Chapter 1 Psychology in Micronesia



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Overview of the Micronesian Region

In this chapter, we describe the five US-affiliated Pacific Island (USAPI) jurisdictions in the western Pacific region of Micronesia: the US Territory of Guam, the quasi-independent Commonwealth of the Northern Mariana Islands (CNMI), and the three independent nations of Palau, the Federated States of Micronesia (FSM), and the Republic of the Marshall Islands (RMI) (see Table 1.1). The Federated States of Micronesia includes four states: Yap, Chuuk, Pohnpei, and Kosrae. Although the term "Micronesia" commonly comprises the island nations of Kiribati and Nauru in addition to the USAPI, we exclude these two non-USAPI countries in this chapter, as their long colonial histories under the United Kingdom have shaped

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© The Author(s), under exclusive license to Springer Nature Switzerland AG 2022 G. J. Rich, N. A. Ramkumar (eds.), *Psychology in Oceania and the Caribbean*, International and Cultural Psychology, https://doi.org/10.1007/978-3-030-87763-7_1

 Table 1.1 Population, land area, and gross domestic product (GDP) per capita for the five USAPI jurisdictions

USAPI jurisdiction	Population (2020)	Land area (km²)	GDP per capita (2017/2018)
Guam ^a	168,775	540	\$31,848
CNMI ^a	57,559	460	\$23,117
Palau ^a	18,094	460	\$12,310
FSM ^b	104,650	710	\$2408
Yap	11,577	124	\$3468
Chuuk	49,509	127	\$1436
Pohnpei	36,832	344	\$3393
Kosrae	6732	111	\$2344
Marshall Islands ^a	59,190	180	\$3195

^aAdapted from Worldometer (2021) (https://www.worldometers.info/), with population figures projected for 2020 and GDP figures projected for 2017.

their development and contemporary social services along different paths than the USAPI.

Geographically, the region is composed of both "high" volcanic islands and low-lying coral atolls and islands (see Fig. 1.1). Although small in land area, the region is enormous in ocean area. The combined exclusive economic zones (EEZs)

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^bAdapted from the FSM Statistics Division (2020) (https://www.fsmstatistics.fm/), with population figures projected for 2020 and GDP figures projected for 2018.

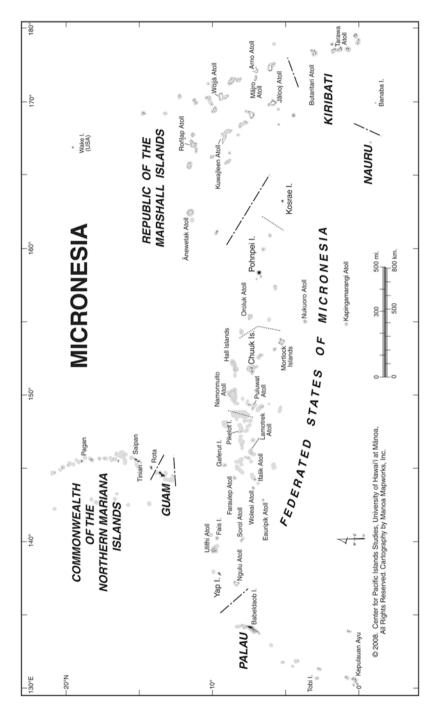


Fig. 1.1 Map of Micronesia. (Reproduced with permission)

of the five island areas total 5.3 million km², or about two-thirds the size of the continental United States.

The USAPI all share an ancestral Austronesian cultural heritage. Palau, Guam, and the Northern Mariana Islands, along the western edge of Micronesia, were settled about 4000 years ago by seafarers sailing east directly out of Island Southeast Asia, achieving the longest ocean passages in human history to date. The eastern edge and central region of Micronesia—the Marshall Islands and the central Caroline Islands—were settled about 2000 years ago by seafarers sailing north and west from the region of the northern Solomon Islands and Vanuatu. This later wave of migrants eventually populated all the Caroline Islands, with the most recent settlements—the small coral islands lying southwest of Palau—only within the past half-millennium.

