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## Epilepsy and Enuresis of Teenagers and Young Adults: Attitudes, Practices and Knowledge in Togo

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**Materials and Methods:** We have carried out a prospective study on enuresis and epilepsy in Togo. After the phase of recruiting enuresis and epilepsy patients at CHU- SO, an investigation phase followed in three main cultural areas in Togo and focused on three groups of people: the custodians of collective knowledge, the general population (120) and the medical staff (225). Open-ended questions were about the knowledge and the behaviors in case of enuresis as the only symptom of epilepsy.

**Results:** Enuresis is not considered like a manifestation of epilepsy in most subjects interviewed. This poor knowledge epilepsy seems to explain the relative tolerance in patients with enuresis within the society. But some attitudes and practices in the case of enuresis reveal risks of "social death" just like in non-treated epileptic subjects. On the other hand, adult subjects with enuresis revealed attitudes and practices that are conducive to care for the patients with enuresis and epilepsy.

**Keywords:** enuresis, epilepsy, attitudes, practices, togo.

**GJMR-A Classification :** NLMC Code: WL 385, WS 322



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# Epilepsy and Enuresis of Teenagers and Young Adults: Attitudes, Practices and Knowledge in Togo

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**Conclusion:** Once the attitudes and practices of the patients with enuresis and epilepsy are known, better strategies can be developed for a better care for these patients in order to rescue them from "social death".

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## I. INTRODUCTION

Enuresis (E) is the uncontrolled micturition during sleep. The International Children's Continence Society defines enuresis as an intermittent urinary incontinence or a sullyng of the bed during sleep by a person under 5 [1]. This terminology is applicable only after bladder control acquisition or after 5 years, and is one of the most frequent pediatric disease [1]. Enuresis is a public health issue, especially in the tropical areas and sometimes leads to dehumanizing and humiliating practices. Various etiologies can explain the occurrence of enuresis of teenagers and adults, especially epilepsy. Actually, apart from headaches, epilepsy is the most frequent neurological pathology seen in the world. [2].

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The World Health Organization believes that the number of epileptic subjects all over the world is about 50 million and that 80% of that number is found in the tropical latitudes [3]. Epilepsy is also a major public health issue considering its medical, social, cultural and economic consequences both for the epileptic patients and for the society. Epilepsy, just like any other disease, including enuresis, cannot be separated from its own social and cultural context. Each community, each society has its own peculiar vision about it and which is not without repercussion the care provided [4]. It seemed interesting for us to study one of the unknown symptoms of the Epilepsy of the teenager and the young adult in Black Africa, namely enuresis. For us, knowing this vision seems to be a fact that cannot be overlooked if we want to put up a policy of information, sensitization and education adapted to social and cultural realities regarding epilepsy in Togo.

## II. MATERIALS AND METHODS

Our study is carried out at the Clinic of Neurology, CHU Sylvanus OLYMPIO (CHU-SO), Lomé, Togo. It is a prospective crosscutting study carried out in two steps.

The first phase is carried out at the Clinic of Neurology, CHU-SO in patients with enuresis from January 1 to December 31, 2014. All the patients involved in our study have been recruited from January 1 to December 31. Each one of the patients involved has been monitored for three years. Patients that have consulted a practitioner for enuresis during that period of the study and whose electroencephalogram revealed epilepsy were included to our study. All the patients involved in our study have been checked in the division of urology, CHO-SO in order to eliminate any uroorganic affection. The patients that don't meet the inclusion criteria were excluded.

The second phase included collecting answers to a questionnaire from all the patients involved in the study, from their families and the medical staff of CHU-SO. Les various questionnaires used were inspired by the WHO standardized and validated protocols. They were translated into the local language when the need arises and tested before the survey. The surveys were



carried out the same team trained by a neurologist, a general practitioner from the same region with the patient, a psychologist and a medicine student from the same region with the patient. Finally, the surveys in general took into consideration three groups of people: the custodians of the family knowledge, the patients and the general population, as well as the medical staff. All the surveys complied with ethics and were validated by the National Health Commission. The Togolese League against Epilepsy provided a funding of 500 euros to pay all those involved in the phase of the survey with the custodians of collective knowledge in the interior of Togo.

