



Paraguay is located in central South America and borders Argentina, Bolivia, and Brazil. It is administratively divided into 17 departments plus a capital district, Asunción.

In 2019, the population numbered 7 million, 1.8% of it indigenous. The population grew by 59.5% between 1990 and 2015. Its structure has become less expansionary, and is stationary in the under-20 age groups.

The Paraguayan economy is growing. The country is the largest exporter of electricity in the Americas and the fourth-largest exporter of soybeans and sixth-largest exporter of beef in the world. During the past decade, the Paraguayan economy grew at an average annual rate of 5%. Its per capita gross domestic product (GDP) was US\$ 8,911 in 2014, while per capita gross national income was US\$ 8,470 that year.

THE DISEASE BURDEN AFFECTING MENTAL HEALTH

Mental, neurological, substance use disorders and suicide (MNSS) cause 18% of all disability-adjusted life years (DALYs) and 36% of all years lived with disability (YLDs).

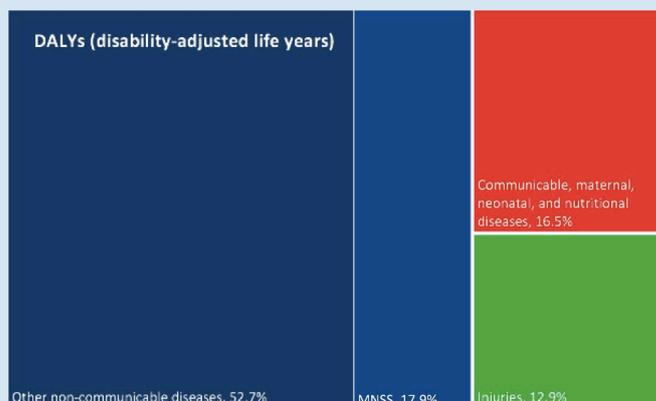
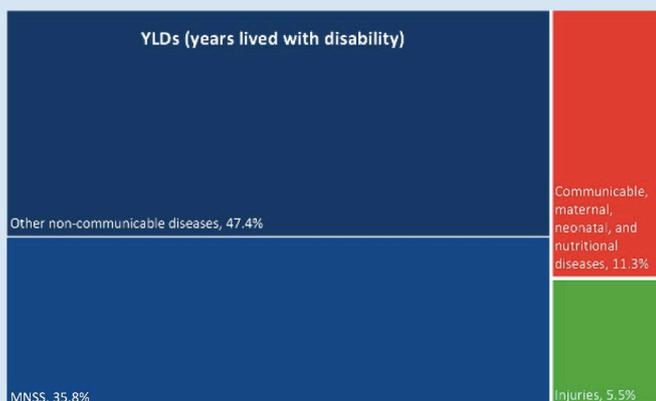


Figure 1. Distribution of YLDs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

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 30% 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 (46%) and autism (45%). Between 5 and 15 years old, the burden of anxiety disorders (22%), conduct disorders (17%), and headaches (17%)—including migraine and tension-type—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 44%, headaches for 19%, substance use disorders 17% (13% due to alcohol), and severe mental disorders (schizophrenia and bipolar disorders) 9%. The elderly suffer mostly from neurocognitive disorder due to Alzheimer's disease, which surpass 50% of the burden at 75 years old and remains above 80% after 85 years old.