The contemporary mosaic of related but distinctive cultures in this region reflects the different origins and migration histories of the island populations. All of the dozen or so languages spoken in the USAPI region are in the great Austronesian language family, which includes some 1200 languages in all. All but two of the languages (Palauan and Chamorro are the exceptions) are within the "Oceanic" subfamily of Austronesian, which also includes all Polynesian languages.

In the pre-colonial era, all of the island populations under review in this chapter shared several general cultural configurations. Matrilineal lineages or clans were the primary social and economic units. Comprised of individuals related through their maternal line, these groups held customary title to garden land, reef fishing areas, and property such as canoes, large items of fishing equipment, communal meeting houses, and special houses for young men or for menstruating or postpartum women. In some island areas, the matrilineage was also a residential group; newly married couples resided on the wife's land, resulting in village sections comprised of women related through their maternal lines, joined by their in-marrying husbands. Political authority was held by hereditary chiefs, whose title was typically linked to particular residential land parcels. Throughout Micronesia, men predominantly hold the position of hereditary chiefs, although women of the matrilineage may exert authority in selecting who becomes chief. Traditional chiefs' political authority varied across the region, from the island-wide paramountcy of Kosrae's *Tokosra* or "king," to the limited local authority of Chuuk's village chiefs.

Gender roles in Micronesian cultures were sharply differentiated. In general, the sea was the male domain and land the female domain. Men fished the surrounding reef areas and the distant deep-sea areas, employing a great variety of techniques. Women and men both worked in the gardens, harvesting the staple food crops of taro, sweet potato, breadfruit, manioc, pandanus, and coconut. Women were responsible for most of the household preparation of meals, while men provided labor for large communal feasts and rituals, house and canoe construction, and strenuous gardening tasks.

In these archipelagic island nations, seafaring has been a vital skill for survival. Atoll cultures of the FSM and RMI developed sophisticated methods of non-instrument navigation based on star movements, ocean currents, and other natural signs. Their large, single-outrigger sailing canoes were expertly engineered to

enable long-distance voyages across thousands of kilometers of open ocean, permitting inter-island trade, access to distant resources, and maintenance of dispersed kin networks.

Although sharing some core cultural features, the island entities have experienced different colonial and postcolonial histories, resulting in a spectrum of modernity across the region. At one extreme is Guam, which in the late 1600s was the first Pacific island to be missionized and colonized, and to suffer from the devastating effects of foreign diseases and forced relocation of its people, resulting in the loss of 90% of the Indigenous population over the first several decades of European impact. Today, Guam is a modern transportation and communication hub, with high-rise hotels, luxury shopping malls, and an international airport handling over 40 flight arrivals daily. At the other extreme are small, isolated coral islands throughout the region, some with populations of only several families, serviced by government ships operating infrequently. Missionization and colonization impacted the islands of Palau, the FSM, and the RMI nearly two centuries later than in Guam and the northern Marianas. After nearly a century of colonization by Spain, Germany, Japan, and the United States, these three island nations achieved independence in the final decades of the twentieth century. They remain linked to the United States by "compacts of free association" (COFA), which provide direct financial assistance, support an array of social services and economic programs, and permit visafree entry into the United States for their citizens.

The Travails of Social Change in Micronesia

Despite popular Western illusions of Pacific Islands as timeless Edenic spaces, social change has been a dimension of life since the first Austronesian seafarers set foot on uninhabited islands millennia ago. Populations evolved from small bands and boatloads of explorers occupying coastal sites to complex stratified societies numbering in the tens of thousands. Sustainable agricultural and fishing technologies intensified to support growing populations. Occasional inter-village or interisland warfare resulted in new political relationships, as the defeated side faced either abandoning their land or accepting domination by the victors. Periodic natural disasters—typhoons, tsunamis, earthquakes, droughts—caused localized loss of life and land, with subsequent reordering of social relations and land tenure.

The arrival of foreigners, beginning in the seventeenth century, had profound impacts on island societies. Colonization, missionization, and militarization of the islands resulted in initial episodes of massive depopulation and dislocation, followed by fundamental changes in political authority, economic activity, belief systems, and social relations over the ensuing centuries. Today, viewing social change from the vantage point of elder islanders reflecting on what they have witnessed in their own lifetimes—roughly from the immediate post-WWII years to the present day—we can briefly describe two momentous trends. One is economic modernization and the other is demographic shifts; both have had significant social implications.

