

◆ Definitions

- ◆ **Budget for neurological care** is defined as a separate regular source of money, available in a country's health budget allocated for actions directed towards the care of neurological disorders in the country.
- ◆ **Out-of-pocket payments** in this context refer to payments made for neurological care by the patient or his or her family.
- ◆ **Tax-based funding** refers to money for health services raised by general taxation or through taxes earmarked specifically for neurological services.
- ◆ **Social insurance** refers to a fixed percentage of income that everyone above a certain level of income is required to pay to a government-administered health insurance fund which, in return, pays for part or all of consumers' services for neurological care.
- ◆ **Private insurance** refers to a premium that health-care consumers pay voluntarily to a private insurance company which, in return, pays for part or all of their neurological care.

◆ Salient Findings

- ◆ Of the responding countries, 10.4% have a separate budget within the country's health budget for care of neurological illnesses.
- ◆ Tax-based funding and social insurance are the primary methods of financing neurological care in 37.8% and 35.4% of the responding countries, respectively, followed by out-of-pocket expenses in 25.6%. Private insurance is the primary method of financing in 1.2% of the responding countries.
- ◆ Out-of-pocket expenses are the most important source of financing in Africa (83.3% of the responding countries) and South-East Asia (40% of the responding countries).
- ◆ Tax-based funding is the most important source of financing in the Eastern Mediterranean (57.1% of the responding countries), the Western Pacific (50%), the Americas (42.9%) and South-East Asia (40%).
- ◆ Social insurance is the most important source of financing in Europe (58.3% of the responding countries), while none of the responding countries in Africa use social insurance as the primary method of financing.
- ◆ Out-of-pocket expenditure is the primary method of financing in 84.2% of low-income countries, while it is the primary method of financing in 3.6% of high-income countries.
- ◆ Tax-based funding and social insurance are primary methods of financing in 50% and 42.8% of high-income countries, respectively, and primary methods of financing in 10.5% and 5.3% of low-income countries, respectively.

◆ Limitations

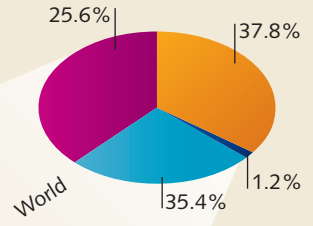
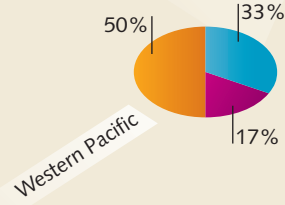
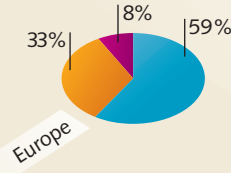
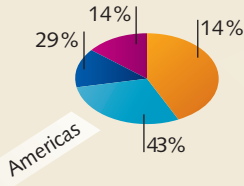
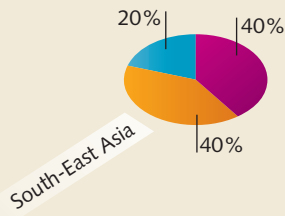
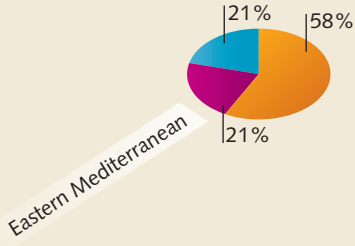
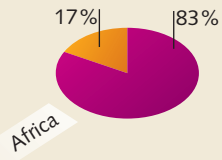
- ◆ This information is based on best estimates by the respondents and not on a review of actual expenditure or budget figures.
- ◆ Although definitions were provided with the questionnaire, it is possible that they may not have been used accurately.

◆ Implications

- ◆ Although a separate budget for neurological services is not essential, when present it assists in earmarking the resources and planning the services effectively. In most countries, the budget for care of neurological diseases is included in somatic medicine.
- ◆ In most low-income countries, out-of-pocket payment is the major source of financing. This is likely to result in further inequity in utilization of neurological services. Efforts need to be made to introduce some form of public financing to cover these services.

