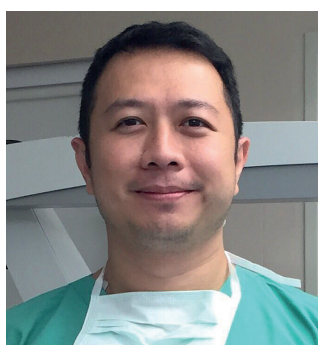


Sleep matters

ASEAN SLEEP MEDICINE NEWSLETTER NEWS / OPINIONS / INSIGHTS



DR. KEITH AGUILERA
DPBOHNS, FPSOHNS, FPSSM

Center Head, St. Luke's Medical Center–Global City, Program Director, Sleep Medicine Fellowship, St. Luke's Medical Center, Treasurer, Philippine Society of Sleep Medicine, Chair, Philippine Board of Sleep Medicine, Assistant Professor I, St. Luke's College of Medicine, Consultant, Department of Otolaryngology – Head and Neck Surgery, St. Luke's Medical Center, Past Chair, Philippine Academy of Sleep Surgery

“St. Luke's Medical Center was the first to have a sleep laboratory in the Philippines in 1992.”

–Dr. Keith Aguilera

Interview with Dr. Keith Aguilera on St. Luke's Medical Centre Philippines Sleeplab

When was the Sleep Lab started? If possible, Please do share a picture of Sleep lab when it started.

St. Luke's Medical Center was the first to have a sleep laboratory in the Philippines in 1992. It eventually opened the Comprehensive Sleep Disorder Center (CSDC) in 2000. It started offering a wide range of services for the treatment and diagnosis of sleep disorders as the specialty started to grow. In March of 2010, as the hospital opened a new branch in Global City, it extended the reach of the sleep center.

How many beds does the sleep lab have for Level 1 sleep studies?

St. Luke's Medical Center currently has 6 beds with Level 1 sleep study.

What type of Diagnostic studies are done in the Sleep center?

The CSDC offers diagnostic and split-night polysomnography. Multiple sleep latency test (MSLT) and maintenance of wakefulness test (MWT) are also available.

What type of PAP titration facilities are available at your Sleep centre?

Therapeutic sleep studies of the center include continuous and bilevel positive airway pressure (PAP) titration.

What are the educational/training opportunities available for Doctors and technicians at Sleep centre especially for candidates from other countries?

The center just recently started a fellowship program for sleep medicine and there are currently two fellows in training. The sleep fellows together with the technician regularly receive lectures/activities from the sleep consultant staffs. Likewise, the consultant staffs are also active member of the Philippine Society of Sleep Medicine (PSSM) that conduct workshops for sleep technicians and conferences for those physicians interested in the specialty. The fellowship program at present is only open to local physicians who plan to practice outside Metro Manila. This is to hasten the growth of sleep medicine wider across the country.

Email us on
sleepmatters@philips.com with your content.

How many sleep techs are employed at the Sleep centre? What are their day time and night time duties?

We have 5 staffs including the section manager. The shifts are as follows: 8am-4pm, 12pm-8pm, 8pm-4am, 9pm-5am.

During a day shift, the staff makes sure that all the scheduled sleep studies had confirmed and received appropriate orientation prior to their appointments. Making sure that the center is stocked adequately is another important duty of the shift as it is difficult to obtain these supplies at night during a sleep study. For the night shift duties, apart from conducting the sleep study, the staff coordinates with the sleep consultant any untoward events or episodes during the night. Placing patient comfort and safety during the whole duration of the study while maintaining quality data collection. They make sure all the emergency equipment is functional and on stand-by.

