



2019 population (millions) **6.5**
Life expectancy (years) **74.5**

Nicaragua is located in Central America and borders Honduras, Costa Rica, and the Atlantic and Pacific Oceans. It is divided administratively into 15 departments, 2 autonomous regions, and 153 municipalities.

Between 1990 and 2019, its population grew by 53.7%, reaching 6.5 million in 2019. In 1990, the population pyramid was expansive but has since become stationary in the population under 20 years of age. Indigenous groups and people of African descent comprise an estimated 8.6% of the population, the main ethnic groups being the Miskito (27.2%) and Chorotega-Nahua-Mange (10.4%).

The total fertility rate is 2.4 children per woman, and life expectancy at birth was 74.5 years (78 for women and 70.9 for men) in 2019. In the period 2006-2015, real economic growth increased from 4.2% to 4.9%, at the expense of the agricultural sector, with an increase in per capita gross domestic product (GDP) from US\$ 1,203.70 to US\$ 2,026.70 and a decline in the cumulative annual inflation rate from 9.4% to 3.1%.

THE DISEASE BURDEN AFFECTING MENTAL HEALTH

Mental, neurological, substance use disorders and suicide (MNSS) cause 21% of all disability-adjusted life years (DALYs) and 36% of all years lived with disability (YLDs).

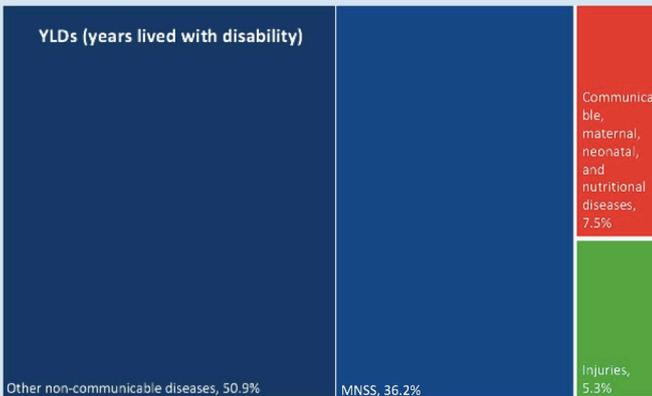


Figure 1. Distribution of YLDs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

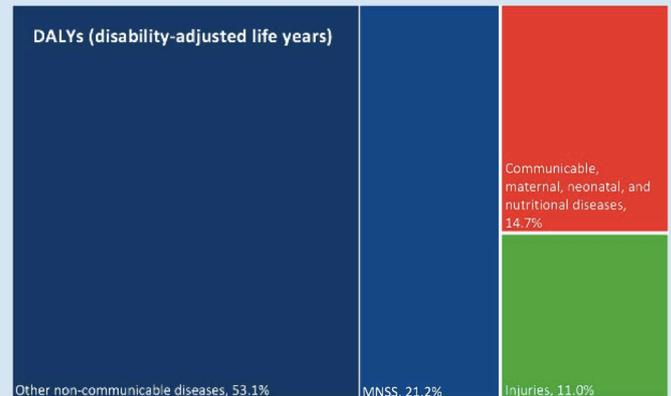


Figure 2. Distribution of DALYs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

THE BURDEN AFFECTING MENTAL HEALTH ACROSS THE LIFETIME

Fig. 3 shows the changes in disease burden across age-groups. NCDs (in shades of blue) surpass 50% of the burden at 5 years old, and will remain the largest burden throughout the lifetime. MNSS account for around a third of the total burden between 10 and 40 years of age, the largest burden of all disease groups during this period.

Fig. 4 focuses exclusively on the burden resulting from MNSS. Until 5 years old, the MNSS burden is mostly due to epilepsy (60%) and autism (35%). Between 5 and 15 years old, the burden of conduct disorders (20%), headaches (18%)—including migraine and tension-type-, and anxiety disorders (13%) gain prominence. Around 20 years of age, a pattern emerges that will remain stable throughout youth and adulthood: common disorders (anxiety, depression, self-harm and somatic symptom disorder) account for 37%, substance use disorders for 24% (20% due to alcohol), headaches 20%, and severe mental disorders (schizophrenia and bipolar disorders) 8%. The elderly suffer mostly from neurocognitive disorder due to Alzheimer's disease, which surpasses 50% of the burden around 75 years old and remains above 70% after 85 years old.