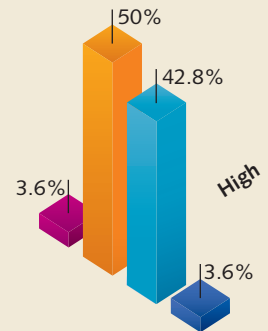
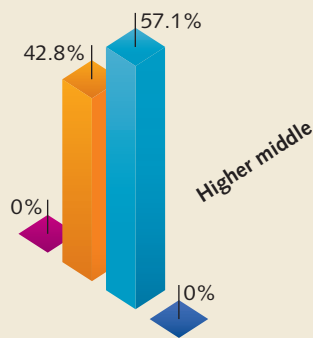
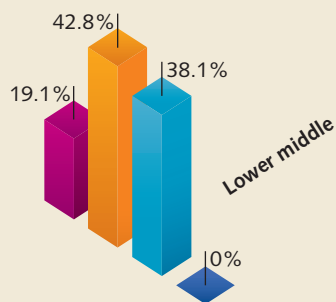
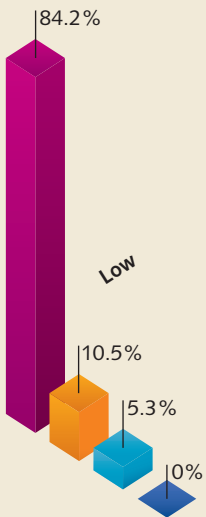
12.1

Primary method of financing neurological care in WHO regions and the world
N=82



12.2

Primary method of financing neurological care in different income groups of countries
N=82



◆ Definitions

- ◆ **Disability benefits** in this context are the benefits that are payable as part of legal right from public funds in cases

of neurological disorders that cause physical or mental impairment leading to functional limitations.

◆ Salient Findings

- ◆ Of the responding countries, 70.5% reported the availability of some form of disability benefits for patients with neurological disorders.
- ◆ Of the low-income countries, 67.9% reported nonavailability of any kind of disability benefit for neurological disorders, compared with 3.2% of high-income countries.
- ◆ Availability of disability benefits for neurological disorders is also variable across regions. While 25% and 33.3% of the responding countries in Africa and South-East Asia, respectively, reported availability of some form of disability

benefits for neurological disorders, such benefits were available in 66.7% of the responding countries in the Eastern Mediterranean, 77.8% in the Western Pacific, 85.4% in Europe, and 92.3% in the Americas.

- ◆ Regarding the types of disability benefits reported by countries, monetary benefits (75.7%) and rehabilitation and health benefits (64.9%) are the most commonly reported, followed by other benefits including housing, transport, education and special discounts (45.9%) and benefits at the workplace (37.8%).

