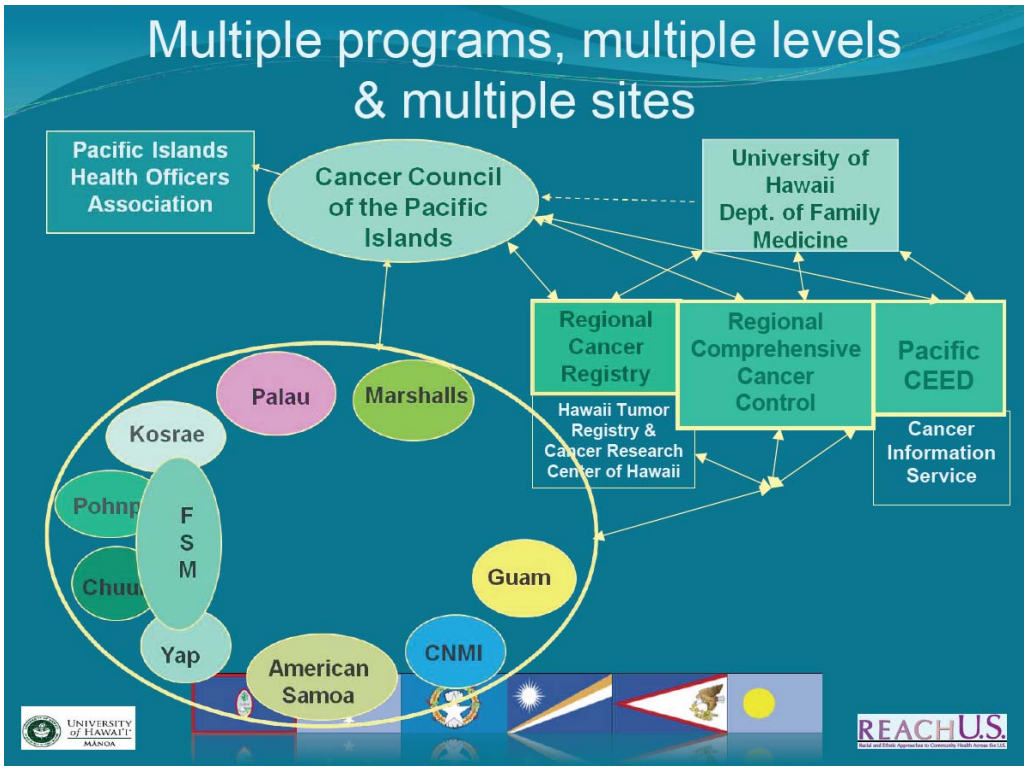
Challenges for Healthcare Professionals in Hawaii:

- Late stages of diagnosis (Cancer Council of the Pacific)
- Many Micronesians don't know about common health screenings like Mammograms or Pap Smears (Kathryn Braun, Key informant, 2009)
- Difficulties in communication due to Limited English Proficiency (Pobutsky)
- Providing culturally appropriate methodologies (Pobutsky)
- Cultural differences in communication (Pobutsky).
- Problematic screening, follow up and continuity of care with circular migration patterns (Pobutsky).
- Financial burden on health care system (Pobutsky).

- Communicating and coordinating over time zones (Cancer Council of the Pacific).

Hawaii and Pacific Islands Collaborators

Chart 6. Pacific Center of Excellence in the Elimination of Disparities



Recommendations:

- Uniform and systematic surveillance of cancer incidence, mortality and survival (Hughes, C. K.,2000)
- Establish laboratory services (Palafox, 2008)
- Create regional referral centers (Palafox,2008)
- Maintain funding for implementation the Pacific Regional Central Cancer Registry (PRCCR,2007) (Palafox,2008))
- Prevention, screening, early detection, and treatment programs (Hughes, ,2000)
- Cancer research studies and clinical trials (Hughes, ,2000)

- Development of regional policies for cancer care (Palafox,2008)
- Community outreach programs (Hughes,2000)
- Encourage community involvement (Hughes.,2000)
- Long term sustainability programs
- Community based participatory collaboration (Pobutsky,2005)

Sexually Transmitted Diseases (STDs)

Throughout Micronesia, STDs present a challenge. "Sexually transmitted diseases, social and cultural norms that restrict women's decision-making power even with regard to conjugal sex, multiple closely spaced pregnancies, teen pregnancies, are all serious problems in parts of the Pacific." (Lewis *et al*, 1995)

