

## "POLYSOMNOGRAPHIC" AND "SLEEP" PATTERNS: SYNONIMS OR TWO DISTINCT TERMS

Dražen Begić

Department of Psychiatry, University Hospital Center Zagreb, Zagreb, Croatia  
School of Medicine, University of Zagreb, Zagreb, Croatia

\* \* \* \* \*

Dear Editor,

In issue No. 1 (2014) of your esteemed journal, the paper entitled "Polysomnographic sleep patterns in depressive, schizophrenic and healthy subjects" by Ilanković et al. (2014) was published. These are the results of original research which demonstrate that "sleep variables" can be used to distinguish depressive and schizophrenic patients from one another, but also from healthy subjects. It was found that the use of "multiple sleep variables" can place the accurate diagnosis of these entities with a probability of 88%. This is an extremely important result that may have implications in daily clinical work.

In this respect, however, I would like to point out the terminological confusion when the terms "polysomnographic" and "sleep" patterns are used simultaneously and especially when they follow one another, as they do in the title of this paper.

The terms polysomnography, polysomnograph, polysomnographic, and polysomnogram (PSG) indicate the monitoring of a number of different activities and parameters during sleep. Typically, these are electroencephalogram (EEG), electromyogram (EMG), electrooculogram (EOG), electrocardiogram (EKG or ECG) and, less commonly, the monitoring respiration and perspiration, audio recording of snoring, constant video monitoring, etc. As such, because polysomnography is a polygraph during sleep, it is unnecessary to link this term explicitly with the concept of sleep. One might more appropriately use the term polysomnography alone or, alternatively, "sleep polygraphy" or "sleep study". The most common term used is polysomnography and is described as a "sleep study" (American Academy of Sleep Medicine 2011).

Amongst over 600 papers examining the topic of polysomnography in the PubMed database for the year 2014, only one other paper (Patriquin et al. 2014) uses the phrase "polysomnographic sleep". In most papers, use of the terms "polysomnographic analysis," "polysomnographic characteristics," "polysomnographic data," "polysomnographic scoring," "polysomnographic study" is always separate from the concept of "sleep". In instances when the term PSG is not used, the commonly used terms are "sleep abnormalities", "sleep alterations," "sleep analysis", "sleep organizations", "sleep parameters", "sleep patterns", "sleep variables".

Correspondence:

Professor Dražen Begić, MD, PhD  
Department of Psychiatry, University Hospital Center Zagreb  
Kišpatičeva 12, 10000 Zagreb, Croatia  
E-mail: drazen.begic@mef.hr

Indeed, this simultaneous use of the terms polysomnography and sleep are two linguistic variations of the same thing (tautology).

In the classical reference from Rechtschaffen & Kales (1968), the term polygraphia (not polysomnography) parameters during sleep is used.

Ilanković et al. (2014) mention these standard criteria, in this paper the authors the reference is listed in the abstract, and should be included in the reference list.

In addition, the description of Table 1 in the text should be adjusted so that it accurately depicts what is presented in the table.

The manner in which results are displayed in Tables 3-6 is filled with figures and somewhat not informative.

These arguments should in no way diminish the value of this work, where the result indicating an 88% accuracy of diagnosis of depression and schizophrenia using "sleep patterns" speaks for itself. This is a significant result that, as the authors themselves argue, can facilitate "diagnostic processes."

I hope that the journal "Psychiatria Danubina", which was recently quoted in Current Contents, continues to publish papers in the field of sleep medicine.

**Acknowledgements:** None.

**Conflict of interest:** None to declare.

### References

1. Ilanković A, Damjanović A, Ilanković V, Filipović B, Janković S, Ilanković N: Polysomnographic sleep patterns in depressive, schizophrenic and health subjects. *Psychiatr Danub* 2014; 26:20-26.
2. Overnight sleep study. *American Academy of Sleep Medicine*. <http://yoursleep.aasmnet.org/ArticlePrinterFriendly.aspx?id=12&DType=4>. Accessed September 2, 2011.
3. Patriquin MA, Mellman TA, Glaze DG, Alfano CA: Polysomnographic sleep characteristics of generally-anxious and healthy children assessed in the home environment. *J Affect Disord* 2014; 161:79-83.
4. Rechtschaffen A, Kales E: A manual of standardized terminology, techniques and scoring system of sleep stages in human subjects. *Brain Information Service/Brain Research Institute, University of California, Los Angeles, 1968*.