◆ Limitations

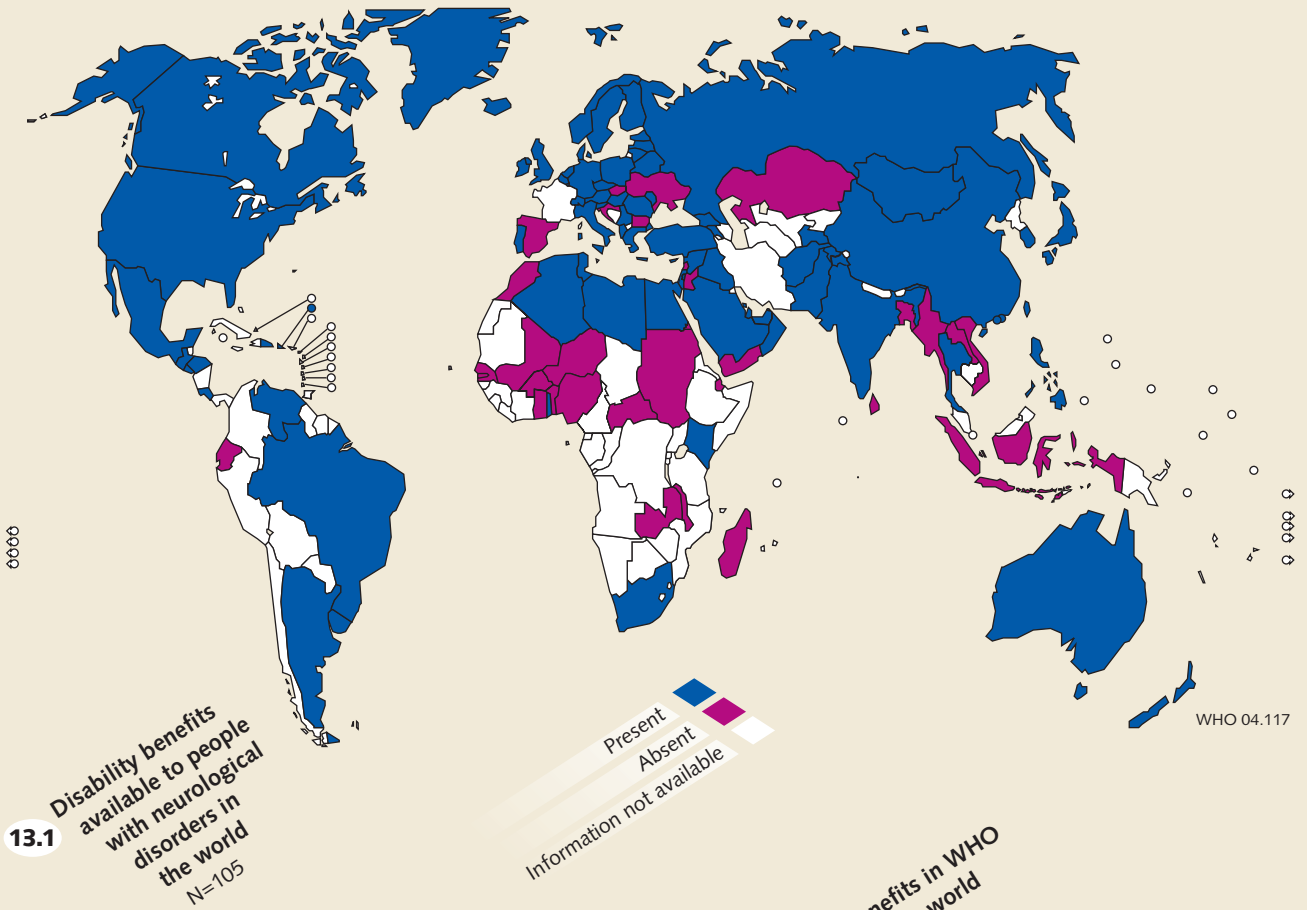
- ◆ Information on the exact type of disability benefit for neurological disorders was not obtained on a structured format.

- ◆ Data regarding coverage within the countries was not obtained. It is possible that in countries who responded in affirmative, disability benefits are available to only a small proportion of the population.

◆ Implications

- ◆ Because of a lack of public information about disability benefits and the procedure for claiming them, few people actually receive them in many countries even when benefits are available. Sometimes the procedure for availing themselves of disability benefits is also very complicated.

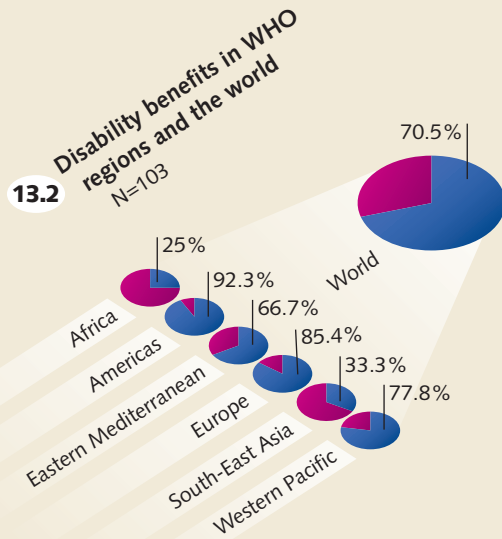
- ◆ Efforts should be made to advocate better provision of disability benefits for neurological disorders.
- ◆ The inequity in the availability of disability benefits observed across income groups, geographical areas and within countries needs to be specifically addressed.



