

PREVALENCE OF EPILEPSY IN HONDURAS: A NATIONAL POPULATION BASED-STUDY

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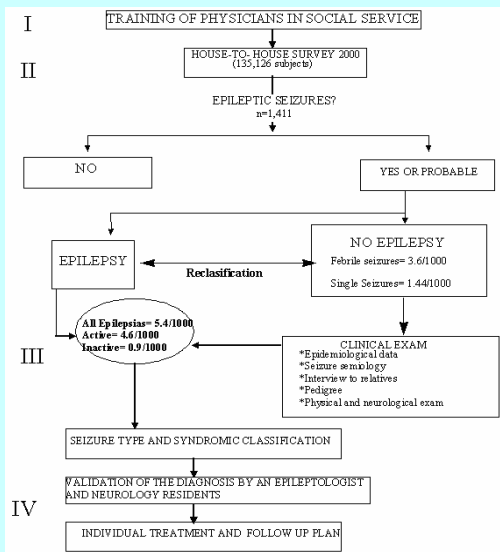
PURPOSE

To determine the epidemiology of epilepsy in Honduras through a national population-based study.

METHODS

70 medical doctors accomplishing their social service and previously trained in epilepsy performed a house-to-house survey in 50 communities from the 18 counties of Honduras. Diagnoses were based on the criteria of the International League Against Epilepsy and were validated by one epileptologist and five neurologists. All patients gave written consent for the study.

Figure 1. Methodology of the study by phases.



RESULTS

Total population screened: 135,126

52% female and 48% male

Epileptic seizures sometime in life: 10.4/1000 (n=1,411)

National overall epilepsy prevalence: 5.41/1000 (range 1-27/1000)

Diagnosis	Population at risk	Prevalence	Age group (years)	Prevalence rate
All epilepsies	731	5.41	< 10 años	4.01
Active epilepsy	616	4.56	10-19 años	5.3
Inactive epilepsy	115	0.86	20-29 años	6.63
Single seizure	194	1.44	30-39 años	7.24
Febrile seizure	486	3.6	40-49 años	5.02
Epilepsy in men	351	2.6	50-59 años	5.57
Epilepsy in women	380	2.8	> 59 años	5.16
Non epileptic events	168	1.49		

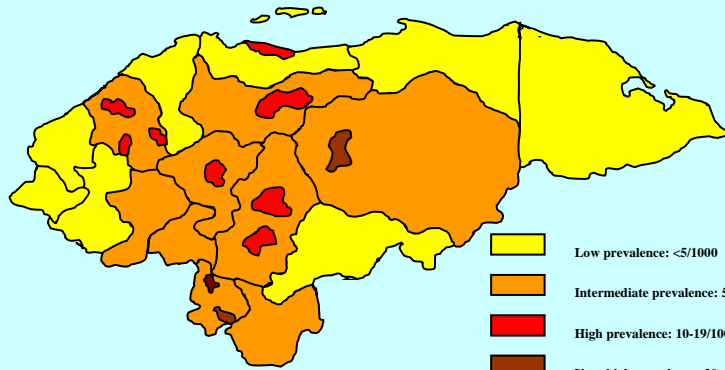


Figure 4. Map of Honduras with Counties and prevalence by category

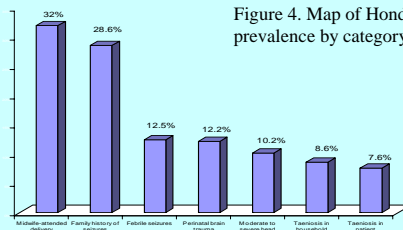


Figure 3. Historical data that could be related to the increased risk for epilepsy



Figure 5. Seizure types by clinical history in patients with active epilepsy

- We found problems of access both to treatment and diagnostic studies for epilepsy.
- One third of 772 persons with active epilepsy were not on antiepileptic drug (AED) treatment.
- The vast majority of patients received first generation AEDs (PBPH, CBZ, and VPA)
- 7% of patients had never consulted a physician

Figure 4. Treatment status in patients with active epilepsy

COUNTY	COMMUNITY	INCIDENCE/1000 POP.
Atlántida	La Ceiba	87
	Santa Rosa de Agaña	98.3
	Comayagua	98
Choluteca	El Triunfo	49.6
	Subangrade	49.3
	Leporrique	199
Francisco Morazán	Cururín	64.3
	Cidreño	149.8
	La Paz	84.1
Lempira	San Manuel Colohete	48
	Guanaco	142
	Salama	86.34
Ocotepeque	Jutiocalpa	1.8
	Macueltiro	49.9
	Valle	168
Yoro	Yoro	109
	Yoro	195.6
	Yoro	121
Yoro	Yoro	254.3

Table 5. Incidence in 11 Counties in which at least one year follow-up was done

COUNTY	COMMUNITY	YEAR	PREVALENCE	PREVALENCE/1000 POP.
ATLÁNTIDA	La Ceiba	19	87	4.50
	Santa Rosa de Agaña	19	98.3	5.19
	Comayagua	19	98	5.17
CHOLUTECA	El Triunfo	12	49.6	2.60
	Subangrade	12	49.3	2.59
	Leporrique	12	199	10.48
FRANCISCO MORAZÁN	Cururín	12	64.3	3.37
	Cidreño	12	149.8	7.87
	La Paz	12	84.1	4.42
LEMPIRA	San Manuel Colohete	12	48	2.51
	Guanaco	12	142	7.45
	Salama	12	86.34	4.54
OCOTEPEQUE	Jutiocalpa	12	1.8	0.09
	Macueltiro	12	49.9	2.62
	Valle	12	168	8.89
YORO	Yoro	12	109	5.65
	Yoro	12	195.6	10.24
	Yoro	12	121	6.28
YORO	Yoro	12	254.3	13.33

Table 4. Prevalence by Counties and communities

CONCLUSION

- This is the first national population-based study reported in Central America.
- The overall prevalence for Honduras is similar to that of industrialized countries and lower than reported from local studies in underdeveloped countries, even though foci of high and low prevalences were found.

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