Nicaragua

General Information

Nicaragua is a country with an approximate area of 130 thousand sq. km. (UNO, 2001). Its population is 5.596 million, and the sex ratio (men per hundred women) is 99 (UNO, 2004). The proportion of population under the age of 15 years is 41% (UNO, 2004), and the proportion of population above the age of 60 years is 5% (WHO, 2004). The literacy rate is 76.8% for men and 76.6% for women (UNESCO/MoH, 2004).

The country is a low income group country (based on World Bank 2004 criteria). The proportion of health budget to GDP is 7.8%. The per capita total expenditure on health is 158 international $, and the per capita government expenditure on health is 77 international $ (WHO, 2004).

The main language(s) used in the country is (are) Spanish. The largest ethnic group(s) is (are) Mestizo (seven-tenths), and the other ethnic group(s) are (is) European and African. The largest religious group(s) is (are) Roman Catholic (five-sixths).

The life expectancy at birth is 67.9 years for males and 72.4 years for females (WHO, 2004). The healthy life expectancy at birth is 60 years for males and 63 years for females (WHO, 2004).

Epidemiology

Penayo (1990) used SRQ-20 as a screening instrument to identify probable psychiatric cases (cut-off score of 9/10) in the general population (n=576) and primary health care (n=781). Confirmation of diagnosis was done through Present State Examination (PSE) assisted interview. Almost 23% of general population and 47% of the primary care subjects were identified as cases. Penayo et al (1992) estimated the prevalence of mental disorders in an area affected by armed conflict. Two-stage cluster sampling was used to select 219 families (n=584). Screening was done with SRQ and confirmation of diagnosis through the Present State Examination. The estimated prevalence rates were: neurosis (7.5%), depression (6.2%), reactive crisis (3.3%), alcoholism (5.8%), organic brain syndrome (3.9%), psychosis (0.5%) and other disorders (0.7%). The estimated overall prevalence of mental disorders in the study population was 27.9%. Disorders were more prevalent among men (30.8%) than women (26.3%). Caldera et al (2001) assessed a sample of 496 adult survivors of a hurricane in 4 primary care centres using the Harvard Trauma Questionnaire (HTQ). Prevalence of PTSD ranged from 9.0% in the worst afflicted area to 4.5% in a less damaged area. PTSD symptoms 6 months after the disaster (HTQ) were significantly associated with the death of a relative, destroyed house, female sex, previous mental health problems and illiteracy. Suicidal thoughts were reported by 8.5% of the sample and it was associated with a history of previous mental health problems and illiteracy. One year after the hurricane, half of those identified as PTSD cases at 6 months retained the diagnosis. Goenjian et al (2001) interviewed 158 adolescents from three differentially exposed cities using a Hurricane Exposure Questionnaire, the Child Posttraumatic Stress Disorder Reaction Index and the Depression Self-Rating Scale 6 months after a hurricane. Severe levels of posttraumatic stress and depressive reactions were found in the two more heavily affected cities and this was proportionate to the level of exposure. Level of impact (city), objective and subjective features and thoughts of revenge accounted for 68% of the variance in severity of posttraumatic stress reaction. Severity of posttraumatic stress reaction, death of a family member and sex accounted for 59% of the variance in severity of depression. Summerfield

and Toser (1991) found that 62% of men and 91% of women ex-refugees still living in the war zone met criteria for caseness according to the General Health Questionnaire. Nearly 25% of men and 50% of women merited a diagnosis of posttraumatic stress disorder. Some distress reflected unresolved grief states. Caldera et al (1995) assessed 100 consecutive outpatients with the Structural Clinical Interview for DSM-III Disorders. One fourth of patients had a psychotic disorder where schizophrenia dominated. Among non-psychotic patients, major depression, anxiety and adjustment disorders were most frequent. Personality disorders were common (80%) among non-psychotic patients, with paranoid, obsessive-compulsive, passive-aggressive and masochistic personality disorders being the most frequent. Victims of spousal violence frequently experienced feelings of shame, isolation and entrapment and poor social support (Ellsberg et al, 1999, 2000). Suicide was the leading cause of death in the 15-34 year-old age group and the tenth leading cause of mortality overall in the year 2001. Suicidal behaviour is more common in men than women (2,5:1). The rate for 100 000 inhabitants has ascended of 2.80 in 1992 to 6.74 in 2002. Almost 29% of the parasuicidal behaviour is seen in the population younger than 20 years and more than 50% in those younger than 25 years. In this group women (more than 75%) are overrepresented. Herbicides are often used to attempt suicide (Ministry of Health, 2004).