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

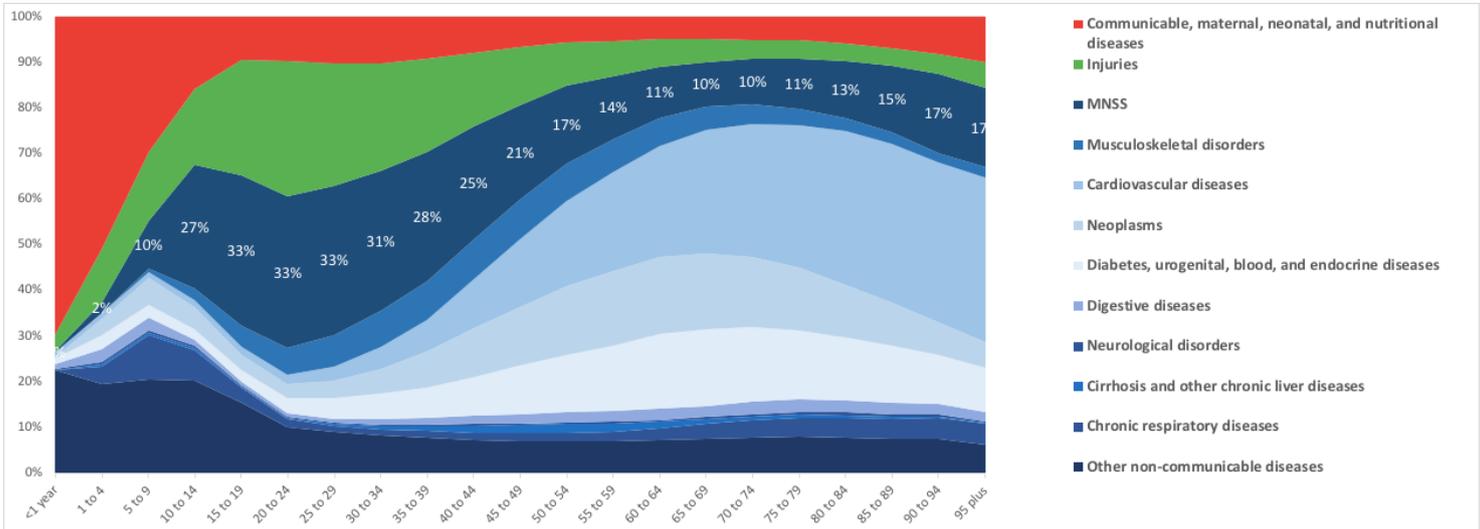
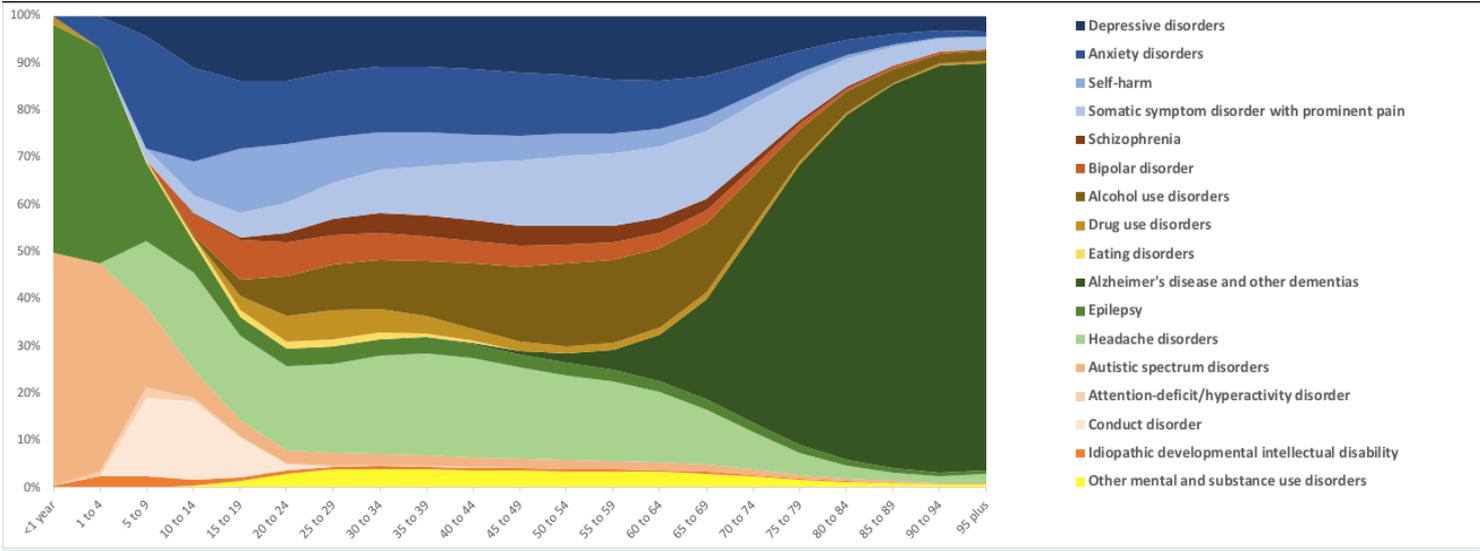


Figure 4. Burden of disease, by MNSS and age



THE BURDEN AFFECTING MENTAL HEALTH IN MEN AND WOMEN

The top three disorders in terms of disability-adjusted life-years—accounting for 40 to 55% of total MNSS burden—are not the same for men and women: While men are mostly affected by alcohol use disorders, Alzheimer's disease and other dementias, and headaches, women are mostly affected by headaches, anxiety and depressive disorders.

Men		Women	
Disorder	DALYs per 100 000	Disorder	DALYs per 100 000
MNSS (all)	4761	MNSS (all)	4914
Alcohol use disorders	814	Headache disorders	1030
Alzheimer's disease and other dementias	582	Anxiety disorders	758
Headache disorders	545	Depressive disorders	718
Somatic symptom disorder with prominent pain	438	Alzheimer's disease and other dementias	590
Self-harm and suicide	434	Somatic symptom disorder with prominent pain	519

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.