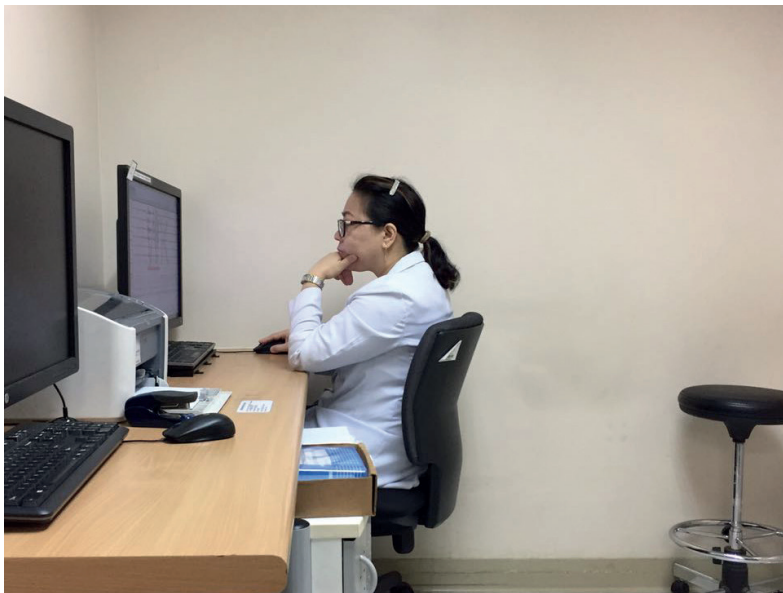
How many Level 1, Level 3 studies, PAP titration studies, MSLT and MWT are done in one year?

There were more than a thousand sleep studies done in St. Luke's Medical Center last year in which over 600 studies include PAP titration. MSLT and MWT average around 5 a year.

What are the contact details of the Sleep centre – address, phone no., email id, website?

St. Luke's Medical Center

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Observation room

Dr. Celina Q. Colina, Sleep Fellow



Patient Room

Ralph Maro S. Sahagun, Section Manager (Left)
Hannah Jane S. Gantes, Sleep Tech (Right)



DR. TEOFILO L. LEE-CHIONG JR.

Professor of Medicine, National Jewish Health and University of Colorado Denver School of Medicine,
Chief Medical Liaison for Philips Respironics (Denver, USA)

Mechanical ventilation improved blood gases in patients with OHS,
with or without concomitant OSA.

–Dr. Teofilo

Dr. Teofilo's summary of clinical studies on Obesity Hypoventilation Syndrome (OHS)

Similar to OSA, obesity hypoventilation syndrome (OHS) is closely related to obesity, and its incidence is expected to rise in many countries in parallel with the worsening obesity epidemic. Also, like OSA, this disorder is associated with adverse cardiovascular consequences, many of which are reversible with PAP and noninvasive ventilation (NIV) therapy.

1 Risk of cardiovascular morbidity decreased significantly with worsening OSA severity in patients with OHS. The association between oxygen desaturation index (ODI) and cardiovascular morbidity was evaluated in 302 patients with OHS. The highest ODI tertile was inversely related to prevalence of cardiovascular morbidity, with the strongest negative association seen for chronic heart failure. Compared to patients in the lowest ODI quartile, those in the higher quartile were mostly men, younger, and more obese and sleepy, and had lower prevalence of hypertension, better exercise tolerance and fewer hospitalized days. [Masa JF et al. Protective cardiovascular effect of sleep apnea severity in obesity hypoventilation syndrome. *Chest*. 2016 Feb 25.]

2 Adherence to positive airway pressure therapy for OSA and OHS significantly lowered rates of all-cause hospitalization in obese patients with chronic hypoxemia. Investigators conducted a retrospective cohort study of 129 patients who underwent PSG and were given PAP therapy. Forty-nine percent of patients were adherent with PAP therapy during a 2-year follow-up period, and this group had lower odds of frequent hospitalization, but not rates of emergency room or outpatient clinic visits, compared to non-adherent patients. [Povitz M et al. Healthcare use in individuals with obesity and chronic hypoxemia treated for sleep disordered breathing. *J Clin Sleep Med*. 2016 Apr 15;12(4):543–8.]

