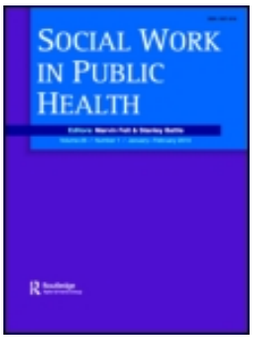

Social Work in Public Health

ISSN: 1937-1918 (Print) 1937-190X (Online) Journal homepage: www.tandfonline.com/journals/whsp20

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To cite this article: Lana Sue I.Ka'opuaPhD and DCSW and LSW & Debra J. Holden (2010) Cancer Disparities in the Federated States of Micronesia: Funding Challenges of a Developing Nation in Epidemiological Transition, Social Work in Public Health, 25:3-4, 296-310, DOI: 10.1080/19371910903240720

To link to this article: https://doi.org/10.1080/19371910903240720

Published online: 04 May 2010.

Social Work in Public Health, 25:296–310, 2010

ISSN: 1937-1918 print/1937-190X online
DOI: 10.1080/19371910903240720

Routledge
Taylor & Francis Group

Cancer Disparities in the Federated States of Micronesia: Funding Challenges of a Developing Nation in Epidemiological Transition

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This article describes funding and other challenges to cancer control in the Federated States of Micronesia (FSM) and examines funding opportunity announcements (FOAs) as a critical facet in implementation of the U.S. Compact of Free Association (COFA). As a health-relevant policy, COFA commits the United States to improve the health of FSM citizens and, specifically, allows the FSM to apply for U.S. federal health FOAs. Emerging research suggests discrepancies in the intent and implementation of COFA and indicates that the capacity of the FSM to secure U.S. health funding may be at least partially hindered by the ways in which FOAs are structured. Current cancer-related FOAs were identified to evaluate their relevance to the FSM. Eligibility requirements of all FOAs were systematically reviewed and compared with FSM infrastructural and human resources. Findings indicate that most FOAs have requirements more likely to be met in fully developed health service entities. Such requirements disadvantage the FSM when competed with the relatively more resource-rich U.S. states and health services systems. This situation predisposes the FSM to increased risk of disparate cancer outcomes. Highlighted is the need for distributive justice and specific efforts that enhance

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the health services infrastructure in the FSM and increase opportunities for resource-appropriate interventions. Findings provide considerations for those in international social welfare, public health, and other disciplines interested in the advancement of global health partnerships to eliminate cancer disparities in underresourced nations.

KEYWORDS Cancer, prevention and control, disparities, Federated States of Micronesia, funding, U.S. Compact of Free Association

BACKGROUND AND RATIONALE

The Federated States of Micronesia (FSM) is a developing nation with historic ties to the United States. This article examines the intent and implementation of the U.S. Compact of Free Association (COFA) as a health-relevant policy influencing cancer prevention and control in the FSM. The COFA is regarded as the single most important policy affecting the health of FSM citizens and, as such, sets a critical precedent for U.S. involvement in promoting the health of the FSM (Hezel, 1995, 2003). Of specific interest in this article is COFA implementation, as reflected in cancer-related U.S. funding opportunity announcements (FOAs) for which the FSM may be eligible.

Cancer is emerging as a leading cause of death in the FSM and increasingly contributes to the nation's overall disease burden (Palafox & Tsark, 2004). Although the need to address the cancer burden is recognized as urgent and important to the nation's overall health, efforts to develop cancer control interventions are severely challenged by complex and persistent environmental factors (Gunawardane & Demei, 2004).

Cancer control in the FSM is situated in the context of an epidemiological transition characterized by the prevalence of cancer and other chronic conditions (for example, diabetes, heart disease) typical of developed nations, as well as by communicable disease epidemics (for example, cholera, dengue) more typically experienced in nations of the developing world (Katz et al., 2004). In this transition, cancer control programs must vie for resources with programs that address the more immediate and pressing challenges posed by communicable diseases.

Health services funds in the FSM, including those for cancer control, are limited by the nation's lack of an industrial base and spiraling rates of unemployment and underemployment (FSM, Department of Economic Affairs, Division of Statistics, 2000). Over the last decade, per capita gross national income, the single most important indicator of a nation's wealth, has steadily declined and the World Bank (2005) places the FSM in the lower-middle income category of developing nations. In this environment of scarce

within-country resources, cancer control is heavily dependent on access to U.S. federal health funds, such as those which might be provided to the FSM through the COFA.

