

Poster presentation

## Sleep disorders in children with neurological disorders - greatly unrecognized by caregivers and misdiagnosed by physician

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### Background

Sleep is a complex physiological process influenced in children by temperament, diurnal activity, habits, parent-child interaction, and familial environment. Sleep necessary varies from a child to another and is depends of age. Sleep structure reflects the maturation process of the brain. It is recognized that sleep disorders are misdiagnosed in general child population; children with neurological disorders suppose a more careful attention from the caregivers, sleep disorders should be recognized and reported with a greater accuracy, or maybe not.

### Materials and methods

To evaluate different clinical and social aspects of sleep disorders, we realized an analytical study, observational type, in a children population with neurological disorders, aged between 1 - 18 years, admitted in Clinic of Pediatric Neurology Cluj Napoca, Romania for a period of two months (1 March 2007 - 30 April 2007).

For a complete anamnesis about the child sleep we have made a questionnaire addressed to the parents, adapted from Kohrman HM 1999. The questions were comprehensible, addressed to medium intellectual level. In this study were not included children with associated febrile disorders, known to produce sleep disorders, other than the objectives of this study. The questionnaire was not directed to a certain type of neurological pathology. We used t-student test to processed the obtained data.

### Results

Parents of 102 children responded to the questionnaire; 82% of them declared from the starts that are concerned about their child sleep, although only 9% of these children had a previous diagnosis of sleep disorder. From those with previous diagnosis of sleep disorder - 66, 66% asked for medical advised because of severe sleep alterations in children with complex neurological pathology and nocturnal seizures. Sleep disorders were present in fact at 41 percent of our study population (32 percent unrecognized by the parents and uninvestigated by the physician). Sleep time was between 12.50 hours and 7.45 hours, with a medium of 10.31 hours, with no statistical difference from children without neurological disorders.

From our study population 53% were not sleeping alone, but with one or both parents (32%), with grandparents (3%) or with siblings (18%). In these children we found a lower degree of emotional disorders associated, and sleeping with parents was found as a protective factor against stress.

Despite the fact that excessive watching on TV it is known that have a negative influence on the sleep-wake cycle, in our study population was not found a statistical significant relation in this regard. In our group time spent on TV was about 1.33 hours.

### Conclusions

Sleep disorders are greatly unrecognized by the parents of children with neurological disorders, to identify these dis-

orders physician needs pointed questions. There is not a significant difference between sleep time in children with neurological disorders and those without. Sleeping with parents, for children with neurological disorders could be a protective factor against emotional disturbances. Watching TV time had no significant relevance on sleep disorders in children from our study group.

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