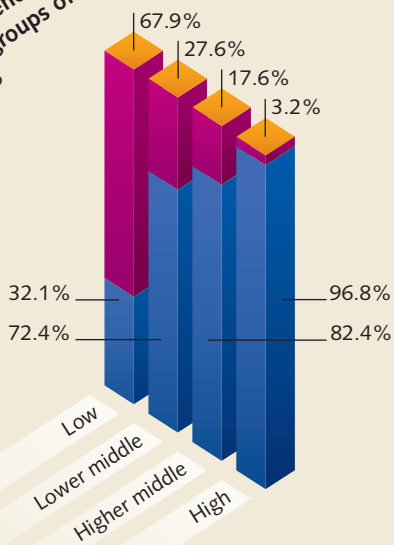
13.1

Disability benefits available to people with neurological disorders in the world
N=105

13.2 Disability benefits in WHO regions and the world
N=103



13.3 Disability benefits in different income groups of countries
N=105



◆ Definitions

- ◆ In this context, **health reporting system** refers to the preparation of reports, usually yearly, covering health service functions related to neurological disorders, including the use of allocated funds.
- ◆ **Epidemiological or service data collection system** refers to an organized information-gathering system for service activity data for neurological disorders. It usually incorporates incidence and prevalence rates of diseases, admission and discharge rates, numbers of outpatient and community contacts and other activities.

◆ Salient Findings

- ◆ There is a health reporting system for neurological disorders in 78.1% of the responding countries.
- ◆ A health reporting system for neurological disorders is available in 66.7% and 73.3% of the responding countries in South-East Asia and Africa, respectively, while such a system is available in 76.9% of the responding countries in the Americas, 77.8% in the Eastern Mediterranean and the Western Pacific, and 83.3% in Europe.
- ◆ A data collection system for neurological disorders exists in 48.5% of the responding countries.
- ◆ Whereas almost two thirds of the responding countries in the Americas and Europe, 41.2% in the Eastern Mediterranean, and 43.8% in Africa have a data collection system for neurological disorders, none of the responding countries in South-East Asia and 22.2% in the Western Pacific have an epidemiological data collection system.
- ◆ An epidemiological data collection system is available in 35.7% of the low-income countries and 73.3% and 51.6% of the higher middle-income and high-income countries, respectively.

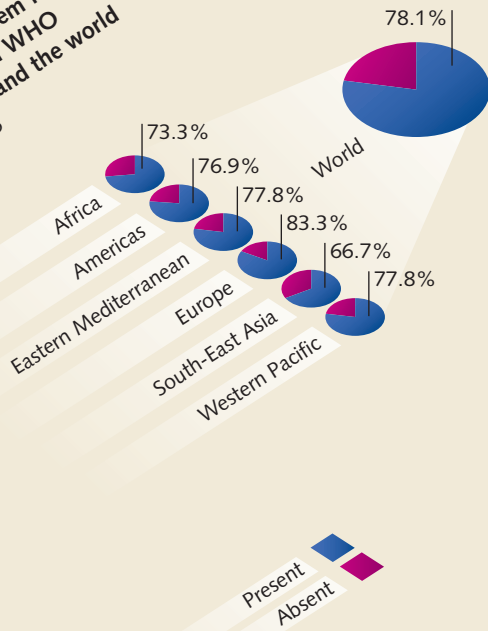
◆ Limitations

- ◆ Information about the quality or adequacy of the health reporting system for neurological disorders is not available.
- ◆ The epidemiological or service data collection system does not include the epidemiological studies for neurological disorders carried out by individual groups in various countries.

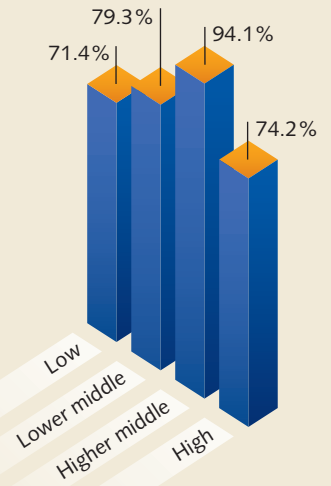
◆ Implications

- ◆ An organized health reporting system is essential to enable health planners to decide how to use various resources.
- ◆ Epidemiological data help to gather information regarding the disease burden and trends and help in identifying the high priority issues. This information is highly useful for planning health services and monitoring trends over time.

