Depression and Anxiety Among Adults in Hawai‘i
A Focus on Gender and Ethnicity


Introduction
The State of Hawai‘i is host to a rich blend of cultures and ethnicities (see Figure 1) and because of its diversity, Hawai‘i is an ideal place to study the interaction between culture and health. Studies have shown that gender, race, and ethnicity are correlated with health outcomes and that racial disparity persists in medical care treatment and outcomes ("Mental Health: Culture, Race, and Ethnicity"; 2001; Smedley et al., 2002).

This study aims to contribute to the growing literature on the relationship between ethnicity and health outcomes by examining how the prevalence of anxiety and depression differs across gender and the five major ethnic groups in Hawai‘i.

The impact of anxiety and depression is far reaching, including medical, psychological, and social consequences. Given the extent of their sequelae, studies of their prevalence among general populations are imperative for planning of mental health care services. More specific information, such as whether and how prevalence varies among gender and ethnicities, could help administrators and providers in targeting primary prevention efforts and anti-stigma campaigns. Prior to 2006, it was a challenge to estimate the prevalence of anxiety and depression by gender and ethnicity due to lack of available general population data on mental disorders. In 2006, the Behavioral Risk Factor Surveillance System (BRFSS) in the State of Hawai‘i added an anxiety and depression module, thereby making it possible for the first time to estimate prevalence based on a large statewide sample.

Methods
Participants
During calendar year 2006, the Hawai‘i BRFSS collected usable data on 5,840 State of Hawai‘i residents aged 18 and older through a random household telephone survey.

Measures
The Hawai‘i BRFSS 2006 included the Depression and Anxiety Module, which consisted of two parts: (a) Provider Diagnosis of Depressive and Anxiety Disorders Questions, and (b) Patient Health Questionnaire-8 (PHQ-8).

Lifet ime prevalence of depression and anxiety: Did the respondents report that a doctor or a healthcare provider EVER told them that they had a depressive disorder or an anxiety disorder?

Current prevalence of depression: The severity of Current Depression was determined using the Provisional Depressive Disorder Diagnosis (PDD) (Kroenke & Spitzer, 2002). The PDD consists of three categories: (1) Major depressive disorder = seven or more days of symptoms of anhedonia or depression and five or more depressive symptoms from the PHQ-8; (2) Other depression = seven days or more of symptoms of anhedonia or depression and five to four depressive symptoms from the PHQ-8; and (3) No depression = fewer than two depressive symptoms.

Results
The following findings were based on 5,840 individuals: 2,478 males (42%) and 3,362 females (58%). The percentage of the ethnic population sampled was: White (44%), Japanese (26%), Hawaiian (12%), Filipino (11%), Others (10%), and Chinese (4%). For ethnic distribution, see Table 1, which also provides background information on education and income.

• Females had significantly higher prevalence rates of lifetime depression and anxiety than males (p<.001; see Figure 2).

• Whites had significantly higher prevalence rates of lifetime anxiety than did Hawaiians, and reported having had depression sometime in their lives at higher rates than Hawaiians, Chinese, Filipinos, or Japanese (p<.05; see Figure 3).

• Within each ethnicity, females were overall significantly more likely than males to have had lifetime anxiety and/or depression (p<.001; see Figure 4).

• Chinese females > Chinese males (5 times)

• White females > White males (2 times)

• Japanese females > Japanese males (1.7 times)

• Hawaiian females > Hawaiians (1.6 times)

• Filipino females > Filipinos (1.4 times)

Discussion
The differences in the lifetime prevalence of depression and anxiety across ethnic groups and between gender may be due to the following:

• Health-seeking behaviors may vary due to differences in beliefs about causality of mental illness and expression of distress.

• Cultural factors such as incompatible expectations with current systems of care, linguistic barriers, lack of an ethically matched care provider, and preferred alternative healing practices may contribute to observed disparities.

• Socioeconomic status is also a likely factor (see Table 1). In a different study with this sampled population, our results confirmed the often-reported finding that low socioeconomic status is significantly associated with depression and anxiety. Low socioeconomic status may indirectly influence the reported lifetime prevalence rates. Unless individuals interact with the health care system, their mental disorders remain unrecognized. These factors, a lower socioeconomic status and lower interaction with Western health care may explain why Hawaiians have higher prevalence of current depression than prevalence of lifetime depression. Hawaiians with lower socioeconomic status may under-utilize the health care system due to not identifying with traditional Western medical practices as well as lack of resources (e.g., transportation and health insurance).

Recommendations
• Culturally appropriate screening and assessment for anxiety and depression in primary health care must be a part of the health care system for early detection.
• Systems of health care must be more inclusive in providing culturally appropriate services to vulnerable segments of the population such as Hawaiian who appear to be under served.

References


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