Mental Health Resources

Mental Health Policy

A mental health policy is present. The policy was initially formulated in 1975.

The components of the policy are advocacy, promotion, prevention, treatment and rehabilitation. It was revised in 2001 by mental health professionals and public servants. Between 25 to 50 % of its original content was put into practice.

Substance Abuse Policy

Details about the substance abuse policy are not available. It was revised in 2002. It has a specific budget for its implementation and has been implemented to the extent of 25 to 50%. Nicaragua also has laws on substance abuse, 'Ley 175 de 1994 - Creación Consejo Nacional Antidrogas', 'Ley 285 Ley antidrogas actualizada' and 'Ley 370 - Ley Creación Instituto contra el Alcoholismo y la Drogadicción'.

National Mental Health Programme

A national mental health programme is present. The programme was formulated in 1979.

It was revised in 2001. There are no specific funds for its implementation, but it has been implemented to the extent of 25 to 50% by local, regional and national authorities. Its main components are strategy of services reform, promotion and prevention, integration of mental health services in primary care and development of specialized services.

National Therapeutic Drug Policy/Essential List of Drugs

A national therapeutic drug policy/essential list of drugs is present. It was formulated in 1999.

Mental Health Legislation

The most recent legislation is from 2001 and was revised in 2002. There are no regular funds for its implementation but it has been implemented to the extent of 25 to 50%. It focuses on promotion and prevention and regulation of mental health services, but there is no reference to human rights of patients. Other laws related with mental health are the Handicap Law (Law

202), the Anti-Drug Law (Law 285), the Law on Creation of the Institute Against Alcoholism and the Drug Addiction and the Pharmacy Law.

The latest legislation was enacted in 2001.

Mental Health Financing

There are budget allocations for mental health.

The country spends 1% of the total health budget on mental health.

The primary sources of mental health financing in descending order are out of pocket expenditure by the patient or family, tax based, social insurance and private insurances.

The country has disability benefits for persons with mental disorders. Disability benefits are available only to those covered by social security. The health department has to assess a patient every 3 years.

Mental Health Facilities

Mental health is a part of primary health care system. Actual treatment of severe mental disorders is available at the primary level. Less than 25 % of the population is covered by this kind of service. Mental health care is provided by primary health care physicians.

Regular training of primary care professionals is not carried out in the field of mental health.

There are community care facilities for patients with mental disorders. The system of community care for the mentally ill includes preventive/promotion interventions, home interventions, family interventions, residential facilities, vocational training; employment programs; however, all of them are available for less than 25% of the population. Community care teams are often multidisciplinary (general clinicians, nurses, social workers), but they are understaffed.

Psychiatric Beds and Professionals

Total psychiatric beds per 10 000 population	0.34
Psychiatric beds in mental hospitals per 10 000 population	0.32
Psychiatric beds in general hospitals per 10 000 population	
Psychiatric beds in other settings per 10 000 population	0.02
Number of psychiatrists per 100 000 population	0.64
Number of neurosurgeons per 100 000 population	0.01
Number of psychiatric nurses per 100 000 population	0.045
Number of neurologists per 100 000 population	0.4
Number of psychologists per 100 000 population	1.45
Number of social workers per 100 000 population	0.71

In addition, there are 10 general nurses, 74 assistants and a 1 pedagogue. Almost half of the psychiatrist work in the private set-up. No attempts have been made to close mental hospitals. However, only 10% of beds are occupied by long-stay patients. There are facilities to assess the quality of care at secondary and tertiary level. The ministerial resolution 31- 93 encourages attendance of psychiatric patients in general hospitals. About 15 general hospitals provide mental health care. There is significant geographic variation of mental health services with 96% of centres providing mental health care being along the Pacific Coast. More than 50% of mental health professionals are employed in public institutions.