Challenges for Micronesians Living In Micronesia

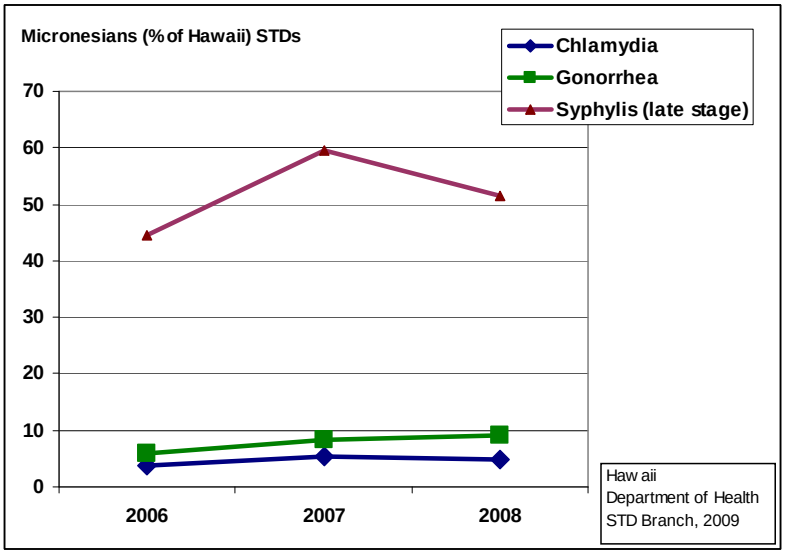
- In 1985, 7.7% of the women tested in the Marshall Islands between the ages of 15 and 49 years showed positive for syphilis. (South Pacific Commission, 1985)
- In Fiji, not technically part of Micronesia, but very similar, of 440 women served in a prenatal clinic, 14.7% of the Fijian and 1.7% of the Indian women were positive for syphilis. 50% of the Fijian women and 38% of the Indian women were positive for Chlamydia. (Gyaneshwar *et al*, 1987)

Challenges for Micronesians Living In Hawaii

- While the incidence of syphilis has been declining in Hawaii for the last three decades, from 1999-2003, 25% of the syphilis cases reported were from Micronesians and Samoans. (Pobutsky et al., 2005) Chart 7 shows rates for STDs for Micronesians who represent about 1% of Hawaii population.
- Pregnant women represent 92% of cases of early syphilis, resulting in several cases of congenital syphilis, all among Micronesians. (Hawaii Department of Health, 2004)

- For gonorrhea and Chlamydia, which have been steadily increasing in recent years among all ages, Micronesians are represented in about one-fifth of reported cases among Asian/Pacific Islanders. (Pobutsky et al., 2005)
- These STDs make individuals more susceptible to HIV. While the reported HIV numbers are small for Micronesians, testing has been limited.
- A recent study of birth outcomes (1996 to 2002) among Micronesian women found that both late entry into prenatal care and lack of needed STD screening may be related to their high infant mortality rates in their home islands. (Arakaki *et al*, 2004)
- Hawaii Department of Health does not report publicly data specifically for Micronesians; uses the CDC category "Asian/Pacific Islanders" (API).
- About 20% of reported cases of gonorrhea and Chlamydia in the API category are Micronesians (Pobutsky)

Chart 7: Percentage of Micronesians in Hawaii with STDs



Cultural Considerations

Vicki Lukere describes some practices that may have impact on the incidence of STDs:

- The practice of group sex (lainap), involving one woman and several men, which she asserts 'traditional precedents exist for the practice in some areas.' (Lukere, 2002) Theories abound as to why this practice persists, including male bonding, an urge to dominate women, the intent to punish, and a cultural acceptance of sexual

violence. In any case, this practice puts all the participants at high risk for STD transmission.

- In many Micronesian societies, there is a prohibition on sex between a man and his wife while she is breast-feeding, to improve the chances of the child's survival. A man may use his wife's withdrawal from sexual relations while she is breast-feeding as reason to seek comfort elsewhere.

Challenges For Healthcare Professionals

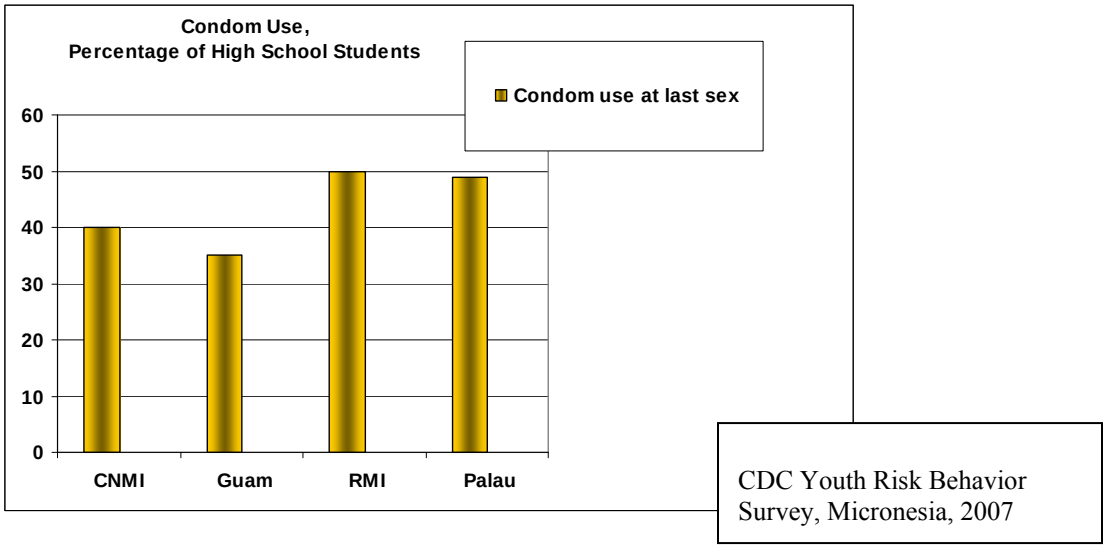
(based on a Key Informant interview with nurse on Oahu)

- STDs are common with new students arriving from Micronesia;
- STD prevention is difficult:

→"Women don't seem to have assertiveness to demand the man use a condom."