Togo is a West African country with a population of about 6,500,000 inhabitants in 2010. CHU-SO is the first national health care center of reference in Togo with 1050 workers. These workers include 320 Medical Doctors, 105 Advanced Health Technicians, 93 midwives, 150 nurses and 382 nurse's aids. All the categories of the population go there to consult on a regular basis. Togo is featured by a subdivision in five economic regions (Savannah, Kara, Central, Plateau and Maritime Regions) and an ethnic map made up of three major cultural areas (Para Gourma, Kabyè and Adja Ewe).

For the survey with the medical staff at CHU-SO, the questionnaires were about the definition, the curability, the diagnosis and the place of enuresis in epilepsy. Over a total of 300 questionnaires distributed to the medical staff of CHU-SO, 252 have been exploited (42 Medical Doctors, 54 Advanced Health Technicians, 48 midwives, 58 nurses and 50 nurse's aids).

The participants in these study were drawn at random.

The survey with the patients and their families was preceded by the identification of the seniors of the family or the village of origin of the family. These "custodians of collective knowledge", called the tradition and culture keepers included well-known and famous healers in their respective regions, elders, notables and traditional chiefs,... They were 90 in number and were identified

four months before the surveys stated thanks to the cooperation of the parents. The data collection technique was the oral questioning with an interview guide. The answers were recorded in writing and on tape recorder. The survey with the custodians of collective knowledge focused on enuresis as a symptom of epilepsy: knowing and ignoring that enuresis is the manifestation of epilepsy; attitudes and practices in case of enuresis during epilepsy: therapeutic baths, therapeutic rituals, initiation rituals, contagiousness. The questions were open-ended; a content analysis was done for the answers to the questions. We used the chi2 correlation and validation test of Mandel Haenszel for the qualitative comparisons. The links between the variables were considered as statistically significant at the probability threshold of  $p \leq 0.05$ .

### III. RESULTS

During the period of our study, 104 patients were checked for enuresis. 15 patients had a normal electroencephalogram, 12 patients had an organic and/or urologic etiology that could explain the enuresis. Finally, 10 patients were lost. 67 patients that complied with our inclusion criteria were monitored till the end of the study. Our results will therefore focus on these 67 patients. We dealt with 21 female patients and 46 male patients i.e. a sex-ratio of 2.19. The mean age of the patients was  $15.15 \pm 6.9$  years with extremes of 10 years and 36 years. 18 (26.86%) patients were between 10 and 12 years old. 44 (65.68%) patients consulted for enuresis, followed by 15 (22.38%) cases of epilepsy associated with convulsive attacks and by 8 (11.94%) cases of enuresis with fainting. According to the period of occurrence of the enuresis, 48 (71.64%) patients had nighttime enuresis, 12 (17.91%) had daytime and nighttime enuresis and 2 (2.98%) had a daytime enuresis. In 5 (7.47%) patients, the type of enuresis has not been specified. Finally, 57 (85%) patients had a secondary enuresis.

#### *Attitudes, Practices and Knowledge*

*Table 1* : The answers of the medical staff

	Medical Doctors (N= 42)	Nurses (N= 58)	Midwives (N= 48)	Nurse's Aids (N= 50)	Advanced Technicians (N= 54)
Enuresis as unique symptom of epilepsy	10 (23.80%)	12 (20.68%)	8 (16.66%)	2 (4%)	9 (16.66%)
Right definition of epilepsy	12 (28.57%)	4 (6.89%)	5 (10.41%)	3 (6%)	10 (18.51%)
Right answers on curability of associated with epilepsy	20 (47.61%)	18 (31.03%)	22 (45.83%)	10 (20%)	16 (29.62%)

*Table 2* : The answers of the custodians of collective knowledge

	Adja Ewe (N= 30)	Kabyè Tem (N= 30)	Para Gourma (N= 30)
Enuresis as unique symptom of epilepsy: right answer	5 (20%)	5 (20%)	3 (10%)
Ritual baths: naked in pond with toads	30 (100%)	25 (83.33%)	30 (100%)
Ritual practices: carry the wet mat (with urine) around the area or the village and be shouted at	30 (100%)	30 (100%)	30 (100%)
Right answer on contagiousness	30 (100%)	30 (100%)	30 (100%)
Right answer on curability	30 (100%)	30 (100%)	30 (100%)