Economic modernization has involved a shift away from agrarian work, subsistence gardening and artisanal fishing, to wage labor and increased dependence on money. In mid-twentieth-century Guam and the Northern Mariana Islands, the village was the basic social and economic unit, while in the islands of Palau, FSM, and RMI, the lineage was the primary unit. The increasing role of nuclear households as social and economic units has been accompanied by a loss of the social connective tissue once provided by wider networks and shared resources among village neighbors and lineage mates. This nuclearization of households and loss of wider social roles and supports in lineage economic activities has been linked to the emergence of particular social problems in Micronesia, such as the rising rates of adolescent male suicides in the 1970s (Hezel, 1989; Rubinstein, 2002). The shift away from subsistence gardening and fishing has also eroded traditional roles, perhaps most noticeably for young men, who served as the labor force for village and lineage work in previous generations.

Dependence on wage labor and money has generated growing disparities in wealth and pockets of poverty within the island populations (see Table 1.1). The island populations are increasingly stratified across socioeconomic levels, with sharp differences between rural and urban areas, and between well-educated individuals holding positions of skilled employment, versus unskilled workers and people supporting themselves through subsistence gardening and fishing. Economic modernization has also led to radical shifts in diet and daily activity levels for a growing portion of the island populations, and coupled with the introduction of Western medicine, this has produced a dramatic epidemiological transition from infectious diseases to noncommunicable diseases as the primary causes of morbidity and mortality. Current epidemic levels of diabetes, and some of the highest obesity rates in the world, are stark indicators of this transition.

Demographic shifts over the past 75 years have likewise been significant. In Guam, the Indigenous Chamorro people became a minority in their own island for the first time in 1950, as a large contingent of US military personnel, plus a sizeable influx of skilled Filipino laborers hired to work on the postwar reconstruction of the island, outnumbered the native population. Chamorro out-migration to Hawai'i, California, and other US states accelerated beginning in the 1960s, and today, Chamorros living in the United States outnumber those living in Guam. A similar pattern holds in the CNMI, where the Indigenous Micronesian population is outnumbered by Asian immigrant workers. Since the 1986 implementation of the COFA treaties between the United States, FSM, and RMI, about one-third of the populations of those island nations have moved to Guam and the United States. Chuukese are now the fastest-growing ethnic group in Guam, and there are growing enclaves of FSM and RMI citizens in Hawai'i and scattered from Oregon to Arkansas. The anticipated end of COFA direct financial assistance, scheduled for 2023, is accelerating out-migration and putting further economic pressure on FSM and RMI (Palau negotiated a different schedule).

The migration flows and demographic shifts have added layers of social complexity to modern life in the islands and, in some cases, have contributed to specific social problems. The heavy flow of military personnel between Guam and Southeast

Asia during the American War in Vietnam, including numerous Chamorro enlistees, contributed to a severe epidemic of heroin and other drugs in Guam in the 1960s and 1970s. The flood of American Peace Corps Volunteers in Micronesia in the 1960s, and the swelling numbers of Micronesian students attending US colleges in the 1970s, introduced marijuana and other drugs into the islands. Asian garment factories and casino developments in the Northern Mariana Islands, beginning in the 1980s, have been associated with sex trafficking and the introduction of hard drugs. More recently, the flow of Marshall Islanders between home in the RMI and diasporic communities in Arkansas and elsewhere has become a conduit for the importation of methamphetamine and other drugs. As island families and communities evolve into transnational kinship networks, islanders increasingly are navigating multiple cultural worlds. For Micronesian youth envisioning their future, the prospects can be exciting yet also daunting, as they face pathways for both success and failure that previous generations could hardly imagine.

Behavioral Health Problems in Micronesia

The social and cultural changes that have swept across Micronesia in recent decades have been accompanied by a significant rise in behavioral health problems throughout the region. Here, we look at two behavioral health concerns that have impacted Micronesian island societies: suicide and mental illness.