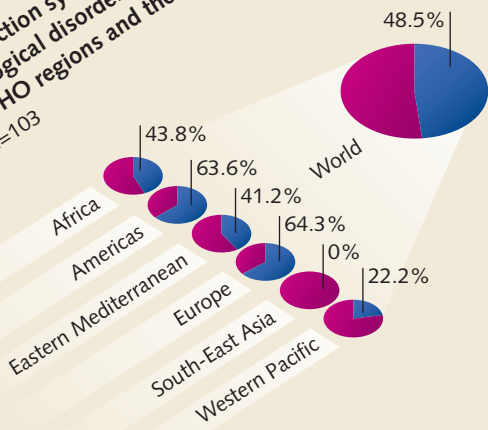
14.1 Reporting system for neurological disorders in WHO regions and the world
N=105



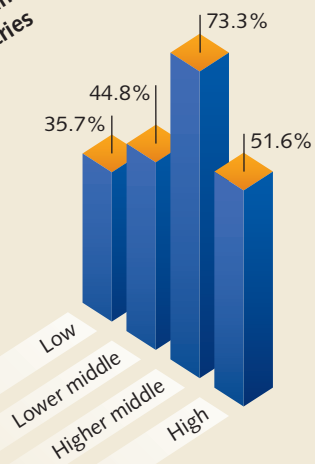
14.2 Reporting system for neurological disorders in different income groups of countries
N=105



14.3 Data collection system for neurological disorders in WHO regions and the world
N=103



14.4 Data collection system for neurological disorders in different income groups of countries
N=103



◆ Definitions

- ◆ **National neurological association** refers to the professional association of neurologists or other neurology-allied sciences; such associations are usually nongovernmental.
- ◆ **Nongovernmental organizations (NGOs)** refers to voluntary organizations, charitable groups, service-user or advocacy groups in the area of neurology.

◆ Salient Findings

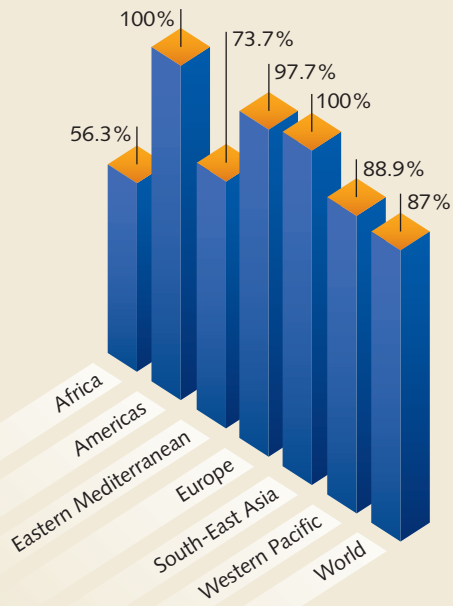
- ◆ A national neurological association exists in 87% of the responding countries.
- ◆ While 43.7% of the responding countries in Africa do not have a national neurological association, 26.3% in the Eastern Mediterranean, 11.1% in the Western Pacific and 2.3% in Europe do not have a national neurological association.
- ◆ A median number of 192 (interquartile range 46–500) specialists are members of the national neurological association in the responding countries.
- ◆ The national neurological associations are involved in various activities: organizing professional meetings and conferences (100% of the responding countries), advising government (70.7%), constructing curricula for postgraduate training (44.6%), granting a degree of specialization in neurology (31.5%), constructing curricula for undergraduate training (30.4%), accrediting neurology departments for postgraduate training (28.3%) and accrediting neurology departments for undergraduate training (21.7%).
- ◆ Of the responding countries, 71.7% have at least one nongovernmental organization working in the field of neurology. In 10.5% of these countries, the nongovernmental organizations are working only in the area of epilepsy.
- ◆ No nongovernmental organizations for neurological disorders exist in 34% of the low-income countries and 29% of the high-income countries.
- ◆ Regionally, no nongovernmental organizations for neurological disorders exist in 52.9% of the responding countries in the Eastern Mediterranean, 33.3% in the Western Pacific, 23.8% in Europe, 19.7% in Africa, 16.7% in South-East Asia, and 14.3% in the Americas.
- ◆ The nongovernmental organizations are involved in awareness and advocacy in 92.1% of the responding countries, treatment (69.7%), rehabilitation (65.8%) and prevention (61.8%) activities.

◆ Limitations

- ◆ Since the sources of information in most countries were the key persons working in neurology and possibly members of a national association, the data pertain mainly to countries where neurologists or persons with an interest in neurology exist. Therefore it is possible that the figures might be an overestimate.
- ◆ Information regarding the coverage of population by the activities specified within the countries is not available.
- ◆ Information regarding the quality of services is also lacking.
- ◆ Some of the nongovernmental organizations working in the countries are actually international organizations and not local organizations.