The COFA is a treaty agreement and public law that accords high priority to improving the overall health of FSM citizens and their health services (FSM Government, Legal Services, 2007). COFA provides the FSM with eligibility for U.S. federal health funds; thus, the FSM may compete with U.S. state and county governments as well as U.S. health entities. Anecdotal reports indicate that such competitions do not occur on a level playing field and tend to favor the relatively more resource-rich U.S. entities. Critics point to the continuing disparities burdening the FSM and the widening gap between cancer control programs in the United States and the FSM. It is suggested that the United States has failed in its treaty obligation to promote the health of FSM, as well as other U.S.-associated Pacific Islands nations (that is, republics of the Marshall Islands and Palau) and territories (that is, American Samoa, Commonwealth of the Northern Mariana Islands, Guam) (Palafox & Yamada, 1997).

A global perspective on cancer disparities is stressed in the Institute of Medicine report *Cancer Control Opportunities in Low- and Middle-Income Countries* (Sloan & Gelband, 2007). Emphasized are international collaborations and the important role that developed nations might play in offering the prospect of improved cancer outcomes to developing countries like the FSM. The present article proceeds from this global perspective and focuses on the challenges and opportunities for collaboration in cancer control with and for the FSM. The relevant literature is reviewed with attention to the cancer burden of the FSM, historical precedents in United States–FSM relations, the COFA as a health policy-relevant document, and challenges and opportunities for cancer health partnerships.

LITERATURE REVIEW

Foreign Domination and Indigenous Health

The area now known as the FSM comprises more than 600 islands and atolls located across an ocean expanse of 18,000 miles and was settled several thousand years ago by ancient people sailing east from Asia and north from Polynesia (FSM Government, *Geography*, 2007; Hezel, 2001). In contemporary times, this geographically dispersed nation is home to indigenous Micronesians with many diverse cultural traditions, eight official languages, and seven other living languages (FSM Government, Department of Economic Affairs, Division of Statistics, 2000). Despite such diversity, the indigenous people of the area share a common history of colonization and/or domination by more powerful European and Asian nations and most

recently, by the United States (Hezel, 1995). The influence of foreign control, albeit well-intentioned in some instances, has not always had a positive impact on the health and well-being of the indigenous Micronesians (Feasley & Lawrence, 1998). For example, during the post–World War II period of re construction, American soldiers introduced the indigenous people to cigarette smoking and U.S. companies mounted aggressive campaigns to market tobacco and alcohol (Hezel, 1995; Palafox & Tsark, 2004).

Historic Precedents to U.S. Involvement in FSM Health Services

The United States has maintained a steady presence in the region since Japan surrendered the islands and atolls at the close of World War II (Hezel, 1995).The archipelago was catapulted into global view by the major battles waged in this area of the western Pacific Basin. From 1914 to 1945, the islands were a colony of the imperial Japanese empire with Chuuk Lagoon serving as the primary fleet anchorage for its admiralty. Considered the Pearl Harbor of the Japanese navy, the lagoon was the target for Operation Hailstone, a campaign in which American forces successfully destroyed hundreds of Japanese ships, submarines, support vessels, and aircraft. This 1944 operation is credited as crippling the Japanese war effort and turning the tide of victory in favor of the United States (U.S. Central Intelligence Agency, 2003). The human cost of battles like Operation Hailstone was high and took a grave toll on the lives of both Americans and Micronesians (Hezel, 1995).

Upon liberation, U.S. forces found the indigenous Micronesians in extremely poor health—malnourished, diseased, without proper clothing—and the land and seas from which the islanders had once derived health and well-being were neglected or severely devastated by the war (Poyer, Falgout, & Carucci, 2002). Clearly, U.S. assistance to the indigenous people was needed and well-deserved given their extreme sacrifices. However, the nature of the U.S. relationship in restoring the health and well-being of the indigenous Micronesians was riddled with political conflict at the nexus of militarism and democratic ideals.

Ostensibly, World War II had been fought to end colonial domination and exploitation. In the war's aftermath, this philosophical perspective tempered the role of the United States in these islands of the western Pacific. Specifically, the United States was hesitant to assume a relationship with the islands that might be construed as colonial and imperialistic. However, at the same time, the war had cemented the popular belief that the islands were strategically valuable as a gateway to Asia and the looming threat of possibly hostile Asian nations. Thus, in the years immediately following the war and into the ensuing years of the Cold War, the concern for global security among the allied forces was elevated to a high pitch. The Trust Territory of the Pacific Islands (TTPI), a strategic trusteeship, was shaped to address

the quandary of U.S. occupation and militarization without colonization (Hezel, 1995).

