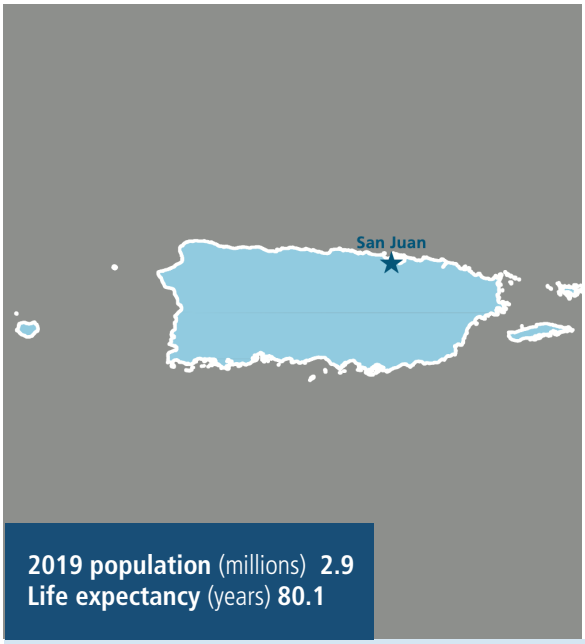
PUERTO RICO

The Burden of Mental Disorders in the Americas:
COUNTRY PROFILE



2019 population (millions) **2.9**
Life expectancy (years) **80.1**

Puerto Rico is an archipelago in the Greater Antilles, located in the northeastern Caribbean Sea. It consists of the main island and a number of smaller islands, the largest of which are Mona, Vieques, and Culebra. The territory is organized into 8 senatorial districts and 78 municipalities.
A commonwealth of the United States, Puerto Rico has a total land area of 9,105 km^2; the main island measures 170 km by 60 km. The estimated population in 2019 was 2.9 million, a 6.6% decline from 2010.

The population's age structure has been affected by aging, lower fertility and premature mortality, as well as emigration. Life expectancy at birth in 2019 was 80.1 years (76.5 in men and 83.5 in women).
Puerto Rico has been classified as a high-income economy, since its average annual per capital income between 2010 and 2015 was above US$ 12,476.

THE DISEASE BURDEN AFFECTING MENTAL HEALTH

Mental, neurological, substance use disorders and suicide (MNSS) cause 19% of all disability- adjusted life years (DALYs) and 32% of all years lived with disability (YLDs).

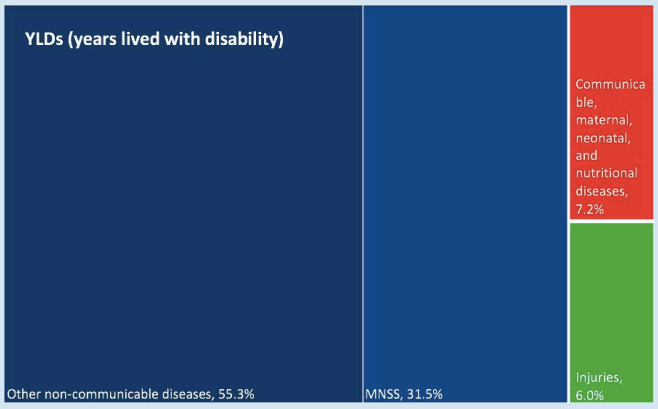


Figure 1. Distribution of YLDs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

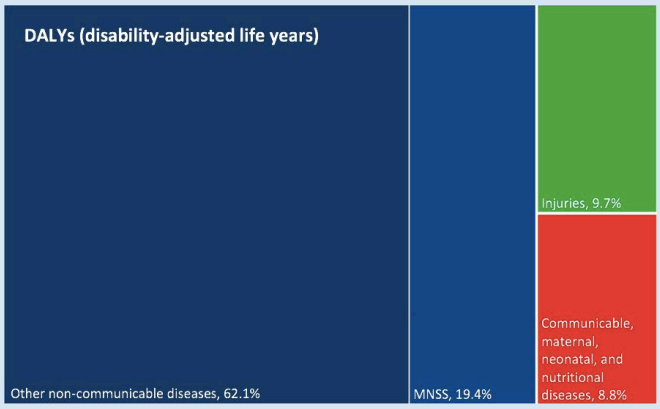


Figure 2. Distribution of DALYs with a focus on mental, neurological, substance use disorders and self harm (MNSS)

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 nearly 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 and autism, split almost 50/50. Between 5 and 15 years old, the burden of conduct disorders, anxiety disorders, and headaches –including migraine and tension-type- gain prominence, with nearly 20% of the MNSS burden each. 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 around a third, substance use disorders for 20%, headaches 20%, and severe mental disorders (schizophrenia and bipolar disorders) around 10%. The elderly suffer mostly from neurocognitive disorder due to Alzheimer's disease, which reaches nearly 50% of the burden at 75 years old and remains above 80% after 80 years old.