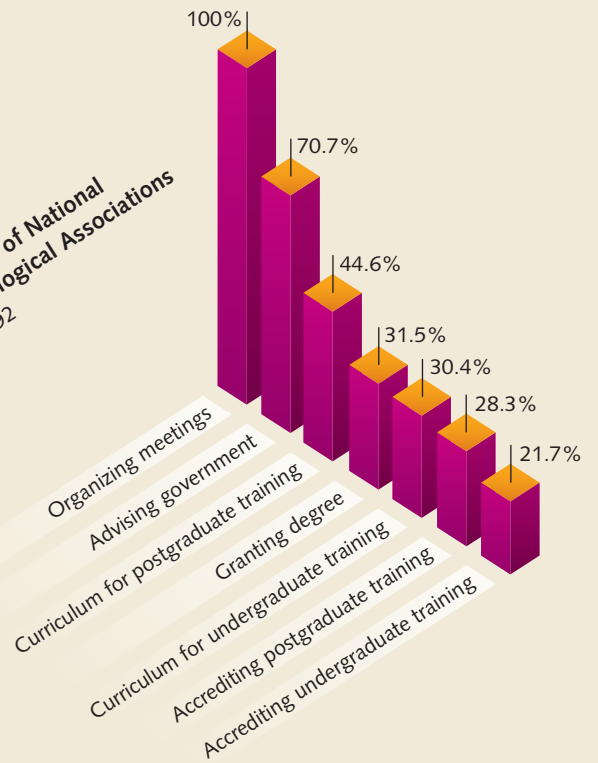
◆ Implications

- ◆ Presence of professional associations highlights the commitment of neurologists to improve the status of care for neurological disorders.
- ◆ The neurological associations should be more involved to improve the status of patient care and training in neurology.
- ◆ The participation of both local as well as international nongovernmental organizations in the care of neurological disorders is important. Their activities need to be encouraged as they complement the services provided by the public sector.
- ◆ Many international nongovernmental organizations are also involved in various educational and training activities for neurologists.
- ◆ Groups of patients with neurological disorders and their carers need to be established in many more countries, as they can be strong advocates for improvement in the quality of services.

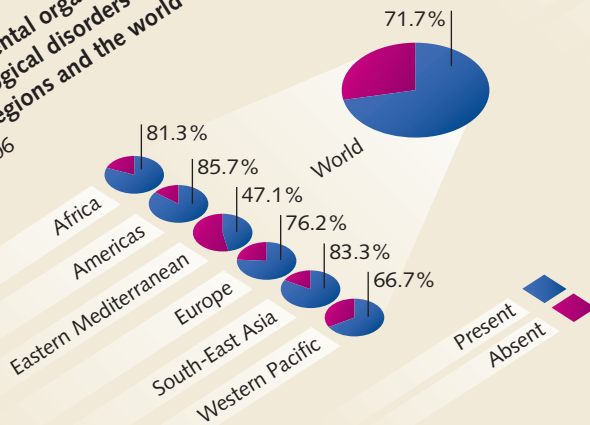


15.1 National Neurological Associations in WHO regions and the world
N=108

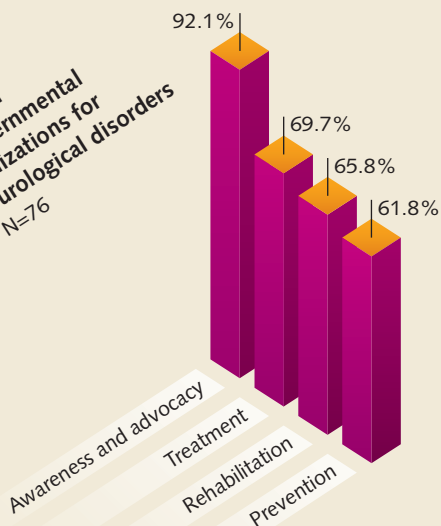
15.2 Activities of National Neurological Associations
N=92



15.3 Nongovernmental organizations for neurological disorders in WHO regions and the world
N=106



15.4 Activities of Nongovernmental organizations for neurological disorders
N=76



15.5 Nongovernmental organizations for neurological disorders in different income groups of countries
N=106