Mandated by the United Nations Security Council in 1947, the TTPI accorded the United States with the right to make strategic military use of the islands, exclude visitors, and take actions deemed necessary for security purposes. In return for these rights, the United States agreed to prepare the indigenous people for self-governance and to address their educational and health needs (TTPI, 1965). The TTPI was dissolved when the constituent island groups of Chuuk, Pohnpei, Kosrae, and Yap became states and formed the FSM. A new policy document was articulated to define the new nation's relationship with the United States (Hezel, 1995). The COFA resulted (FSM Government, Legal Services, 2007).

COFA and FSM Health

Guided by the philosophical and pragmatic concerns reflected in the TTPI, the COFA was formulated, ratified by Micronesian plebiscite in 1983, and signed into law by the U.S. Congress in 1986 (FSM Government, Legal Services, 2007). The COFA is a series of documents that define aspects of the United States–FSM relationship (for example, governmental, economic, security, and defense) and designates the FSM as a freely associated state (FAS) of the United States.

By definition, an FAS is a postcolonial form of amicable protection in which a less powerful nation delegates to the more powerful one some authority normally retained by a self-governing state. In return, the less powerful nation is given some form of favored economic status (Wikipedia, 2007). This definition aptly describes the current relationship of the FSM and United States. As per the COFA (FSM Government, Legal Services, 2007), the FSM as FAS agrees to give the United States exclusive military access and the right to deny other nations access. In return, the United States agrees to provide the FSM with direct financial assistance and with access to certain federal grant programs. Due to the persistent and profound health needs of FSM citizens, COFA accords high priority to U.S. funding of health services programs (Feasley & Lawrence, 1998; Hezel, 1995; Palafox & Tsark, 2004).

The COFA specifies health sector grants as the primary mechanism for assistance in health services programs. Under Title II on Economic Relations, Article I pertaining to Grant Assistance, the compact explicitly states that the U.S. government will provide assistance on a sector grant basis with priority given to the health sector (FSM Government, Legal Services, 2007). Through Title II, Article I, the FSM is eligible for health services grants and may compete with the 50 states, Alaska Native and American Indian tribal entities, and U.S. territories (for example, American Samoa, Guam) for funding support. Eligibility to apply for health sector grants were reiterated in the 2004 COFA amendments that extend U.S. involvement in the FSM for

an additional 20 years (FSM Government, Legal Services, 2007). In the last decade, COFA-related grant funds have accounted for more than one-half of the government and health budget (Hezel, 1995, 2003).

Significant Differences in Cancer Control and Disparate Cancer Outcomes

Significant differences in resources available for cancer control exist between nations of the developed and developing worlds. In the United States and other developed nations, cancer control includes a spectrum of interventions such as prevention education, early detection screening, diagnostics, oncology treatments, psychosocial supportive care, clinical trials, and palliative care. By comparison, resources for cancer control interventions are considerably more limited in developing nations like the FSM (Sloan & Gelband, 2007). Limitations in health infrastructure (for example, trained human resources, supplies for early detection screening, medical technologies) place the FSM and other developing countries at increased risk for disparate cancer outcomes (Gunawardane & Demei, 2004; Palafox & Tsark, 2004). In particular, the lack of early detection screening and timely diagnosis and treatment are associated with higher rates of cancer mortality (Sloan & Gelband, 2007).

Cancer is emerging as a leading cause of death among three of the four states in the FSM (Ichiho, Gladu, Keybond, & Ruben, 2004; Ichiho, Wong, Hedson, & David, 2004; Taoka, Hancock, Ngaden, Yow, & Durand, 2004). In the states of Chuuk, Pohnpei, and Yap, the most common causes of cancer-related mortality are attributed to carcinoma of the lungs, ovary, cervix, female breast, and prostate. Oral cancer, secondary to combined betel nut and tobacco use, is also identified as a leading cause of cancer mortality in Yap (Taoka et al., 2004). Cancer is not presently a leading cause of death in Kosrae and no single type of cancer contributes to its mortality burden (Shehata, Kroon, Skilling, & Taulung, 2004). Clinicians and other health services personnel suggest that cancer mortality rates may be underreported in all states due to limitations in cancer control infrastructure (Shehata et al., 2004).