Non-Governmental Organizations

NGOs are involved with mental health in the country. They are mainly involved in advocacy, promotion, prevention, treatment and rehabilitation. These organizations participate in mental health activities related to women, children, domestic violence and consumers.

Information Gathering System

There is mental health reporting system in the country. They use ICD-10 codes. Besides psychiatric diagnoses, other mental health components reported are family violence, homicides, suicides, drug abuse and dependence. Epidemiological assessments of mental disorders are performed.

The country has data collection system or epidemiological study on mental health. The department in charge of service data collection system is the 'Dirección General de Sistemas de Información' of the Ministry of Health. Data is collected only in hospitals and some primary health care centers where mental health services are available. Cases registered in the system of registration of the MINSA in 2002 showed that out of the 33 583 outpatients applying for mental health care (0.07% of all registrants) only 69% had diagnosable conditions. Sleep related disorders (22%), anxiety states (42%), psychoses (27%), and alcohol dependence (2.9%) were common (Ministry of Health, 2004)

Programmes for Special Population

The country has specific programmes for mental health for disaster affected population, indigenous population and children.

Also, there are programmes for women, children in vulnerable situation, and victims of domestic violence.

Therapeutic Drugs

The following therapeutic drugs are generally available at the primary health care level of the country: carbamazepine, ethosuximide, phenobarbital, phenytoin sodium, sodium valproate, amitriptyline, chlorpromazine, diazepam, haloperidol, lithium, biperiden, carbidopa, levodopa.

The essential drug list was created in 1979 and revised in 2001. Availability of these medications is erratic. They are free of charge for chronic patients and at the primary care level.

Additional Sources of Information

•Asioli, F., Kraudy, E., Liberati, A., et al (1987) Organization of services and pattern of psychiatric care in Nicaragua: result of a survey in 1986. Acta Psychiatrica Scandinavica, 76, 545-51.

•Byng, R. (1993) Primary mental health care in Nicaragua. Social Science and Medicine, 36, 625-29.

•Caldera, T., Kullgren, G., Penayo, U., et al (1995) Is treatment in groups a useful alternative for psychiatry in low-income countries? An evaluation of a psychiatric outpatient unit in Nicaragua. Acta Psychiatrica Scandinavica, 92, 386-391.

•Caldera, T., Palma, L., Penayo, U., et al (2001) Psychological impact of the hurricane Mitch in Nicaragua in a one-year perspective. Social Psychiatry & Psychiatric Epidemiology, 36, 108-114.

•Ellsberg, M. C., Pena, R., Herrera, A., et al (1999) Wife abuse among women of childbearing age in Nicaragua. American Journal of Public Health, 89, 241-244.

•Ellsberg, M., Pena, R., Herrera, A., et al (2000) Candies in hell: women's experiences of violence in Nicaragua. Social Science & Medicine, 51, 1595-1610.

•Goenjian, A. K., Molina, L., Steinberg, A. M., et al (2001) Posttraumatic stress and depressive reactions among Nicaraguan adolescents after hurricane Mitch. American Journal of Psychiatry, 158, 788-794.

•Penayo, U., Caldera, T., Jacobsson, L., et al (1992) Prevalence of mental disorders in adults in Subtiava, Leon, Nicaragua. Boletin de la Oficina Sanitaria Panamericana, 113, 137-149.

•Penayo, U., Kullgren, G., Caldera, T. (1990) Mental disorders among primary health care patients in Nicaragua. Acta Psychiatrica Scandinavica, 82, 82-85.

•Summerfield, D., Toser, L. (1991) 'Low intensity' war and mental trauma in Nicaragua: a study in a rural community. Medicine & War, 7, 84-99.