

◆ Definitions

- ◆ *Neurologist*: a medical doctor who has at least two years of post-graduate training in neurology at a recognized teaching institution.
- ◆ *Neurosurgeon*: a medical doctor who has at least two years of post-graduate training in neurosurgery at a recognized teaching institution.

◆ Salient Findings

- ◆ The mean number of neurologists per 100 000 population is 1.99 (S.D. 3.6, Median 0.2)
- ◆ The mean number of neurosurgeons per 100 000 population is 0.48 (S.D. 0.7, Median 0.12)
- ◆ 69% of countries encompassing a population of almost 72% have less than one neurologist per 100 000 population.
- ◆ Almost 88% of countries have less than one neurosurgeon per 100 000 population.
- ◆ The distribution of neurologists and neurosurgeons across regions is variable. The number of neurologists and neurosurgeons in the Western Pacific Region is very low. Median number for neurologists and neurosurgeons are both 0, but the mean numbers are 0.67 and 0.42, respectively. The median figures are also low in the African Region: 0.02 neurologists and 0.01 neurosurgeons per 100 000 population. In the South-East Asia Region the medians for both groups of professionals per 100 000 population is 0.02. The median distribution per 100 000 population in the European Region is 4.25 and 1.0 for neurologists and neurosurgeons, respectively.
- ◆ The low income countries have a median distribution of 0.03 for neurologists and 0.01 for neurosurgeons per 100 000 population.
- ◆ The median distribution per 100 000 population in high income countries is also low and is 3.0 neurologists per 100 000 population and 1.0 neurosurgeon per 100 000 population.

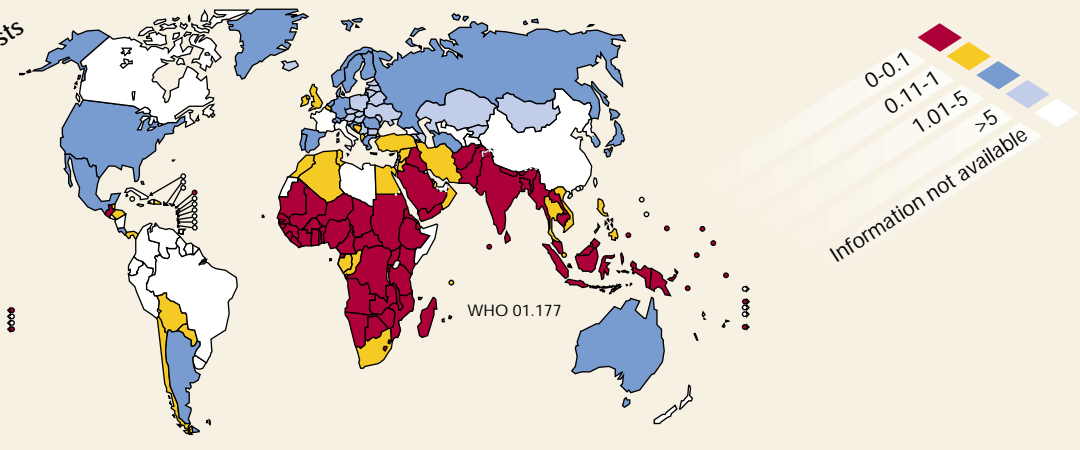
◆ Limitations

- ◆ Information on neurologists and neurosurgeons in the private sector may not have been reported accurately by some countries.
- ◆ Some countries reported information on neurologists and neurosurgeons based on membership figures from professional associations, leaving out some neurologists and neurosurgeons who are not members of those associations.

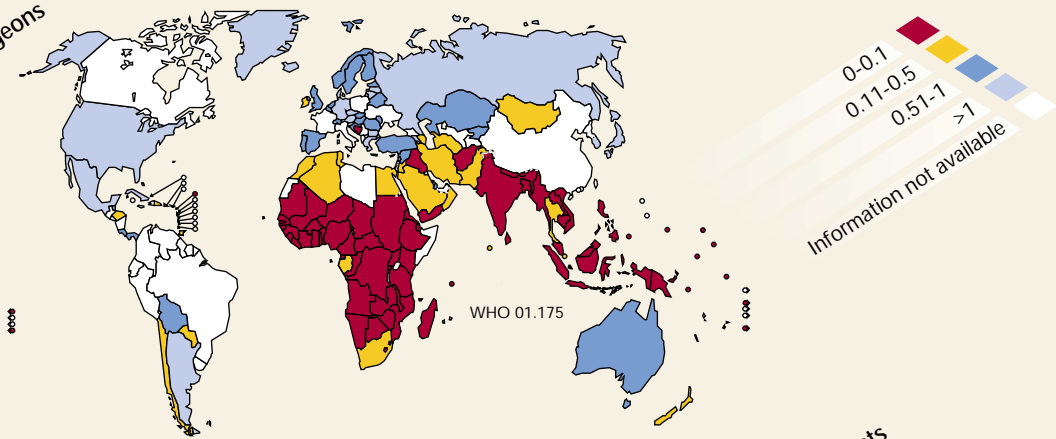
◆ Implications

- ◆ Neurologists and neurosurgeons often complement the efforts of mental health professionals in providing care for mental disorders. Some disorders are at the boundary of psychiatry and neurology, while others require expertise of both. Neurologists and neurosurgeons are also required for management of neuropsychiatric disorders like epilepsy, Parkinson's Disease, Alzheimer's Disease, movement disorders, etc.
- ◆ The number of neurologists and neurosurgeons is extremely inadequate in most countries.
- ◆ Due to the inadequate number of neurologists in some countries, psychiatrists have to manage neurological disorders.
- ◆ In areas where there are no mental health professionals, neurologists or neurosurgeons (if available) provide the needed mental health care.

12.1 Number of neurologists



12.2 Number of neurosurgeons



12.4 Number of neurologists in each WHO Region (Approximations based on information from 152 countries)

12.3 Median number of neurologists and neurosurgeons per 100,000 population in each WHO Region and the world
*The median numbers for Western Pacific Region is 0 as many smaller countries do not have these professionals