Limitation in cancer control interventions within the FSM include (1) infrastructural constraints (for example, lack of centralized tumor registry, no regional pathology lab), (2) lack of human resources (for example, few if any pathologists or cytologists are available to confirm the presence of cancer and the states are dependent on out-of-country resources that are costly and time-consuming), and (3) other factors unique to geographic dispersion of the population across many islands and atolls (for example, transportation between population centers and remote islands and atolls is costly, time-consuming, and limited; case records from outer island clinics may not be returned to central office for diagnostic coding).

Challenges to collecting accurate and reliable cancer-related statistics point to the importance of establishing a central tumor registry and is accorded high priority by all four states (Ichiho, Gladu, et al., 2004; Ichiho, Wong, et al., 2004; Shehata et al., 2004; Taoka et al., 2004). Other priority areas identified by the states, include the need to (1) develop a comprehensive cancer plan, (2) enhance knowledge and skills specific to provision of cancer care (for example, physicians need training to improve accuracy in diagnosis and staging of tumors; laboratory technicians need training to stay abreast of new tests, nurses need training in counseling on cancer risk behaviors and provision of prevention education), (3) increase access to pathologists and cytologists who can reliably and accurately read results of biopsies, Papanicolaou tests (that is, Pap smears), and other medical screening methods used to detect premalignant and malignant processes, (4) increase access to equipment such as ultrasonography machines and supplies such as Pap smear kits, (5) enhance the capacity of information technology systems with an emphasis on computer software for use in collection, management, and analysis of epidemiological and health services data, and (6) increase access to those with expertise in collection, management, and analysis of biostatistics and with expertise in grant-writing (Ichiho, Gladu, et al., 2004; Ichiho, Wong, et al., 2004; Shehata et al., 2004; Taoka et al., 2004).

A primary intent of the COFA is to provide the FSM with assistance through health sector grants that include funding for cancer control (FSM Government, Legal Services, 2007). As a freely associated state of the United States, the FSM is eligible to respond to U.S. health services FOAs. However, the implementation of COFA health-related provisions appears problematic, with the FSM unable to secure funds for cancer control interventions. Informed by the extant literature, this study aimed to identify all current U.S. federal funding opportunities specific to cancer control, determine eligibility requirements, and evaluate their potential relevance for cancer control in the FSM.

METHOD

We conducted a review of FOAs catalogued on the federal government's Web site at www.grants.gov. Grants.gov was established as a resource to simplify applying for financial assistance and reporting of grant activities and statistics. As a central storehouse for more than 1,000 grant programs totaling about $400 billion in annual awards (U.S. Government, Centers for Disease Control and Prevention, National Comprehensive Cancer Center Program, 2007), Grants.gov maintains a current listing of all FOAs. Announcements can be located through searches on specific content areas (for example, cancer) or by government agencies (for example, Centers for Disease Control and Prevention [CDC]). Grants are posted as open announcements with specified

closing dates. Each grant announcement also includes an archival date (that is, when the announcement will be store as an archived document). The search conducted for this study aimed to (1) determine funding opportunities available for cancer control during the 2006–2007 fiscal year, (2) describe the specific requirements of current opportunities, and (3) compare these requirements with current FSM capabilities, as gleaned through our review of the relevant literature. For these requirements, we were interested in determining whether the FSM would meet criteria for application and to identify barriers that might prevent the FSM from securing funds.