Suicide

Suicide was not unheard of in premodern times, but historical sources suggest that the rates were low—about 6 or 8 per 100,000—and cases were largely confined to mature adults (Purcell, 1987). Recent data compiled over the past six decades, however, point to an explosion of suicide throughout the region. At present, suicide ranks as one of the major psychosocial problems in Micronesia.

In FSM and the Marshalls, suicide rates surged beginning about 1970, and the rates in both places hovered close to 30 per 100,000 over the following years, finally dipping to about 20 in recent years (Hezel, 1989, 2016b; RMI Epidemiological Workgroup, 2018). Palau showed a similar although more gradual increase that peaked at 35 before it also declined in the past decade (Cash, 2013; Palau Ministry of Health, 2021). Guam's increase was also slight until the early 1990s when its annual number doubled (Workman & Rubinstein, 2019). Unlike the other island groups in Micronesia, Guam's suicide rate has not abated in recent years; rather, it has peaked at 24 in the past 5 years (David, 2021). The continuing high incidence of suicide in Guam may be due to the growing numbers of people from FSM (Hezel, 2017). CNMI is the only jurisdiction in the region not to have reached a rate of 20, although it came close during the last 5 years (CNMI CHCC, 2021).

What accounts for the rapid rise in suicide throughout the region since the 1970s? This question has prompted a series of articles on the subject (e.g., Rubinstein, 1987). The cultural patterns of suicide are unmistakable. Hanging is by far the most common method. Suicide is almost always motivated by the disruption of a personal relationship—in some cases with a spouse, but far more often with someone in the victim's own blood family. Rarely is suicide occasioned by failure in school or business, or by despair at lack of personal success (Hezel, 1989). The studies suggest that the increase in suicide might be tied to the rapid change in social organization, especially in the dynamics of family life.

Another characteristic of Micronesian suicide is the very low incidence among women. In Guam, females make up only 15% of cases over the past 20 years (Guam DPHSS, 2021). In the rest of Micronesia, the female share is even lower: less than 10%. In the Marshalls, it is only about 5% (Majuro Hospital, 2021). Some observers have suggested the low rates of female suicide are linked to the low consumption of alcohol among women, but this explanation is unconvincing. Still, the female risk of suicide has recently begun to rise in some places. In the FSM, the female share doubled from 6% in the 1960s and 1970s to 14% in the first 15 years after 2000 (FSM DHSA, 2019) and then more recently soared to 34% (FSM DHSA, 2021).

Suicide might have once represented the choice of a mature adult, but in recent years, an alarmingly high number of suicides occur in the very young age group. In FSM, during the height of the suicide epidemic, half the suicides were aged 20 and younger, although this proportion has dropped to 38% in recent years (Hezel, 2017). The high incidence of suicide among the young, and the declining rates within each older age cohort, inverts the trend found in most developed societies. This suggests that suicide might often be an impulsive response to a troublesome family situation.

Even if suicide rates have shown a recent decline, suicide seems to be a growing problem in more rural and culturally traditional areas. A recent update of the FSM data shows a significant increase in suicides in the outer islands of Yap and Chuuk as well as Pingelap in Pohnpei. This is most striking in Yap, where the number of suicides in the outer islands now exceeds those of the more populous main island (Hezel, 2017).

While the recent rise in suicide rates may have been generated by some of the social changes that have swept the islands over the years, there is also evidence of suicide "contagion" or modeling. Clustering of suicides is a pronounced feature in the region. The death of a prominent political figure in one island triggered a spate of suicides in the months that followed. The same contagion effect is suggested by the clusters of victims occurring in a single village during a short time frame (Rubinstein, 1987).

Although suicide may not be a new phenomenon in the islands, as those stories from the deep past attest, it has become a much more serious challenge in recent times. Responding effectively to that challenge will require that we understand its cultural meaning and the dynamics affecting it.