→ The men don't like to use condoms. Chart 8 shows condom use reported among Micronesian high school students.

Chart 8: Percentage of High School Condom Use in Micronesia



Recommendations:

- As it is still the cultural norm that men control reproduction, we need to convince the men first of the need to control disease by using condoms.
- Provide medically accurate sex education (in a culturally appropriate way).
- Consider creative ways to distribute condoms, especially to the adolescent population.

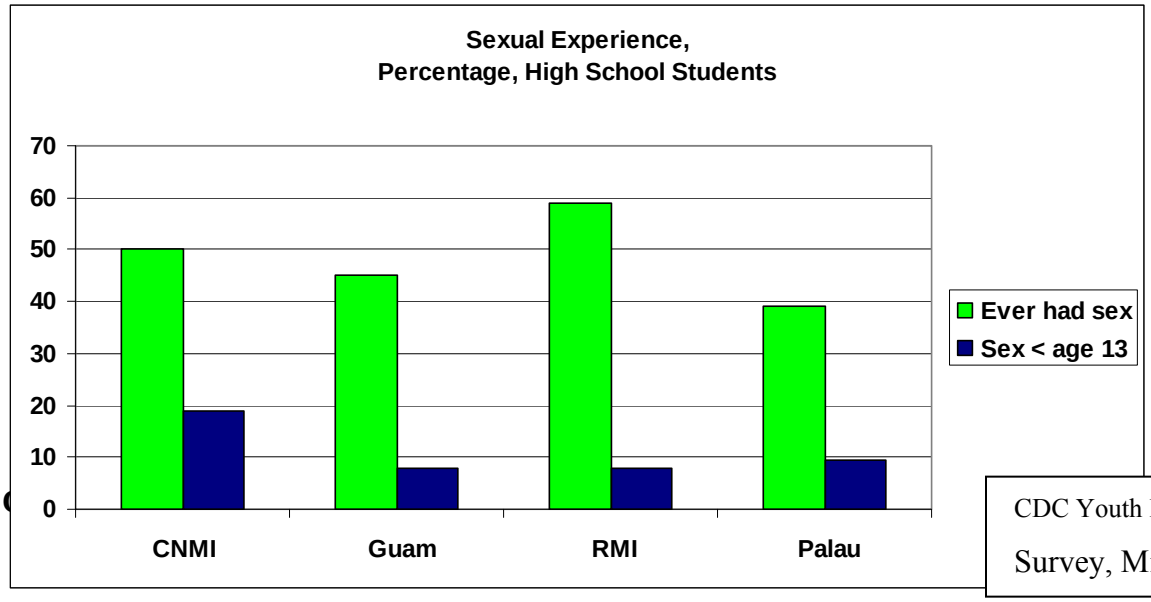
- Changing attitudes must be done first.

Teen Pregnancy

Young people all across the Pacific are having sex, and they're having it more frequently and at younger ages. (Chung, 2000) In 1995, in the Marshall Islands, 31% of women under 20 surveyed reported having been pregnant already. (South Pacific Commission, 1995) Chart 9 shows percentage of sexually active Micronesian teenagers. Many people prefer to believe that this is not happening. In some areas, the elders refuse to see it, or the community's religious beliefs may prevent it. Finally, sometimes the sense of family shame is just too great.

As a result, when teenagers do have sex, they do it without knowing how to protect themselves from pregnancy and sexually transmitted diseases (STDs). Without basic sex education or access to basic contraception, they are left to face two of the most insidious problems unarmed, and as a result, experience negative consequences associated with unintended pregnancies and STDs.

Chart 9: Percentage of High School Students w/Sexual Experience in Micronesia



CDC Youth Risk Behavior Survey, Micronesia, 2007

at times only with her husband's permission. (Dureau, 2001)

- Condoms are cheap and effective, but difficult to come by.
- The most widely used forms of contraception, withdrawal and condoms, leave the reproductive choice up to the man, confirming the attitude that a woman's body belongs to her husband or partner.
- If a woman asks a man to use a condom, this is often considered an insult that he has been unfaithful.
- In the Marshalls, family planning methods to reduce the number of unintended or mistimed pregnancies include, in order of preference: tubal ligation, birth control pills, rhythm method, and breastfeeding. (Levy *et al*, 1988)