An exhaustive search of the Web site for grants was conducted in the broad area of health using the following keywords: cancer control, cancer prevention, comprehensive cancer control, cancer care, and cancer disparities. The initial search yielded 176 grants spanning a 5-year period from 2002 to 2007. Those FOAs released prior to July 1, 2006, were then excluded in order to determine the types of funding opportunities that have been available to FSM during the current fiscal year. Also excluded were those FOAs that were not directly related to cancer control (for example, assessing measures of youth tobacco smoking, CDC RFA-DP07-003). After this initial exclusion, 51 FOAs remained on the exhaustive list. We then scanned through the contents of the abstracts of these 51 FOAs and determined that 16 were specific to cancer prevention and control. The announcements excluded at this stage of review included additional ones that had titles that seemed like they may be related to cancer control (for example, "Strengthening Non-Communicable Disease Prevention and Health Promotion Capacity in Developing Countries," CDC-RFA-DP07-708), but through more detailed review of the entire announcement, it was determined that the award was either targeted toward one source (International Union for Health Promotion and Education in the example above) such that the FSM was excluded from the competition or developing countries were excluded in the announcement itself (for example, "Minority-Based Community Clinical Oncology Program," U10, RFA-CA-07-049 excluded all "foreign institutions"). Additional review determined that 12 (75%) of the 16 were actually intended for only one recipient, which was usually specified in the announcement (for example, Prevention Research Centers, American Indian tribes) and, therefore, did not apply to the FSM. Ultimately, we identified 4 FOAs specific to cancer control and released between July 1, 2006, and June 30, 2007. Of these, 2 were released by the National Cancer Institute (NCI) and 2 by the CDC (Note: one FOA [National Cancer Prevention and Control Program, CDC-RFA-DP07-703] encompasses three programs, each with separate eligibility criteria). Once the review was narrowed down to this pool of FOAs, we systematically reviewed each to determine whether the FSM would be eligible to apply based on the criteria of (1) inclusion of "foreign institutions"; (2) infrastructural requirements (for example, current cancer registry that met CDC requirements, facilities such as laboratories to analyze Pap smear findings,

clinical specialists providing in-country services, technical expertise such as program evaluators with knowledge of community-based participatory research approaches), and (3) FSM capacity to meet eligibility requirements.

FINDINGS

NCI Funding Opportunities

Two cooperative agreements were released by the NCI during the specified time period, both of which were intended to develop community clinical oncology programs (CCOPs). These programs are established by NCI to provide a network of community medical practitioners who conduct cancer prevention and treatment clinical trials (U.S. Government, National Cancer Institute, 2007). Eligibility requirements for these applications included (1) demonstrated history of successful accrual of patients into clinical trials, (2) access to staff oncologists with experience in patient accrual into clinical trials, and (3) that applicants also have to work with an NCI-designated cancer center that serves as the CCOP research base to design the clinical trials and conduct data analysis. Required infrastructure for this program includes facilities such as laboratories, inpatient and outpatient resources, cancer registries, and other mechanisms that support the research activities. Applicants also have access to "appropriate professional resources" available, including experts in radiotherapy and pathology.

The second NCI opportunity was for the Minority-Based CCOP (MB-CCOP), which is similar in design to the CCOP. The primary purpose of the MB-CCOP is to increase clinical trial accrual among minority patients. Applicants seeking funds for this program must meet the same requirements as those described for the CCOP and additionally must demonstrate service to a large minority population. Successful applicants must document that at least 40% of newly diagnosed cancer cases are among patients representing a minority population.

CDC Funding Opportunities

The CDC is by far the lead agency for funding cancer control program development and implementation. Currently, the CDC has three major program efforts in the area of cancer control: the National Comprehensive Cancer Control Program (NCCCP), the National Breast and Cervical Cancer Early Detection Program (NBCCEDP), and the National Program of Cancer Registries (NPCR). These three programs each have separate eligibility criteria but are included under a single FOA, the National Cancer Prevention and Control Program (NCPCP). The NCPCP, or umbrella announcement, was released in January 2007.

The NCCCP supports the advancement of a coordinated cancer control effort through a coalition that operates across a state, tribe, or territory. This announcement includes specific language that encourages applications from the FSM and other U.S.-associated Pacific Island jurisdictions. A comprehensive cancer plan is required and must be in place prior to application. The applicant must also be able to assess the local cancer burden.

The NBCCEDP was established in 1990 through a congressional law that provides breast and cervical cancer screening to women from 50 to 64 years of age who are at or below poverty level and who are either uninsured or underinsured. NBCCEDP focuses on screening and diagnostic services for women for breast and cervical cancer. Thus, applicants must demonstrate the capacity to provide these services. Access to screening tests such as mammography and Pap smears must be evident. In addition, since the timeliness of diagnostic services is a program performance measure, applicants must demonstrate the ability to provide services such as breast ultrasonography, fine needle aspirations, and colposcopies within 30 days of receipt of an abnormal finding. As these services are provided, programs are required to collect clinical data on the women served and report them to the CDC on a regular basis. Thus, applicants need to demonstrate the capacity to collect and report this type of data.