Figure 3. Burden of disease, by disease group and age

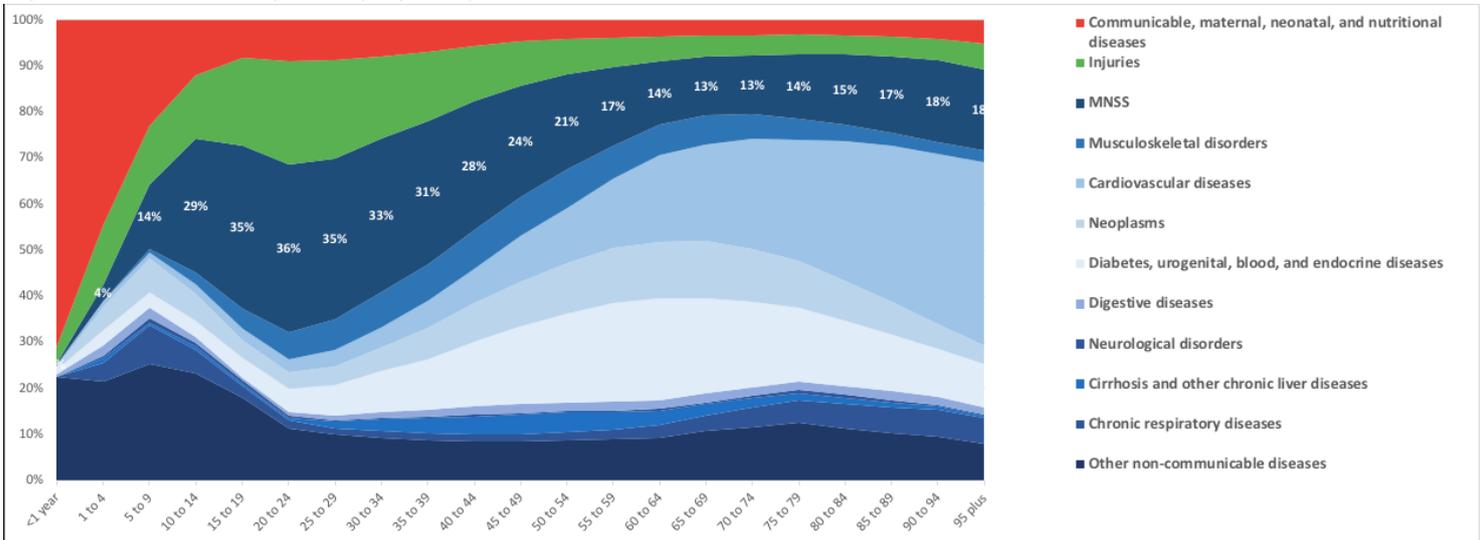
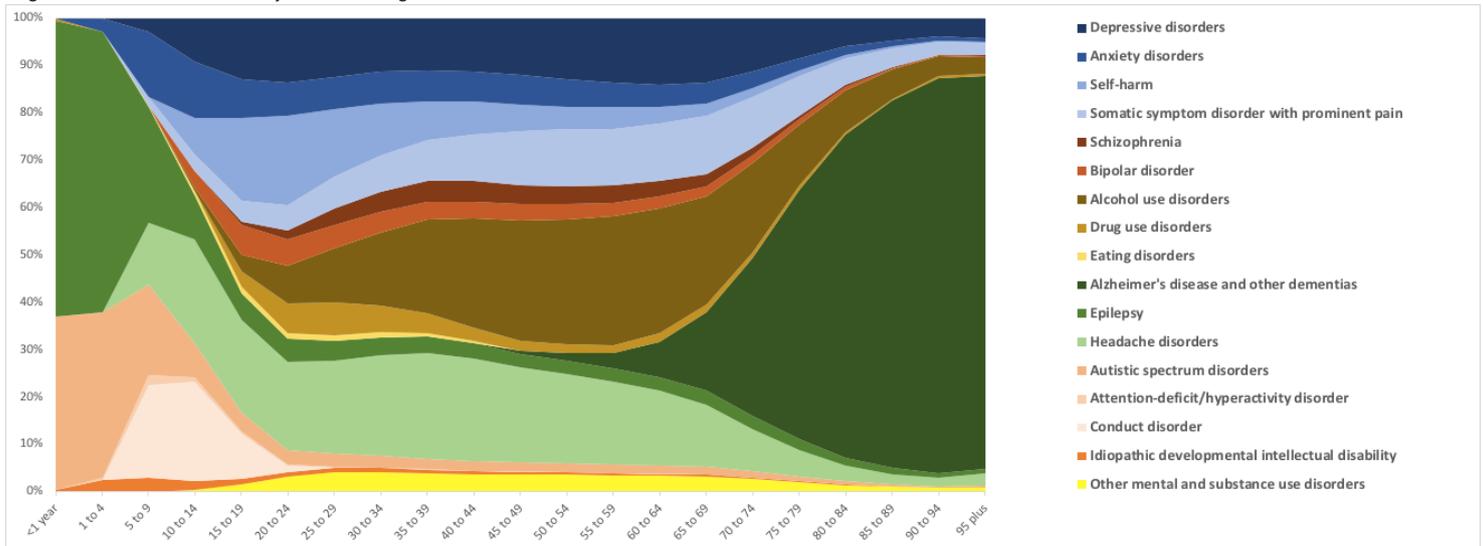


Figure 4. Burden of disease, by MNSS and age



THE BURDEN AFFECTING MENTAL HEALTH IN MEN AND WOMEN

The top three disorders in terms of disability-adjusted life-years—accounting for 45 to 50% of total MNSS burden—are not the same for men and women: While men are mostly affected by alcohol use disorders, self-harm and suicide, and headaches, women are mostly affected by headaches, depressive disorders and Alzheimer's disease and other dementias.

Men		Women	
Disorder	DALYs per 100 000	Disorder	DALYs per 100 000
MNSS (all)	5033	MNSS (all)	4207
Alcohol use disorders	1296	Headache disorders	1004
Self-harm and suicide	571	Depressive disorders	617
Headache disorders	548	Alzheimer's disease and other dementias	473
Alzheimer's disease and other dementias	484	Somatic symptom disorder with prominent pain	428
Depressive disorders	421	Anxiety disorders	345

Conclusions:

Considering these estimates, primary care providers should receive training and tools to prioritize detection and treatment or referral for the common disorders highlighted above for each age-group and sex. For the severe disorders—such as autism, schizophrenia, bipolar disorder and Alzheimer's—as well as for severe, comorbid, or complex presentations of other disorders—e.g. depression during pregnancy, substance use in public service professions, etc.—primary care providers and families need access to adequate supports, such as:

- Referral and/or supervision platforms that allow for continued treatment in the community, including the use of digital technology to increase access to distant geographically concentrated resources.
- Emergency, inpatient, and residential services for the management of high-risk acute situations and high-need patients. These services should be community-based as much as possible, including for crisis management, inpatient treatment in general hospitals, supported housing, and residential services.