Challenges proposed by Focus Group

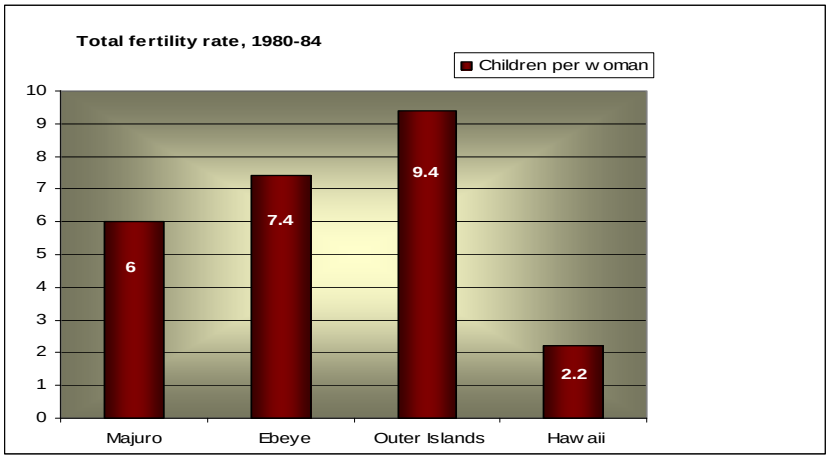
(based on Focus Group with female Micronesian youth on Oahu)

- (Focus group participants in April 2009)backed up the findings of early introduction of sexual activity as well as early and multiparous pregnancies.
  Comments:
  "Most teens get pregnant and don't think about returning to school."
  "All my friends from elementary school are pregnant or have had babies."
- While all acknowledged having some sex education in school, access to contraception was limited.
- Living on an island poses many barriers to receiving confidential services. Clinic staff were frequently relatives or friends of their families, and even being observed entering the clinic may identify girls as 'loose' women. "Girls are ashamed to go because people see you and they assume you are dirty."
- Condom use was unacceptable to their partners. "Boys are ashamed to use condoms. They have myths about them. They don't like to use them. Boys get offended because they think that if the girls tell them to use a condom, they are saying they are 'dirty.'"
- Family Planning: Other contraceptive methods such as birth control pills or IUDs were objectionable, as their partners all wanted large families. The women themselves identified that they would prefer to have no more than two or three children, but felt pressure from their partners and families to have many more.

"The man decides when to get married. They decide when to have the babies. Back at home, the men feel if the wife is on birth control, that it is a bad thing." Chart 10 shows fertility rates in Micronesia and Hawaii.

- Cultural bias towards large families: One woman stated that in their culture having many children guaranteed that someone would take care of them when they were old.

Chart 10: Total Fertility Rate in Pacific Islands



(based on data from Levy *et al*, 1988)

- Concerns about oral contraceptives included worries about weight gain and the fact that having to take a daily pill increased their risk of being exposed as using birth control. They preferred Depo-Provera injections as it allowed them to conceal their use of family planning method from their partners, but expressed the belief that it makes your hair fall out.

Challenges for Healthcare Professionals

(based on Key Informant interview with nurse in Oahu residential training center, April 2009)

- "All babies are blessings," is a frequent statement.
- Many Micronesian women will not consider abortion;
- Many have unrealistic beliefs about birth control;
- Many have babies and give them to relatives to raise;

- We see many of the males treat the females as "2nd class citizens." Some of the males have problems taking direct orders from females in authority positions. We give them counseling about how women are equal to men in the US.
- Micronesians will agree with you, smile, be very sweet, but they haven't understood &/or don't plan on actually doing what you've instructed them to do.
- Many have very little insight as to how their actions/behaviors affect their health
- Many are scared of "Western" health care; some just want to have "Island" medicine.

Recommendations:

- Don't assume your client is too young to be sexually active.
- Provide accurate information on contraceptive methods and assure that the client understands.
- Listen to client's concerns about birth control and allow time for the client to ask questions. Correct misconceptions when possible.
- Be sensitive to the fact that your client may need to conceal her use of contraceptives.
- Provide assurances of confidentiality.
- Educational tools need to be provided to Micronesian clients to increase awareness of teen pregnancy.
- Attitudes must be changed first in order to address this issue.