The NPCR collects data on the occurrence of cancer; the type, extent, and location of the cancer; and type of initial treatment. The requirements for the NPCR are very specific and indicate that eligibility to apply is dependent on the capacity to cover a total population of not less than 250,000, as determined by the U.S. Census Bureau. In addition, applicants must have adequate computer hardware and software resources in place to support data entry, monitoring and tracking, data linkages, and data security. A qualified and experienced cancer tumor registrar must be on staff to assess and ensure data quality as well as to provide education and training coordination.

Racial and Ethnic Approaches to Community Health Across the United States (REACH US) provides funds to local community action organizations that address health disparities, including breast and cervical cancer. Activities focus on the involvement of an established coalition that addresses disparities through education and prevention. Thus, applicants must have a functioning coalition in place prior to application and must also have the capacity to maintain an internal database to collect data for monitoring and capturing the process and outcomes of all activities. An evaluator with experience in community-based approaches is required.

In summary, our review of FOAs indicates that the requirements of almost all FOAs do not reflect FSM realities and its needs for cancer control. Importantly, infrastructural constraints and human resource limitations in the FSM are preempted by application requirements. Thus, while the intent of the COFA is to improve the health status and health services of the FSM, the policy's implementation, as reflected in FOAs, fail to support cancer control

appropriate to the developing nation of the FSM. Key findings are displayed in Table 1.

DISCUSSION

Findings from this study extend the published literature on the continuing health needs of the FSM and the concomitant importance of U.S. collaboration in promoting the health of FSM citizens (Feasley & Lawrence, 1999). By extension, the need for U.S. collaboration in cancer control is crucial given that the FSM remains a developing nation in epidemiological transition, with cancer emerging as a leading cause of death; that the FSM is presently without an industrial base to support its economy; and that the FSM is designated favored economic status as an FAS of the United States (Hezel, 2003; Palafox & Tsark, 2004).

This study proceeds from the treaty agreements articulated in the COFA (FSM Government, Legal Services, 2007). This legal document and public law is relevant to health policy because it specifically guarantees the FSM access to U.S. federal health sector grants. These grants are competitive awards and structured by FOAs. Announcements specific to cancer control were the focus of this study. Methods used included a systematic and thorough review of all relevant FOAs released over a year's time in the area of cancer control and prevention. The methodological procedures used in this study generally follow those used in an earlier CDC study that described the agency's funding of cancer control in the entire region of the U.S.-associated Pacific Islands jurisdictions. Findings from the earlier study are consistent with those found in the current study (Research Triangle Institute, 2007).

Our findings indicate that announcements are written to a broad pool of applicants from state health departments and cancer facilities in the U.S. states. Many if not most of these announcements have requirements that are specific to these more fully developed health/public health entities and do not allow for flexibility to support less developed entities like the FSM. Findings point to the need for announcements more relevant to the FSM as well as to possibly other FASs and territories of the United States that also have urgent needs for cancer control and developing economies (Gunawardane & Demei, 2004).

Further suggested by our findings is the continuing need for systematic attention dually aimed at what can be done at the U.S. federal health agency level, as well that which can be done at the level of FSM public health services and cancer control programs. These aims are not mutually exclusive but require dual foci. At the U.S. federal health agency level, there is a continuing need to revisit the nature, intent, and eligibility requirements of FOAs. Optimally, such efforts would involve the development of announcements that promote resource-appropriate cancer control interventions (for example,

TABLE 1 Cancer Control Funding Opportunities by FOA Requirements and FSM Capacity

