

Evolution and Updates of Epilepsy Situation in Morocco

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Description

Epilepsy is one of the most common neurological diseases. 70 million people in the world suffer from it, 80% of them live in developing countries [1-5]. In Africa, it affects more than 5.4 million people with 4.4 million in sub-Saharan Africa [6]. In Morocco, it constitutes the second reason for consultation in neurology but despite this, very few epidemiological studies have been devoted to it. Its prevalence is estimated at 1.1% [7], which constitutes more than 370,000 epilepsy [8].

In Morocco, many elements have helped to improve the care of Patients with Epilepsy (PWE) such as: The Improvement of telemedicine, the availability of most new anti-epileptics drugs, decreased use of traditional treatments, increasing numbers of neurologists, the involvement of a large number of associations in the sensitization of the population.

In this work we will try to describe the improvement in the care of epileptic patients over the last few years in Morocco.

Improvement of telemedicine

The Marrakech University Hospital is the major 3rd level hospital in southern Morocco and therefore covers a large geographical area and patients with epilepsy are facing serious problem of access to specialized health care structures. Since 2008 our neurology team initiated a program of itinerary consultations in far cities in South Morocco, bringing neurologists to cities without neurologists, then leaving hundreds of patients crossing long distances and wasting time and money Ref Chraa.

Since 2014, the neurology department was the first to initiate the use of telemedicine and is currently the pilot service in this field.

For example, the neurology department organizes specialized epilepsy teleconsultations with a center in Essaouira (a city 190 km away from Marrakech) by a doctor on site and supervised by the head of the department. The number of meetings per week is set in collaboration with the Essaouira team. The patients are examined by the doctor on site and the latter's data are communicated through telemedicine, in return the prescriptions are issued by our senior neurologists 'Ref Chaqda, Rev Neurologique'.

A monthly teleconsultation session also takes place with the Safi regional hospital: An average of 15 cases is discussed each session. Other centers are in the process of acquiring the necessary equipment to expand the number of beneficiary towns, several projects are being led by Professor Kissani.

Teleconferencing represents a type of telemedicine adopted with these centers, and is organized by our team with a number of consultants gathered for a mainly educational purpose in order to improve the level of management and follow-up of patients with epilepsy and to encourage the secondary and tertiary prevention.

This initiative is also carried out with the other centers on an international scale, namely Sfax (Tunisia), Mexico City (Mexico).

How epilepsy progressed since 1980 to 2020

Health infrastructure: Morocco currently has five operational University Hospital Centers:

Avicenna in Rabat

Ibn Rochd in Casablanca

Mohammed VI in Marrakech

Hassan II in Fez

Mohammed VI in Oujda

Three other UHC are under construction in Tangier, Agadir and Laayoune, their inauguration is expected soon in 2021. The reconstruction project of the Avicenna UHC in Rabat is also being finalized.

In total, 8 of the 12 regions have or will have a UHC, while the ambition is to provide all regions with UHC. That said, the "one region, one university hospital" vision faces several problems as financial and human resources.

Each university center has a dedicated neurology and neurophysiology department for the care of PWE. In the 2000s, our neurology center was created as the 4th service in Morocco, the only department in the Southern half of Morocco [9].

Apart from this, other services have been created within regional hospitals, the number of which is constantly increasing.

New investigation PET et le SPECT: Can we put here some pictures of clinical case of epilepsy with SPECT and PET scan?

Epilepsy surgery

Antiepileptics drugs: Commonly called third-generation drugs, most of which are currently available. Among the new antiepileptic available both as princeps and generic form, we find Gabapentin, Lamotrigine, Oxcarbazepine, Levetiracetam, Pregabalin and Topiramate, of which only the generic is available.

References

1. Almu Sh, Tadesse Z, Cooper P, Hackett R (2006) The prevalence of epilepsy in the Zay Society, Ethiopia-An area of high prevalence. *Seizure* 15: 211-213.
2. Chin Jh (2012) Epilepsy treatment in sub-Saharan Africa: Closing the gap. *Afr Heal Sci* 12: 186-192.
3. Hunter E, Rogathi J, Chigudu S, Jusabani A, Jackson M, et al. (2012) Prevalence of active epilepsy in rural Tanzania: A large community-based survey in an adult population. *Seizure* 21: 691-698.
4. Perucca E, Covanis A, Dua T (2014) Commentary: Epilepsy is a global problem. *Epilepsia* 55: 1326-1328.
5. World health organization. (2005) Atlas: Epilepsy care in the world, Geneva.
6. Paul A, Adeloye D, George-Cary R, Kocic I, Grant L, et al. (2012) An estimate of the prevalence of epilepsy in Sub-Saharan Africa: A systematic analysis. *J. Glob. Health* 2: 1-13.
7. Itri M, Hadj KH (1998) Enquête épidémiologique sur les épilepsies de l'enfant. *Les Cahiers du Médecin* 1: 36-38.
8. Kissani N (2012) Situation of epilepsy in North Africa and Middle East region and Arab Spring. *North Afr Middle East Epilepsy J* 1: 5-9.
9. Kissani N, Rhazouani OC, Souirti Z, Khramaz M, Chettati M, et al. (2020) Epilepsy in Morocco: Realities, pitfalls and prospects. *Epilepsia Open*.