Diabetes And Obesity

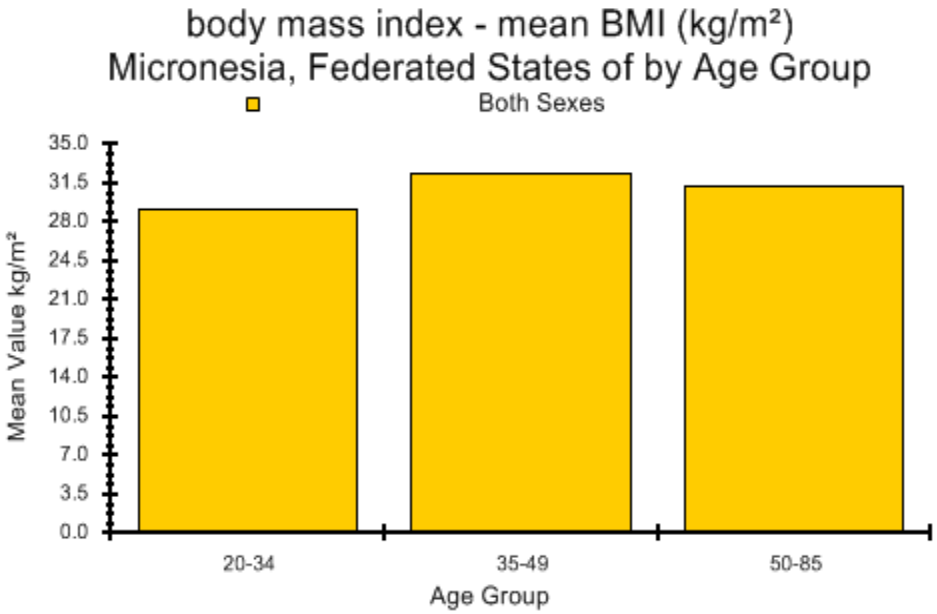
Diabetes and obesity, prevalent diseases in the Pacific Islands, are epidemic for Micronesians (Pobutsky, 2005). Additionally, diabetes, hypertension, cardiovascular disease, and the prevalence of such obesity-related conditions are likely to increase as obesity continues to rise (Inouye, 2000).

The Federated States of Micronesia (FSM) has received considerable attention for their alarming rates of obesity. Kosrae, an island within the FSM has 88% of adults aged 20 or older who are overweight. (Body Mass Index (BMI)>25), 59% are obese

(BMI>30), and 24% are extremely obese (BMI>35), (Cassalls, 2006). The average percentage of residents with diabetes in the FSM (20%) is triple that of the U.S.(Martin, 2008). The rate is even higher in some of the Micronesian Island States such as Kosrae where the percentage of residents with diabetes (30%) is more than 4 times the rate of the U.S. (Martin, 2008).

A change in customary eating habits was influenced by various factors such as Western colonization (Becker 2003).

Chart 11. Micronesian Body Mass Index by Age



Source: Shmulewitz D. Epidemiology and factor analysis of obesity, type II diabetes, hypertension, and dyslipidemia (Syndrome X) on the Island of Kosrae, Federated States of Micronesia, 2001 (http://www.who.int/infobase IBRef: 101261)

Challenges For Health Professionals

- Educating patients on making healthier lifestyle choices, despite abundance of processed foods in Hawai'i

Challenges for Micronesians:

- Change lifestyle especially in terms of food consumption/eating habits and exercise
- Changing attitudes towards nutrition and availability of traditional diet.
- Population dependent on welfare: high carbohydrate diets are more affordable

Health Consequences of Obesity:

- Cardiovascular disease
- Hypertensive disorders
- Diabetes, impaired quality of life
- Premature death (Keith, 2006)

Recommendations:

- Educate the health care workers to assess and council on nutrition and obesity
- Implement community-based participatory programs to increase awareness and support of community involvement
- Develop public policy to address obesity and diabetes issues
- Get interpreters to translate concerns for Micronesians to come into treatment as soon as possible,
- Get elders and/or community leaders involved in helping affected community members to come for treatment.

Mental/Behavioral Health

Mental health concerns in the Micronesian community include depression, alcoholism, violence and suicide. When the Micronesians come to Hawaii they are faced with a whole new environment- including stressors such as not being able to find a job, housing, and adapting to social norms with limited language skills. Suicide is the leading cause of death for young Micronesian men aged 15-29 (Rubinstein,1992). This is more than 10 times the suicide rate for American men of same age. Father Hezel cites that the rate for Trukese males between 15 and 25 is a startling 250 per 100,000. This is 20 times the

youth rate in the United States," (Hezel, 1989). Palau highest rates of schizophrenia in world (Bower 2007).

Challenges for Micronesians:

(based on focus groups, April 2009)

- Mental Illness is often attributed to 'black magic' or curses.
- When the Micronesians immigrants come to Hawaii, they face new environmental stressors. Many feel lonely and disappointed, especially if their life is not as they expected before they came therefore. As being alone is considered "truly fearsome" in some Marshallese cultures, this may lead to suicide.
- Lack of education on mental illness, alcoholism, and domestic violence, and knowing who and where to turn.
- "At home, alcohol is difficult to get. Here easy access- EBT card, money. Boys and cousins drinking, fighting, problems."
- Smoking Marijuana and cigarettes
- "Alcoholism, depression and domestic violence! Oh my lord, yes."
- "Problems in my family in Truk, my brother fighting- too much alcohol"

Challenges for Healthcare Professionals in Hawaii:

Father Hazel and Dr. Rubinstein do not believe that common practices in the US will provide solutions: "I do know that traditional Western solutions such as suicide prevention hotlines and counseling aren't the answer" (Hezel, 1989)

Recommendations:

- Include a mental health screening for anxiety, depression, post-traumatic stress disorder, and physical and substance abuse.
- Make sure to speak with them in private with interpreters if necessary to avoid embarrassment and the possibility of no follow up or loss of trust.
- Encourage use of Ministers/Pastors to help: Women and men talk separately to pastor and pastor's wife.