In general, enuresis is not known as a manifestation of epilepsy, this explains the fact that the patients with enuresis and epilepsy are not systematically excluded like the other epileptic patients in our country, which usually leads to a "social death" of the subject affected. In fact, this ignorance about enuresis as a possible symptom of epilepsy gives room to patients with enuresis to speak in meetings, to share the meat from hunting, to do his daily business without assistance and to participate in initiation ceremonies. Even if the "secret" seems to be usually well kept by the family cell, the patient with enuresis just like any other epileptic patient also undergoes "social death" as testified by the low number of wedding or the high number of divorce in these patients. Actually, enuresis is seen in the teenager and in the young adult in general as a shameful and dirty disease, mentioning that name alone can be horrible. It is therefore hidden from anybody who is not from the family circle. Very often, the subjects of our study had a "peculiar medical" background. This includes ritual baths in a pond or with water already used by toads for bathing, or carry the wet mat (with urine) around the area or the village and be shouted at. These humiliating and dehumanizing practices usually leave psychological aftereffects.

#### IV. DISCUSSION

This study carried out in the division of neurology at CHU-SO, is somehow biased and this should be underlined. Because of the recruitment done in neurology, the study had a selection bias. Some patients with enuresis have been taken care of in other divisions at CHU-SO. Furthermore, some patients were excluded from our study due to the fact that the para clinical check-up was not done since this check-up is fully at the expenses of the patient. Nevertheless, despite the challenges relating to this type of study in the context of a developing country, where majority of the population is illiterate and where one has to do with questioning, it seems like the studies that are appropriate for this matter are the prospective ones. Johnson in the USA [5], who worked in a very different context, also thinks that prospective study even if it is controlled, is the better method to assess health care institutions.

Majority of the patients in our study was men with a sex-ratio of 2.19. This male predominance can be explained by social and cultural realities and believes [6]. It is in fact clear that the desire to marry is so strong that men with enuresis, after any traditional care attempt has failed, end up coming to consult, while women in the tropics where the society is style dominated by men, prefer to "hide" instead of confessing that they are suffering from this "dirty" and shameful affection [7].

The analysis of the perception of enuresis as a unique manifestation of epilepsy is very low both within the medical body, as well as within the population in general. This can be explained by the fact that enuresis a very frequent pediatric disease [8] which persistence in the adult is not considered as secondary to a pathology but a continuity of the pediatric disease. But primary enuresis only reveals epilepsy in exceptional cases [8]. Secondary enuresis can be the unique symptom that brings to mind epilepsy with nighttime convulsive attacks, mostly in adults. But is possible have favorable and unfavorable elements from the answers of our study. The favorable elements are represented by the curability of enuresis and its non-contagiousness unanimously acknowledged by all the groups that participated in the survey. This will facilitate the introduction of a modern treatment after an etiologic research. The most important unfavorable element lies in the ignorance of enuresis as a symptom epilepsy in the majority of the subjects interviewed. In the medical staff, 23.80% of the Medical Doctors interviewed recognized enuresis as a symptom of epilepsy. This worrisome situation translates without any doubt, the need for a total review of training curricula.

A special attention should be paid to chronic diseases. Unlike the other epileptics, who, according to Apetse and al [9], seem to have a special status in the community, the patient with enuresis, because of the ignorance of its possible etiologies, doesn't seem to suffer from social rejection. But very curious ritual baths are performed in order to get rid of this affection. All these rituals, according to the sociologist Kpegba [10], are in connection with water and purification. Actually, bathing with water infested by toads i.e. polluted water, should be appropriate to remove enuresis which is seen as pollution. With the aversion and the shame witnessed

by the patient with enuresis, a better bladder check-up should be done by the patient for him to avoid enuresis. The same topics seem to be found in a practice which consist of moving in the street with the bed or the polluted mat (with urines). Shame, loss of self-esteem generated could only have one goal which is making the patient with enuresis react for a permanent bladder check-up. All these dehumanizing practices that cause the patient with enuresis "disclose him/herself" for "help" from the community will finally produce the opposite effect in patients with enuresis and epilepsy since these practices will not heal epilepsy. Due to the fact that enuresis is persistent in the subjects that "disclosed" themselves to the community will end up leading to impossibility to marry, set up a family, which is "social death".

## V. CONCLUSION

As the attitudes and practices of the patients with enuresis and epilepsy are known, better strategies can be developed for a better care for these patients in order to rescue them from "social death". This possible positive evolution can only be effective with the improvement of the level education and the establishment of a programme of health education and primary health care.

*Conflict of interests:* no

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