Mental Illness

Comprehensive data for FSM, Palau, and the Marshall Islands was obtained in a 1990 study that gathered life histories on all those identified by the community as mentally unstable (Hezel & Wylie, 1992). Because of the limited access to psychiatric help and clinical diagnosis, the researchers relied on a community-based definition of serious mental illness (SMI), but one that required that the condition had persisted for more than a year and excluded individuals impaired from birth or those whose mental problems stemmed from physical trauma. Prevalence rates in the islands ranged considerably—from a rate of 3 or 4 per 1000 population (aged 15 years and older) in the Marshalls and the eastern Carolines, to a rate of 8 per 1000 in Yap, and a rate of over 16 per 1000 in Palau. Although Palau's very high rates may fall within the broad range of international studies, they attracted the attention of several researchers who visited the island group during the 1990s (Sullivan et al., 2007). There was no recent data to provide prevalence rates for Guam and the Northern Marianas.

Prevalence of SMI exhibits a strong gender imbalance throughout the islands: in the Marshalls, for every female with mental illness, there are 3.5 males; in Palau, the ratio is 2.3:1, and in FSM, it is 4.4:1 (Hezel & Wylie, 1992). Why do males appear at much higher risk of SMI than females in the islands? Are cultural factors, such as the disproportionate stress placed on males, at play here? Or are the symptoms so attenuated in females that they might not be easily identified?

Alternatively, some researchers have suggested that the preponderance of males among persons with SMI is related to their much greater consumption of alcohol and drugs. Indeed, in the 1990 survey, it was noted that 83% were drinking alcohol and 61% using cannabis before the onset of their illness (Hezel & Wylie, 1992). But there is little hard evidence to support a causal link. Moreover, the correlation raises the question as to whether the use of drugs is cause or effect. While drug use might trigger mental illness, it might also be regarded as an attempt by those suffering from SMI to self-medicate. Other correlations might also be explored in future research. Those with SMI were found to be slightly better educated than average, and they are significantly better traveled: the 1990 study showed that nearly half of those with SMI spent 6 months or longer abroad.

A follow-up study conducted in 2015 offered observations on the course of the disease for those identified as suffering from SMI 25 years earlier (Hezel, 2016a). During this interval, fully half of those with mental illness had died; this is 2.5 times the mortality rate that would have occurred in the general population. Unsurprisingly, then, it appears that mental illness shortens the lifespan of those afflicted with it.

The follow-up survey also showed that of those whose condition stabilized and whose symptoms disappeared in time, many were drug users who had ceased drug use in the course of their illness. This might suggest that drug use was the cause of SMI or that cessation of drug use simply attenuated the symptoms. The follow-up survey also suggested that retaining strong ties with the family appeared to improve the condition of the mentally ill. Indeed, support from the family and community may be one of the most important factors in the treatment for SMI in Micronesia.

Behavioral Health Services in Micronesia

Traditionally, psychological and behavioral problems have been addressed by familial and community support networks, traditional healers, and other Indigenous approaches to helping and healing. Yet recent decades have seen the importation of Western mental health frameworks and practices through government programs, US federal grants, and community-based initiatives. Below we provide a brief overview of the available behavioral health services for the USAPI communities discussed in this chapter.

Each of the five USAPI jurisdictions has a government behavioral health agency or program funded at least in part by block grants from the US Department of Health and Human Services. On paper, the governmental behavioral health services that have been established in Guam, CNMI, Palau, FSM, and RMI are virtually indistinguishable from those of their sister programs throughout the United States. In actuality, behavioral health services provided within this expansive and culturally diverse region are far from conventional and include a range of highly specialized, culturally specific prevention and intervention strategies reflecting the unique geographic characteristics and distinct cultures of each island community.

Guam

As a US Territory and the most populous of the five USAPIs, Guam has the most comprehensive behavioral health services in the region. Its primary psychiatric facility, the Guam Behavioral Health and Wellness Center, is an autonomous government agency that provides inpatient, outpatient, day treatment, community outreach, and residential services through a staff of over 200, including psychiatrists, clinical psychologists, mental health counselors, substance abuse counselors, and social workers. Behavioral health services are also available through various other government agencies including public health, the judicial system, adult and youth correctional facilities, the public schools, and institutions of higher learning, as well as through numerous private clinics, faith-based and nonprofit organizations, and programs for military personnel and veterans. Guam is a single island with a good road system; hence, its behavioral health programs are accessible by car or bus in less than an hour from any village.