- For example- sexual violence – private matter- can't have a meeting with the men- meet with the minister's wife.

More research is needed in this area. For further information related to mental health, it would be critical to contact Susannah Wesley Community Center (Barbara Tom, April 2009)

Focus Groups Results

Common concerns expressed by Micronesians and health care providers in the focus groups include pronounced cultural differences, language and communication issues including information dissemination and sharing, health education, translation and interpretation issues, transportation and community/medical outreach, and behavioral and mental health.

Micronesian Cultural Values and Health Care

Cultural differences play a role transcending all areas of concern. First, the differences in seeking help, traditional healing, and cultural beliefs all lead to limiting access to care when there is a misunderstanding between the cultural norms of Micronesian society and the methods of medical science. It is important for medical personnel to understand the Micronesian community, values, beliefs, and their way of life that affects their response and ability to engage and participate in services.

Micronesian Views of the Health System

Unfamiliarity with the complexities of US health insurance can lead to limited access when a Micronesian patient is not aware of eligible programs that pay for available care. In Micronesia they are not used to things like going to the hospital, taking medications daily, or receiving so much new information. Completing paperwork, or answering so many personal questions, can be overwhelming. They do not understand how many of the systems work. For example, many Micronesians think that the insurance card will pay for everything. Another confusing issue is their welfare disability benefits.

When Micronesians leave their homelands, they are faced with a very new and strange world. Life is much more complicated and there are a whole new set of rules. Many cannot speak or read English, and are challenged with housing, transportation, and urban lifestyle. Generally with low incomes, they are unable to pay for medical bills and become more worried about paying medical bills than their health: “I’d rather die instead of paying bills”, was the story one woman shared about her friend. (Focus group, April

2009) Moreover, transportation problems such as no having a car or bus fare limit their ability to seek care.

They simply do not like to come for medical care because they fear being labeled. Sometimes they are ashamed that other people will see them and make judgments, one woman remarked. Another added "single mothers hesitate to come to the clinic because they feel ashamed." Additionally, another woman recalled that counselors in the Kalihi-Palama clinic have advised them about smoking or eating habits, so they hesitate to come because they are afraid that the staff will scold them for being unhealthy and not changing their behavior. Furthermore, some people do not go to the Kalihi-Palama clinic because of too much pride: "they think the health clinic is for low-income people, even if they are a low income family", commented another woman. Lastly, according to the focus group, it is their way to only go to the doctor when they are very sick: "They are not used to seeing doctors. They only see a doctor when they are sick. Most of them wait until they "collapse". As a result, they don't really care for follow-up checkups. Incurable illnesses are accepted with a fatalistic attitude, believed to be inevitable parts of life.

When they do come in to a clinic, they often experience that the clinics are busy and feel they are being ignored or not served with respect. An individual cited instances where, when they asked a person to repeat something, the person rolled her eyes. There is evidence of racism. One focus group participant said: "Let the people of Hawaii know that Micronesians are loving and good people and not the stereotypically defined troublemakers that they are perceived to be." Within any community including the Micronesian community there are good and bad people." (Focus group participant, April 2009)

The greatest asset of Micronesian people perhaps is their communal approach to working together and the strength of the social support networks of their churches. These are assets that could be used to better assist them.

Health Care Staff View Micronesians in the Health System

The Queen Emma Clinic has had a staff orientation training twice. The training gave an overview of the Micronesian culture. They want to begin training of the doctors and nurses in the hospital at Queens.

A Key Informant from a Maui clinic serving Micronesians cited the need for easily accessible staff training in cross-cultural competency, and for more qualified medical interpreters to provide professional translation services. She expressed the desire to hire and train Micronesians to work in the daily operations of the clinic, but none applied for job openings (personal communication, April 2009).

"A while ago there was a presentation done by a woman who took a trip to Micronesia. Her talk was about the people and their culture, how a man really depends on his wife and how they need interpreters. There also was a Micronesian Cultural Festival like a community fair where there was a PowerPoint presentation which explained the culture, which was very impressive and in-depth. There were also videos on their island regions." (Focus group participant, April 2009)

Recommendations:

- Utilize the Kokua Kalihi Valley model for cultural sensitivity training if available
- Engage the community leadership in promoting public health initiatives that conflict with the cultural norms.
- Promote collaborative relationships with women regarding decision-making for such things like birth control.
- Consider use of case managers or "gate keepers" to walk Micronesians through the process and serve as advocate-advisors for Micronesian patients who are unfamiliar with the system.

Language and Communication

Many medical providers rely heavily on translators for the diagnosis, treatment, and education of Micronesian patients. This results in a 'disconnect' between patients and healthcare staff. Support systems in health care, housing, and social services to need to understand their background and context, and to try to work together to address all needs in a way that is not so intimidating.