3 Positive airway pressure therapy reduced nocturnal beat-to-beat surges in blood pressure in patients with OHS and OSA. Three overnight laboratory PSG and beat-to-beat blood pressure (BP) monitoring via finger plethysmography were performed on 17 adult patients with OHS and clinically diagnosed OSA. Six weeks of PAP therapy lowered mean nocturnal BP and the number of nocturnal beat-to-beat BP surges per hour, but failed to alter daytime BP. Reductions in

nocturnal systolic and diastolic BP surges correlated significantly with adherence to PAP therapy. [Carter JR et al. Positive airway pressure improves nocturnal beat-to-beat blood pressure surges in obesity hypoventilation syndrome with obstructive sleep apnea. *Am J Physiol Regul Integr Comp Physiol*. 2016 Apr 1;310(7):R602–11.]

4 Noninvasive ventilation and continuous positive airway pressure (CPAP) treatments were more effective in improving clinical symptoms and PSG parameters in patients with OHS compared to lifestyle modification alone. A multicenter controlled study randomized 221 patients with OHS and severe OSA to NIV, CPAP or lifestyle modification. At 2-month follow-up, clinical symptoms, PSG measures, daytime PaCO₂ and bicarbonate improved similarly with NIV and CPAP compared to lifestyle modification. Compliance was similar between NIV and CPAP groups. Greater improvements in spirometry and 6-minute-walk distance were seen with NIV than with CPAP. [Masa JF et al. Efficacy of different treatment alternatives for obesity hypoventilation syndrome. *Pickwick Study*. *Am J Respir Crit Care Med*. 2015 Jul 1;192(1):86–95.]

5 Mechanical ventilation improved blood gases in patients with OHS, with or without concomitant OSA. This longitudinal, observational study looks at survival rates over a period of 12 years in 50 patients with OHS and 33 patients with OHS and OSA enrolled in a home ventilation (bi-level positive airway pressure) program. Mean survival time was 8.47 years. The OHS group had appreciably higher baseline PaCO₂ levels and more frequent hospitalizations than the OHS-OSA group. Significant improvements in FEV₁, FVC and blood gases were seen in both groups. [Ojeda Castillejo E et al. Noninvasive mechanical ventilation in patients with obesity hypoventilation syndrome. Long-term outcome and prognostic factors. *Arch Bronconeumol*. 2015 Feb;51(2):61–8.]

Events in the region and world

Mar - Sept 2017

4th ASEAN Sleep Congress, Manila, Philippines http://asiansleep.org/latest%20news/news_text.php?news_id=12	7-10 March 2017
Workshop on Cognitive Behavioral Therapy for Insomnia, Bangkok, Thailand http://imcpcthailand.com/sleep2017/	15-17 March 2017
Sleep and Breathing, Marseille, France http://www.esrs.eu/conferences-events/all-events-at-a-glance.html	6-8 April 2017
ATS Conference, Washington DC, US http://conference.thoracic.org/attendees/future-conferences/	19-24 May 2017
Sleep, Boston, US http://www.sleepmeeting.org	3-7 June 2017
Chest Congress, Basel, Switzerland http://www.chest-sgp-switzerland2017.org/congress.html	7-9 June 2017
XV European Biological Rhythm Congress, Amsterdam, Netherlands http://www.esrs.eu/conferences-events/all-events-at-a-glance.html	30 July-3 Aug 2017
NSMC, Goa, India www.issr.in	21 Sept 2017
Silver Jubilee Congress of Indian Society for Sleep Research http://www.goasleep2017.com	22-23 Sept 2017
ERS, Milan, Italy http://erscongress.org	9-13 Sept 2017

Sleep matters past issues

To access the past issues of sleep matters, please go to the below webpage
www.philips.com.sg/healthcare-consumer/sleep-apnea/resources#sleep-physicians-newsletters

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Letters to the Editor:

Our readers are invited to write to the editor by volunteering content that they feel strongly about or feel needs coverage in a publication such as this. Your input is welcome and valued, particularly with case studies and hot topics currently debated in the field, as well as reviews of Asia Pacific congresses and conferences that you might like to share with the audience. Your letters will be featured in future issues of Sleepmatters, allowing an open forum between the experts, increasing the level of engagement amongst the audience.

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