Commonwealth of the Northern Mariana Islands

The CNMI's behavioral health services are based in Saipan, where 90% of the population reside, and extend via outreach to Tinian and Rota, the only other inhabited islands within the 14 islands of the Commonwealth. The primary government entity for behavioral health is the Commonwealth Healthcare Corporation's Community

Guidance Center (CGC), which provides mental health and substance abuse services through outpatient, day treatment, and community outreach programs. The Center places a strong emphasis on education and prevention, although comprehensive treatment services are also available. The Center's more than 50 staff include a clinical psychologist and several mental health counselors, substance abuse counselors, and care coordinators. Inpatient and outpatient psychiatric services are provided at Saipan's government-run hospital where several psychiatrists are employed. Residential care for persons with substance use disorders is also available in the community. These services are supplemented by mental health counselors working in the public schools, public safety department, and the prison, as well as through community-based nonprofit organizations and faith-based programs. Several psychologists and psychiatrists also provide mental health treatment through private clinics. In Tinian and Rota, outreach services are provided through a care coordinator assigned to each island's government health center. Treatment services are offered by CGC counselors who fly out from Saipan monthly, as well as by the CGC psychologist and the hospital psychiatrists who are on call, ready to travel to Tinian and Rota when needed.

Palau

The Palau Ministry of Health (MOH) Division of Behavioral Health is based in the state of Koror, the nation's urban center where 70% of Palau's population live. Among the 300 islands of this archipelagic nation, only nine are inhabited. The Division has a mental health unit located in the Belau National Hospital, which provides inpatient and outpatient psychiatric services and an adjacent recovery unit focused on psychosocial rehabilitation. Programs focusing on prevention, behavioral health promotion, and alcohol and drug treatment are located in the community. The Division's 25-35 staff include two psychiatrists, two social workers, and a cadre of nurses and counselors. All services are community based and emphasize outreach, which the staff refer to as "clinics without walls." For example, when working with patients who are not taking their medication consistently, the mental health unit applies the DOT (Directly Observed Therapy) strategy developed for the treatment of tuberculosis. In the DOT approach, mental health nurses seek out patients in their homes, at their workplace, or even in public places, to ensure they take their medication daily. Moreover, to provide access to services for the entire population, the behavioral health staff make quarterly visits to each of Palau's inhabited islands. While the villages in Koror and Babeldaob are connected by causeways and bridges, the behavioral health staff must travel 2-3 hours on MOH boats to reach Kayangel, Peleliu, and Angaur, and by larger ships to reach the Southwest Islands of Sonsorol, Pulo Anna, and Tobi, a journey of 2–3 days. A critical component of these outreach visits is to identify and train a reliable family member to assist patients with medication compliance. Between visits to the distant islands, behavioral health staff follow up with patients by telehealth (phone/ CB radio).

Federated States of Micronesia

The FSM Behavioral Health and Wellness Program (BH&WP), under the Department of Health and Social Affairs, coordinates mental health and substance abuse prevention and treatment services among FSM's four states, whose population is scattered across over 600 separate islands. Each state also has its own BH&WP with 10–20 staff, including counselors, nurses, prevention educators, and community outreach workers, working in collaboration with the FSM national psychiatrist, local physicians, and health assistants who staff community dispensaries. Innovative outreach strategies, including "house-to-house" patient care and CB radio communication, ensure access to services for all island communities.

Yap. The Yap BH&WP is part of Yap State Hospital in Yap Island. Services are provided through the hospital and five community health centers on Yap's four main islands. To reach the state's 17 inhabited outer islands, BH&WP staff travel aboard government ships on semiannual month-long trips, which briefly visit each island community along the 2000-km circuit between Yap and the state's easternmost atolls.