"Health is not discussed publicly. It is usually discussed only among family. There are some things men and women cannot discuss those things are discussed between the same gender within the family or with a physician." (Focus group participant, April 2009)

One woman said she feels most comfortable and would want to go see a doctor when she is able to express everything about her health concerns via interpreters. Another woman agreed stating that she comes to Kalihi-Palama clinic because of available interpreters. Another issue is that medical terms can be hard to understand, so Chuukese hesitate to come to health centers without translators and doctors who talk on a level they comprehend."

"They (Micronesians) say yes and agree with you, but you don't know if they really do." (Focus group participant, April 2009

"When you schedule a test for them (Micronesians), you're not sure if they always understand, they just nod their head to be nice (i.e. when they are to take a heart test, they must fast ahead of time, and when you try to tell them or show the instructions, you are never sure if they understand)" (Focus group participant, April 2009)

"I brought my daughter when she was very sick. I was told I had to make an appointment-. I made appointment. I could not see a doctor that day. Then went to hospital. When I got there, they told me if it is during the day I need to go to the clinic. At night go to the hospital."

For a variety of reasons, many Micronesian patients are not confident in disclosing personal information. For example, many of the elders are staying with younger daughters or nieces living in public housing, and if they disclose that information, their family may get evicted from their housing.

Culture plays a role in who can and cannot translate for each other in the Micronesian community. For example, a young person cannot translate to an elder, especially if the elder is a man. Also, females cannot translate for males, as inter-gender discussion of many health issues is taboo.

Patients may have a difficult time describing their symptoms. They may not have the words to describe it even in their own language.

Recommendations:

- Same gender service providers and careful attention to who can best translate according to cultural norms.
- More behavioral health support. “Behavioral health appointments are equivalent in length to approximately 8 social health appointments” (Focus group participant, April 2009)
- Have clients repeat back instructions, explain in multiple ways, and break it down simply, while watching for body language. Show pictures rather than writing things out. Labeling medications with more simple instructions and in their language. “Doctors and clinic staff should speak slowly, repeat, and show them (hand motions), and then the patients will be able to understand.” (Focus group participant) Model /role play behaviors of how to carry out a task, (i.e. how to refill a prescription)
- Provide clear instructions about things that could be taken for granted; i.e. how to refill their medications.
- Be more concrete. Ask them: how will they be able to come to the next visit; do they have a ride, do they have a way to pay, etc. will.
- Avoid Yes/No questions.

- Explain process of clinic visits vs. emergency care.
- Consider a call-in line like ASK-2000 where they can talk with a nurse (who speaks Marshallese/Chuukese).
- Confirm appointments by phone or community liaison visit the home to remind them and confirm that they have transportation.
- Make it clear that information will not be disclosed beyond the clinic. Confidentiality is a foreign concept and may need to be explained in different terms.
- Find the best suited family member who can act as an advocate, provide the most language assistance, and assist with compliance. Consider what would motivate them to comply.
- Ensure that they understand the consequences of not complying with medical recommendations and follow up. They need to understand the risks of non-compliance-even if it is a picture of amputated legs.
- Use visual charts to help identify symptoms, like the Pain Chart at Queens (in Chinese and other SE Asian languages) but the images are universal.
- Centers could provide extra activities like offering healthy recipes followed by showing how to cook them.
- First To Work program should have free classes that talk about these issues→ "healthy classes"
- Train Micronesians as Peer Educators and Navigators to assist Micronesians' access to health care and social services
- Train more Micronesians to provide professional translation services (KI)

Health Education

Many Micronesians cannot read, even in their native language. Another problem with pamphlets is the use of inappropriate language according to their culture; some "items" do not have names or words. "Other clinics have tried handouts in the native tongue, but many of them just end up in the trash." (Focus group participant, April 2009)

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Health education and knowledge is present in the younger generations. Handouts with graphics were preferred over just words. Videos were believed to be boring. Internet was said to be used for personal pleasure and not for educational means. (Focus group participant, April 2009)

"The church helps to remind them (the Marshallese) that this is America and they should learn about the "American way". Many churches teach young people about drug education and make them aware of what can happen here. They mentioned that substance abuse is not prevalent in their home islands. If someone is absent from a church function(s), church representatives go to the family to help." (Focus group participant, April 2009)

A key informant stressed the need to fund the training of peer educators and navigators to assist Micronesians in accessing health care (personal communication 2009). Navigators and peer educators can increase health literacy by directly supporting patients in accessing care, engaging Micronesian community leaders in educational strategies, and improving communication between health care providers and Micronesians. The same clinical director cited above, stressed a need for staff training in cross-cultural competency in order to improve quality of care for Micronesians.

Recommendations:

- Find and use previously created health information materials such as brochures or pamphlets (Communication Information and Education (CIE) materials).
- More community outreach with oral instruction, church sermons.
- Ultimately, face-to-face education and training are best accepted.
- Raise awareness of internet resources through institutions like at Job Corps and ESL classes.