This is the second installment of the 2018 PAHO report, found here

Pan American Health Organization
World Health Organization
Regional Office for the Americas

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

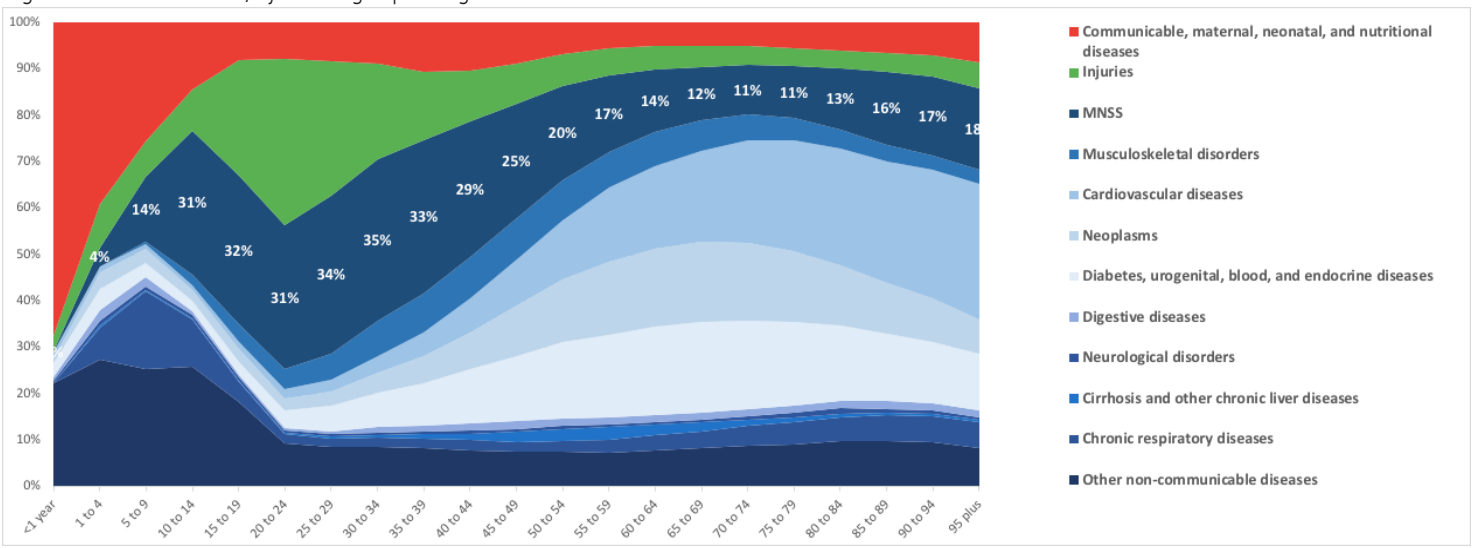
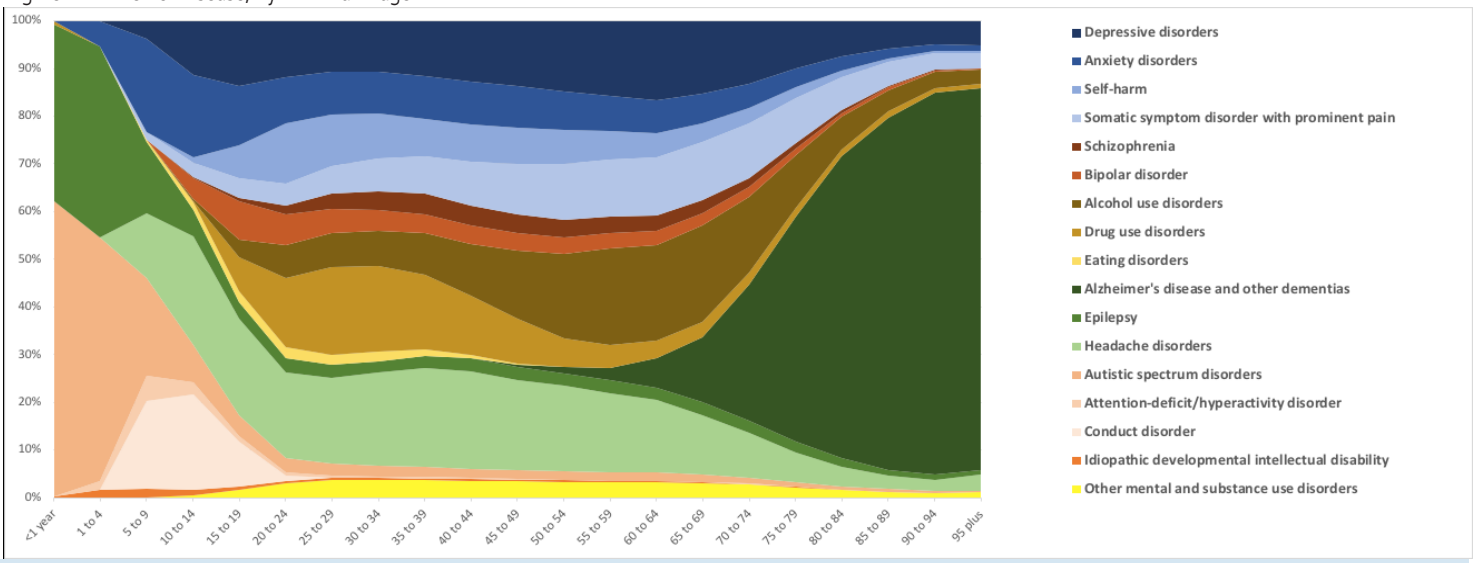


Figure 4. Burden of disease, by MNSS and age



THE BURDEN AFFECTING MENTAL HEALTH IN MEN AND WOMEN

The top three disorders in terms of disability-adjusted life-years –accounting for 35 to 50% of total MNSS burden- are not the same for men and women: While men are mostly affected by alcohol use disorders, headaches, and drug use disorders, women are mostly affected by headaches, anxiety and depressive disorders.

Men		Women	
Disorder	DALYs per 100 000	Disorder	DALYs per 100 000
MNSS (all)	4531	MNSS (all)	3963
Alcohol use disorders	707	Headache disorders	937
Headache disorders	523	Anxiety disorders	540
Drug use disorders	516	Depressive disorders	471
Self-harm and suicide	460	Alzheimer's disease and other dementias	386
Depressive disorders	388	Somatic symptom disorder with prominent pain	382

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.