

Introduction:

The management of sleep disorders has improved significantly in the last 10 years, thanks to a better knowledge and the great technological innovation applied to sleep medicine², but there are few studies that show it with clear scientific evidence.

Materials and methods:

Among more than 100,000 patients selected from 2009 to 2019, we have made a selection of those with different sleep disorders, traditionally treated in the public health system (primary and specialized care in public centers of the Valencian Community: [PCV]) and in a modern way in our centers (specialized private care at the Institute of Sleep Medicine, in Valencia [IMS]), to analyze and compare different parameters of care quality and cost-efficiency of procedures. We present 5 clinical cases and their management protocols¹ for insomnia, sleep apnea, hypersomnia, parasomnia and Willis-Ekbom disease, with a detailed comparative analysis between both methodologies.

Results

In our sample, all these parameters analyzed improve significantly with the approach of these patients according to the IMS method (based on gold-standard procedures^{1,2}, highlighting the waiting time to have a first consultation and a definitive diagnosis, the interval between diagnosis and treatment, the number and type of consultations (face-to-face traditional [T] or by distance) and tests needed and done, the number and type of treatments used, the time interval between the first consultation and the discharge, and the degree of satisfaction 1 month after this discharge.

In addition, the effectiveness, efficiency and cost of the process are much better in IMS and patients highlight the technological resources through our website (www.dormirbien.info), home sleep tests, electronic sleep diary and consultations by e-mail [@] , phone [P] and videoconference [V].

Conclusions:

Use of new technologies applied to sleep medicine brings great benefits to doctors and patients. Development of new methods to improve the quality of care and solve sleep disorders optimally has to be spread and standardized uniformly throughout the world, requiring more similar studies to prove it, more medical and technical knowledge, more research and better interaction and collaboration between public and private health systems.

REFERENCES

A. *Principles and Practice of Sleep Medicine*. Kryger et al. 6th edition . Elsevier, 2018

B. *Update on Research and Practices in Major Sleep Disorders: Part II-Insomnia, Willis-Ekbom Disease (Restless Leg Syndrome), and Narcolepsy*. Chaiard J, Weaver TE., *J Nurs Scholarsh*. 2019 Sep 16. doi: 10.1111/jnu.12515

SLEEP APNEA	PCV	IMS
Wait time	91 days	24h
Diagnostic / after	SAHS / 3 months	Postural SRVAS / 3 days
1st/ last treatment	CPAP 7 mmHg/APAP 6-10	Somnibel+Diet
Consultations	4T x 1 year	2V x 10 days
Test/Others	Hospital oximetry	Video-HomePSG with Somnibel

INSOMNIA	PCV	IMS
Wait time	61 days	8h
Diagnostic / after	Chronic insomnia / 7 days	Mismatch perception / 7 days
1st / last treatment	Zolpidem 10 mg /Loracepam 1 mg	Sleep hygiene + CBT
Consultations	10T x 6 months, 4 treatment changes	3V+2P x 2 months, no changes
Test/Others	Hospital PSG	Actigraphy+electronic sleep diary

HYPERSOMNIA	PCV	IMS
Wait time	123 days	12h
Diagnostic / after	Major depression / 1 month	Narcolepsy / 5 days
1st/ last treatment	Paroxetina 20 mg	Modafinil 200 mg
Consultations	8T x 1,5 years	2P x 15 days
Test/Others	No sleep test	Video-HomePSG+MLT

PARASOMNIA	PCV	IMS
Wait time	75 days	36h
Diagnostic / after	Sleep walking / 20 days	REM behavior disorder / 7 days
1st/ last treatment	Clonacepam 0,5 mg	Melatonin 2 mg
Consultations	6T x 2 years	1V+1P+1@ x 1 month
Test/Others	No sleep test	Video-HomePSG

Others	PCV	IMS
Wait time	156 days	20h
Diagnostic / after	Polineuropathy / 3 months	Willis-Ekbom disease / 1 day
1st/ last treatment	B12/Gabapentin	Iron+thyroid hormone
Consultations	6T x 2,5 years	3P x 21 days
Test/Others	EMG	Video-HomePSG+actigraphy+electronic sleep diary