Chuuk. The Chuuk BH&WP is at Chuuk State Hospital on the main island of Weno in Chuuk Atoll. As Chuuk's population is dispersed across more than 40 islands, community outreach is crucial to the program's mission. Services are provided to 17 islands of Chuuk Atoll and 24 outer islands, with community outreach workers stationed on six islands. The Weno-based staff visit the nearby islands of Chuuk Atoll by motorboat weekly and participate in semiannual public health trips by ship to the outer islands.

Pohnpei. The Pohnpei BH&WP is located on the island of Pohnpei next to Pohnpei State Hospital. Services are provided in Pohnpei and two of the state's five outer islands to the south and east of Pohnpei—Pingelap and Sapwuahfik—where community outreach workers are stationed. Services to outer island communities include semiannual visits by the Pohnpei-based staff who make the 2-day journey by government ships or on the *Okeanos Pohnpei*, a double-hulled traditionally styled sailing canoe.

Kosrae. The Kosrae BH&WP is located on the island of Kosrae close to Kosrae State Hospital. As the only FSM state comprising a single high island, the program's services are easily accessed by the entire population.

Republic of the Marshall Islands

RMI's behavioral health programs are based in the capital, Majuro, where half of the nation's population reside. Of the 34 atolls and coral islands comprising this archipelagic nation, 24 are inhabited. Substance abuse services are provided through

the Single State Agency under the Ministry of Finance, by approximately 10 paraprofessionals who conduct substance use prevention programs. Mental health services, on the other hand, are provided through the Ministry of Health and Human Services by approximately 10 staff including a psychiatrist, four nurses, and one counselor. Both programs collaborate with faith-based and nongovernmental organizations focused on community empowerment, such as WAM (Waan Aelõñ in Majel—Canoes of the Marshall Islands) and WUTMI (Women United Together Marshall Islands). Mental health services are based within Majuro Hospital and include an outpatient clinic for medication, psychotherapy, and counseling and a full range of community outreach and prevention services. Behavioral health care is also provided at Ebeye Hospital in Kwajalein Atoll by two mental health staff and the MOH psychiatrist who flies monthly to the densely populated island of Ebeye. For residents of RMI's many outer islands, access to behavioral health care is available through 56 government health centers, each staffed by a health assistant trained to provide basic medical services. When working with patients with mental disorders, the health assistants consult with mental health staff at Majuro Hospital by CB radio. Additionally, a behavioral health team from Majuro travels by plane or boat to each of the outer islands quarterly to evaluate new cases, provide follow-up care for current patients, and educate families and the community about mental health.

Conclusion

Throughout the Micronesian region, traditional cultural beliefs and practices continue to play a critical role in the community's response to mental illness. Of particular importance are the extended family networks and traditional community associations in which people take responsibility for each other. However, within some of Micronesia's traditional belief systems, mental illness is viewed as a curse placed on a family or an individual because of a past transgression. Thus, social stigma is prevalent, especially in the more remote island communities, and many of those who might benefit from behavioral health treatment are reluctant to reach out for help. It is primarily for this reason that behavioral health staff often go out to the homes of their patients to provide services. Traditional healers are often the first line of treatment, and many individuals with mental health problems respond well to the herbal medicine, massage, and spiritual healing provided. However, some aspects of traditional healing can contribute to stigmatization by perpetuating the belief that mental illness is caused by supernatural forces, such as a curse, black magic, or ancestral spirits. Local government education and prevention programs focus on providing alternative biopsychosocial explanations.

Perhaps the most widespread cultural practice in responding to mental illness is the support provided by families. As there are no residential care facilities for persons with mental illness (except in Guam), the primary caregivers are almost always family members, who play a vital role. In general, when there is strong family support for a person with mental illness, behavioral health interventions including

medication and counseling tend to be successful. In cases where family support is not available, village chiefs sometimes step in to assign a relative or member of the community to serve as the primary caregiver. In many communities, churches also play an important role in providing faith-based support. In sum, although Western behavioral health services have brought relief to many individuals and families throughout the Micronesian region, it is important to recognize that these relatively new approaches to mental health care supplement Indigenous approaches to helping and healing that continue to take place within families and village communities in every island in the region.