Health Education materials available online:

- Medline Plus Chuukese & Marshallese**:** http://www.nlm.nih.gov/medlineplus/languages/languages.html

- Health Information Translations Chuukese & Marshallese http://www.healthinfotranslations.com/marshallese.php
- Infant & Childhood Immunization Brochures**:**
- http://hawaii.gov/health/family-child health/immunization/resources/infant/infant.html Hawaii Parent Information Center: http://www.hawaiipirc.org/handbook/english/english-keeping-healthy.html#
- Pacific Resources for Education and Learning**:** http://www.prel.org/teams/culturally-responsive.asp
- Micronesian Seminar: http://micsem.org/home.htm
- Understanding Marshallese Patients: http://www.hawaii.edu/cpis/mi_workshop
- National Association of Community Health Center http://iweb.nachc.com/downloads/products/ST_SRVPATNT_08.pdf
- Nations of Micronesia: http://www.nationsofmicronesia.org/
- Malo Lejmanjuri Marshallese Women's Group

Contact Nuia Loeak or Momoko Kabu (808) 953-5571

- Kio Marshallese Women's Club Contact: Francine Wase, Leimttu@gmail.com

Papa Ola Lokahi – Traditional health resources: http://www.papaolalokahi.org/home.htm

Transportation

During key informant interviews, several of the community health centers (CHCs) and community organizations highlighted the need for transportation in order to ensure patients were able to reach the appropriate medical facility for screening and treatment. This is a prevalent problem throughout the Micronesian population on Oahu where many families (that are often comprised of extended members outside the nucleus) were limited to one vehicle. In other cases, many of the elderly Micronesians had no reliable mode of transportation other than the bus routes that might not be easily accessible.

Queens has 1 free van to transport patients to and from appointments for the entire hospital, but it gets booked very quickly. Kalihi-Palama Health Clinic also helps patients get rides set up with the Handivan, but it costs $2 both ways, so some patients cannot

afford it. However, patients who can utilize The Bus are not eligible to ride the Handivan. Language barriers prevent many patients from taking The Bus.

Recommendations:

- Need more creative transportation solutions, transportation Hui, etc. Look for organizations that can provide bus fare or bus pass for Micronesians. Negotiate with The Bus to take no bus fee for patients that have medical appointment at some health centers where Micronesians frequent.

- Kalihi-Palama Health Clinic has been successful sending outreach staff to go patients' homes

Summary Recommendations

This report approached the needs assessment process by utilizing an extensive document review, key informant interviews, and focus groups with Micronesians and health care workers. It examined key health topics affecting Micronesian health in detail, including cancer, teen pregnancy, sexually transmitted diseases, obesity, diabetes and mental health,. Micronesians and the health care providers expressed a number of concerns including pronounced cultural differences, language and communication issues (namely information dissemination and sharing, health education, and translation and interpreter issues), transportation and community/medical outreach, and mental and behavioral health.

Recommendations commonly observed from the published literature, focus groups and key informant interviews suggest working collaboratively between Micronesian community members, health care organizations and other stakeholders to improve health care services for Micronesians (Pobutsky et al., 2005). Health education programs adapted for cultural appropriateness offer strategies to improve mutual understanding and cooperation (Braun, 2005).

At times it is difficult to find and hire Micronesians to improve culturally appropriate service delivery, including translation assistance. This shortage of trained Micronesians to work in health and social service fields represents an untapped economic opportunity. Development of training programs to meet these specific employment needs, in a community-based, culturally-appropriate way, would involve Micronesians, together with educational institutions, health care providers, state health department programs and others concerned with providing health care services. Adapting existing education and training programs, offered at local colleges and Hawaii Job Corps, could both meet the needs of the health care system and engender multiple benefits for both health and human service providers and Micronesians.

The high numbers of low literacy and limited English speaking Micronesians, and heavy reliance on parochial networks (Choi, 2008) indicate a need to deliver educational information through culturally accessible channels, such as church networks.

Access to quality health care for Micronesians in Hawaii is also limited by structural health care delivery systems, unable to transfer records and data of patients

migrating between Micronesia and Hawaii. Medical systems are structurally inadequate to transfer medical records and patient data of those migrating between Hawaii and Micronesia, interrupting continuity of care.

A community-based approach to incorporating the changes needed for improving the current health care system would involve all sectors of those involved in delivering health services to Micronesians: Hawai`i Department of Health, community health care centers, the University of Hawai`i, (stakeholders but not part of the service delivery system), immigration department, public transportation services, hospitals (Queens Medical Center, Straub, Kaiser Permanente, Kapiolani Medical Center, etc), research institutions, churches, and so forth (Shoultz, Oneha et al., 2006; Nacapoy, et al., 2008). Another method that may be helpful within the context of community-based collaboration is telecommunication medicine (Norton, et al., 1996).

Engaging the community in the process of assessing its needs and solutions is of utmost importance (Pobutsky et al., 2005; Shoultz et al., 2006). Often the issues surrounding health exceed the boundaries of direct service. Social services need to be coordinated, not only for health care but also for job training and placement, education, transportation, affordable housing, and counseling services. Providing a variety of social services for the community would be the most effective way to address health disparities among Micronesians living in Hawai‘i.

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