Funding Opportunity Announcement (FOA)	FOA requirements	FSM capacity to meet requirements
Community Clinical Oncology Program (CCOP)	• History of accrual to clinical trials • Oncologist with experience in patient accrual • Facilities: laboratories, inpatient/outpatient resources, tumor registry • Professional resources: radiotherapy, urology, gynecology, pathology	• Unable to meet requirements on accrual • Unable to meet most requirements for specialized facilities and professional resources
Minority-Based Clinical Oncology Program (MB-CCOP)	• Same requirements as CCOP • Minority patients ≥40% of new cases	• Confirmation of diagnosis problematic without access to pathologist and cytologist • Physicians lack training to assess clinical symptoms
National Cancer Prevention and Control Program: National Comprehensive Cancer Control Program (NCCCP)	• Specific language encourages application • Comprehensive cancer plan written and in place • Able to assess local cancer burden	• Able to meet all requirements, although assessment of local burden may not be wholly accurate in absence of centralized registry
National Cancer Prevention and Control Program: National Breast and Cervical Cancer Early Detection Program (NBCCEDP)	• Able to provide mammography and Pap smears • Can provide breast ultrasonography, fine needle aspirations, colposcopies within 30 days of receipt of abnormal finding • Can collect/report clinical data	• Unable to meet most if not all requirements • Ultrasonographic imaging and Pap smear kits not always available
National Cancer Prevention and Control Program: National Program of Cancer Registries (NPCR)	• Requires total population ≥250,000 • Capacity to assess data quality and provide education and training coordination by certified cancer tumor registrar	• Total population is about 107,000 • Certified cancer tumor registrar not available
Racial and Ethnic Approaches to Community Health Across the United States (REACH US)	• Functioning coalition able to provide disparities-related education and prevention • Can maintain database to capture process and outcomes of activities • Experienced evaluator, knowledgeable in community-based participatory approaches	• Maintenance of database difficult due to infrastructural limitations and human resource constraints • Lack access to experienced evaluator with knowledge of Community-Based Participatory Research approaches

training and continuing education of health services personnel, infrastructural development, and access to cancer-related equipment and supplies). In sum, announcements are needed to better address the needs of the FSM and, thus, fulfill the promise of the COFA to promote health through the support of relevant services to this developing nation.

The current study has two major limitations. First, the study reviews only 1 year of announcements specific to cancer control opportunities. Admittedly, this is a narrow snapshot of announcements available to the FSM. A review of announcements released over a longer period of time might provide information about additional barriers faced by the FSM in seeking cancer control funding support. Such a review might also detect changes in announcements over time; this would seem to be useful given the current climate for international collaboration in cancer control with and for developing nations like the FSM (Gunawardane & Demei, 2004; Palafox & Tsark, 2004; Sloan & Gelband, 2007). Second, the authors recognize that another limitation of the current study is its lack of authors/reviewers from the FSM. Through the authors' work in the U.S.-associated Pacific Islands, several individuals were approached to participate in this review of funding opportunities. These individuals expressed enthusiasm for participation. However, due to the constraints of their primary duties within the healthcare and public health services system of the FSM, they could not afford the time to participate in study development and manuscript preparation. This situation is understandable, given the pressing health needs of the FSM as well as the ongoing human resource constraints commonly described by Pacific Islander providers as "wearing many hats." Nonetheless, the need to include the perspective of this important "voice" is crucial and points to the need for continued exploration of ways to facilitate dissemination of information from indigenous providers on the frontline of the epidemiological transition in developing nations like the FSM. These limitations notwithstanding, the current study presents findings that illustrate some of the very real constraints faced by the FAS of the FSM in its efforts to access available cancer funding support.

Although the health needs of the FSM are complex and persistent, positive advances have been made to eliminate cancer and other health disparities. Notably, resources and technical support of regional cancer control efforts (for example, Cancer Council of the Pacific Islands) by a U.S. entity (for example, the University of Hawaii) evidence promising results. Through this collaboration, the FSM and other U.S.-associated Pacific Island nations and territories have developed a functional coalition, identified cancer control priorities, completed an assessment of the local cancer burden, and are moving forward in the development of a regional tumor registry (Gunawardane & Demei, 2004). Indeed, such efforts are congruent with the emphasis on global partnerships recommended in the Institute of Medicine report *Cancer Control Opportunities in Low- and Middle-Income Countries* (Sloan & Gelband, 2007).

Concerns about neocolonialism, U.S. exploitation, and the fostering of unhealthy, symbiotic dependencies that do not benefit the FSM and other Pacific Basin FASs have long beset United States–FSM relations. These concerns are legitimate ones and underscore the relevance of community-based participatory principles and approaches (Minkler & Wallerstein, 2003) in advancing future global partnerships between developing nations and U.S. federal health agencies, university-based centers of excellence, cancer centers, and the private sector. Meaningful participation of all partners, culturally responsive dialogic processes, indigenous leadership, self and group reflexivity, and respectful delineation of intellectual property are crucial, albeit often used as "buzz" terms in the area of disparities work. However, the translation of these terms into action remains essential in efforts to bring about distributive justice in health and, by extension, in cancer control. While difficult, more time-consuming, and potentially fraught with cultural and political misunderstandings, such efforts are necessary in offering the prospect of avoidable cancer mortality and enhanced quality of life to those affected by cancer in the FSM and other developing nations.

