Understanding mental illnesses is an important component of disease prevention and health promotion. Mental illnesses are associated with disability and account for 15 percent of the overall burden of disease from all causes of global disease. There is strong evidence that mental illnesses are related to physical illnesses. According to the Global Burden of Disease study, four mental illnesses are among the top 10 causes of disability worldwide: major depression, bipolar disorder, schizophrenia, and obsessive-compulsive disorder. Understanding the prevalence of mental illness and the characteristics of persons with and without mental illness are necessary for developing treatment and prevention policies for the country and for specific areas of the country.

The 2007 California Behavioral Risk Factor Surveillance System (BRFSS) included the K6 scale to estimate persons with serious psychological distress (SPD). This scale of nonspecific psychological distress was designed as a short screening scale to identify persons with a high likelihood of a mental illness.

In California 3.1 percent of the adult population was defined as having SPD. There were no statistically significant differences in the rate of SPD by gender or race. Among females the rate was 3.7 percent while among males it was 2.7 percent. The rate among whites and non-whites was 2.7 and 3.6 percent respectively. Rates of SPD were significantly higher among persons aged 50 to 59 (5.4 percent) than among persons 18-29, 30-39, 40-49, and 60 and older which were essentially the same (2.8 to 3.0 percent).

Rates of SPD varied by marital status. Divorced or separated persons were more likely to have SPD than married or never married persons (6.2 percent vs. 2.4 percent and 2.7 percent respectively). Rates of SPD are highly correlated with an adult’s perceived physical health status. Rates of SPD increased with poorer perceived health. Rates of SPD were 0.9 percent among persons with excellent perceived health and increased to 26.5 percent among persons with poor perceived health. (See chart 1).
Rates of SPD were correlated with education and employment. Rates of SPD decreased with each higher level of education. Rates were highest among persons with less than a high school education (6.9 percent) and lowest among college graduates (1.4 percent). Unemployed persons were more likely to have SPD (9.2 percent) than employed persons (2.0 percent), students or homemakers (2.7 percent and retired persons (2.1 percent). Persons unable to work had the highest rate of SPD (19.8 percent). Poverty was also associated with SPD. Adults below 200 percent of the poverty level were four times more likely to have SPD than adults above 300 percent of the poverty level (6.0 percent vs. 1.5 percent respectively). In general these results show that psychological health is associated with socio-demographic characteristics and perceived physical health. Specifically, adults with lower socio-economic status such as less education and under the Federal Poverty Limit were more likely to have serious psychological distress. These outcomes also point out that mental health is strongly correlated with physical health.

More information on the development of the K6 scale for measuring SPD can be obtained in a paper describing a validity study using the K6 (1). More detailed information on the characteristics of persons with SPD can be found from a study measuring SPD in the United States using the 2001-2004 National Health interview Survey (2). Information on the psychometric properties of the K6 can be obtained from a study using data from the National Survey on Drug Use and Health (3).

Persons seeking facts on where to get help for SPD or a mental health problem can refer to the following website: http://www.dmh.cahwnet.gov/Services and Programs/default.asp and click on Network of Care for Mental Health. Also on this website persons in crisis can refer to the County Mental Health Crisis Hotlines.

References:


Chart 2

Chart 3
BRFSS is an ongoing effort by the California Department of Public Health (CDPH), in conjunction with the U.S. Centers for Disease Control and Prevention (CDC), and the Public Health Institute, to assess the prevalence of and trends in health-related behaviors in the California population aged 18 years and older. It is supported in part by funds from the Cooperative Agreement No. U58/DP922811-05W1 from CDC, and in part by funds from the CDPH and other programs and state departments. Data are collected monthly from a random sample of California adults living in households with telephones. The BRFSS database contains information on Californians from 1984 through the present.

The BRFSS questionnaire is developed each year by CDC in collaboration with participating state agencies. Wherever possible, questions have been selected from previously conducted national surveys for comparability. The questionnaire has three components. The first component consists of a core set of questions that is administered by all states participating in the BRFSS collection effort.

The second component of the questionnaire consists of a series of topical modules developed by CDC. States have the option of adding as many modules as they wish to the core questionnaire each year. California has used several of the CDC modules, although the same modules have not been used consistently across all years of the survey.

The final component of the questionnaire consists of questions designed and administered by individual states to address issues of local concern. These have been revised annually in California to address the needs of as many programs as possible. Participants in the California BRFSS are asked about a wide variety of behaviors such as seat belt use, exercise, weight control, diet, tobacco and alcohol consumption, utilization of cancer screening procedures, and other preventive measures. They also are asked for basic demographic information such as age, race/ethnicity, marital and employment status, household income, and education. Participation in the BRFSS is completely voluntary and anonymous.

The administration and protocol of this survey is reviewed and approved annually by the Committee for the Protection of Human Subjects (CPHS). CPHS serves as the institutional review board (IRB) for the California Health and Human Services Agency (CHHSA). The role of the CPHS and other IRBs is to assure that research involving human subjects is conducted ethically and with minimum risk to participants.

The age, race/ethnicity, and sex characteristics of the BRFSS sample differ to some extent from the age, race/ethnicity, and sex characteristics of the California population. Weighting adjustments are used to compensate for these differences. Prior to analyzing the BRFSS data, the sample is weighted so that age, race/ethnicity, and gender composition match that of the California population. This allows the findings to be generalized to the California population.

For more information on the BRFSS, please contact Survey Research Group, Cancer Surveillance and Research Branch, (916) 779-0338.