Acknowledgments The authors gratefully acknowledge the following individuals who assisted with the preparation of this chapter: Theresa Arriola and Carissa Pangelinan (Guam Behavioral Health and Wellness Center); Dr. Esther Lizama Muña, Reyna Saures, and Wilbert Rospel (CNMI Commonwealth Healthcare Corporation); Joy Mascardo (Palau Ministry of Health); Benido Victor and Juveena Jose (FSM Behavioral Health and Wellness Program); Stanley Ruemgol and Tony Torwan (Yap Behavioral Health and Wellness Program); Veronica Andon, Serlino Wichep, and Kathrine Harry (Pohnpei Behavioral Health and Wellness Program); Nette Kinere and Carsila Tosie (Kosrae Behavioral Health and Wellness Program); Maybelline Ipil (Marshall Islands Epidemiology and Prevention Initiatives); and Rickson Katwon (RMI Ministry of Health and Human Services).

References

- Cash, H. (2013). Palau state epidemiological profile: An update on substance abuse and mental health in Palau. Palau State Epidemiological Outcomes Workgroup.
- CNMI Commonwealth Healthcare Corporation (CHCC). (2021). Suicide death master listing, 2000–2020 [Unpublished raw data].
- David, A. M. (On behalf of Guam SEOW). (2021). Suicide in Guam, 2019. Guam State Epidemiological Outcomes Workgroup.
- FSM Department of Health & Social Affairs (DHSA). (2019). *Epidemiological profile: 2019 update*. FSM Department of Health & Social Affairs (DHSA). (2021). *Suicide cases in FSM*, 2015–2020 [Unpublished raw data].
- FSM Statistics Division. (2020). FSM statistics. FSM Department of Resource & Development. https://www.fsmstatistics.fm/
- Guam Department of Public Health & Social Services (DPHSS). (2021). *Guam suicide data* 1998–2019 [Unpublished raw data].
- Hezel, F. X. (1989). Suicide and the Micronesian family. *The Contemporary Pacific*, 1(1/2), 43–74. https://www.jstor.org/stable/23701892
- Hezel, F. X. (2016a). Severe mental illness in Federated States of Micronesia: 25 year follow up of mental illness survey. FSM Department of Health & Social Affairs.
- Hezel, F. X. (2016b). A survey of suicide over the last half-century: Update on suicide in FSM. FSM Department of Health & Social Affairs.
- Hezel, F. X. (2017). Suicide in Federated States of Micronesia: A new direction. *Pacific Studies*, 40(3), 408–429.
- Hezel, F. X., & Wylie, M. A. (1992). Schizophrenia and chronic mental illness in Micronesia: An epidemiological survey. *ISLA: A Journal of Micronesian Studies*, 1(2), 329–354.
- Majuro Hospital. (2021). *RMI suicide cases annually 2000–2020 by gender* [Unpublished raw data].

- Palau Ministry of Health. (2021). Leading cause of death, 2013–2019 [Unpublished raw data].
- Purcell, D. (1987). Suicide and mental illness in Japan's Pacific mandate [Unpublished manuscript]. Department of History, University of Hawai'i at Hilo.
- RMI Epidemiological Workgroup. (2018). Republic of the Marshall Islands behavioral health epidemiological profile 2018.
- Rubinstein, D. H. (1987). Cultural patterns and contagion: Epidemic suicide among Micronesian youth. In A. B. Robillard & A. J. Marsella (Eds.), *Contemporary issues in mental health research* in the Pacific Islands (pp. 127–148). University of Hawai'i Press.
- Rubinstein, D. H. (2002). Youth suicide and social change in Micronesia. *Occasional Papers*, 36, 33–41. https://core.ac.uk/download/pdf/144568373.pdf
- Sullivan, R. J., Allen, J. S., & Nero, K. L. (2007). Schizophrenia in Palau: A biocultural analysis. Contemporary Anthropology, 48(2), 189–213. https://doi.org/10.1086/510474
- Workman, R. L., & Rubinstein, D. H. (2019). Suicide in Micronesia: Guam's historical trends and patterns. In Guampedia. https://www.guampedia.com/contemporary-guam-suicide-inmicronesia/
- Worldometer. (2021). Population by country. https://www.worldometers.info/