REFERENCES

Feasley, J. C., & Lawrence, R. S. (Eds.), (1998). *Pacific partnerships for health. Charting a new course.* Washington, DC: Institute of Medicine, National Academy Press.

Federated States of Micronesia Government, Department of Economic Affairs, Division of Statistics. (2000). *2000 population and housing census report*. Retrieved July 15, 2007, from http://www.spc.int/prism/Country/FM/stats/Publications/Census_Survey/2000_Census/FSM/Analytical%20Report/00NatlCenRept.pdf.

Federated States of Micronesia Government. *Geography*. Retrieved July 15, 2007, from http://www.fsmgov.org/info/geog.html.

Federated States of Micronesia Government, Legal Services. (2007). *U.S. Compact of Free Association*. Retrieved July 15, 2007, from http://www.fsmlaw.org/compact/t02art01.htm.

Gunawardane, K., & Demei, Y. (2004). Cancer Council of the Pacific Islands: Speaking with one voice. *Pacific Health Dialog, 11*, 14–16.

Hezel, F. X. (1995). *Strangers in their own land. A history of colonial rule in the Caroline and Marshall Islands*. Honolulu: University of Hawaii.

Hezel, F. X. (2001). *The new shape of old island cultures. A half century of social change in Micronesia.* Honolulu: University of Hawaii.

Hezel, F. X. (2003). Rough seas ahead: The FSM economy during Compact II. *Micronesia Counselor, 44*. Retrieved July 15, 2007, from http://www.micsem.org/pubs/counselor/frames/roughseasfr.htm.

Ichiho, H. M., Gladu, R., Keybond, K., & Ruben, K. (2004). Cancer in Chuuk state, Federated States of Micronesia. *Pacific Health Dialog, 11*, 30–36.

Ichiho, H. M., Wong, V., Hedson, J., & David, W. J. (2004). Cancer in Pohnpei state, Federated States of Micronesia. *Pacific Health Dialog, 11*, 44–49.

Katz, A. R., Palafox, N. A., Johnson, D. B., Yamada, S., Ou, A. C., & Minami, J. S. (2004). U.S. Pacific Island jurisdictions: Challenges and methodologic issues. *Pacific Health Dialog, 11*, 84–87.

Minkler, M., & Wallerstein, N. (Eds.) (2003). *Community-based participatory research in health*. San Francisco: Jossey-Bass.

Palafox, N. A., & Tsark, J. U. (2004). Cancer in the U.S.-associated Pacific Islands (USAPI): History and participatory development. *Pacific Health Dialog, 11*, 8–13.

Palafox, N., & Yamada, S. (1997). The health predicament of the U.S.-associated Pacific Islands: What role for primary health care? *Asian American Pacific Islander Journal of Health, 5*, 49–56.

Poyer, L., Falgout, S., & Carucci, L. (2002). *The typhoon of war: Micronesian experiences of the Pacific war*. Honolulu: University of Hawaii.

Shehata, C., Kroon, E., Skilling, V. A., & Taulung, L. (2004). Cancer in Kosrae state, Federated States of Micronesia, *Pacific Health Dialog, 11*, 37–43.

Sloan, F. A., & Gelband, H. (Eds.) (2007). *Cancer control opportunities in low- and middle-income countries*. Washington, DC: Institute of Medicine of the National Academies, National Academy of Sciences.

Taoka, S., Hancock, T., Ngaden, V., Yow, A., & Durand, M. (2004). Cancer in Yap State, Federated States of Micronesia. *Pacific Health Dialog, 11*, 50–56.

TTPI. (1965). *Trust Territory of the Pacific Islands*. Saipan, Commonwealth of the Northern Mariana Islands: Author.

U.S. Government, Centers for Disease Control and Prevention, National Comprehensive Cancer Center Program. (2007). Retrieved September 2, 2007, from http://www.cdc.gov/cancer/ncccp.

U.S. Central Intelligence Agency. (2003). *The world factbook: Federated States of Micronesia*. Retrieved September 3, 2007, from http://www.grants.gov.

U.S. Government, National Cancer Institute. (2007). Retrieved September 3, 2007, from http://www.cancer.gov.

Wikipedia. (2007). *Associated state*. Retrieved August 15, 2007, from http://en.wikipedia.org/wiki/Associated_state.

World Bank. (2005). *World development indicators 2005*. Washington, DC: Author.