

26 January 2023

## The Ventilator Journey - Mechanical Ventilation Training

K-One was granted the non-exclusive licence to manufacture and distribute NASA/JPL’s VITAL ventilator in May 2020. It was only the beginning as the journey to transform the privileged licensed ventilator with the necessary approvals to market was more challenging than thought. With perseverance and external support, K-One is getting there gradually but surely. As part of the ventilator business milestones, K-One needed to prepare and upgrade the knowledge of its relevant staff on all crucial aspects in support of the ventilator business. Towards this end, on 6 to 8 December 2022, its Medical Division hosted a 3-day training in regards to mechanical ventilation for 20 participants. The said training was conducted at PJ Hilton Hotel by two highly qualified Respiratory Therapists; namely, Mr. Marvin Mah and Mr. Kumaran Maheswaran from Graphene Link Sdn. Bhd.



*Full concentration by trainee attendees.*

The training was well received by the enthusiastic participants with the results below confirming so.

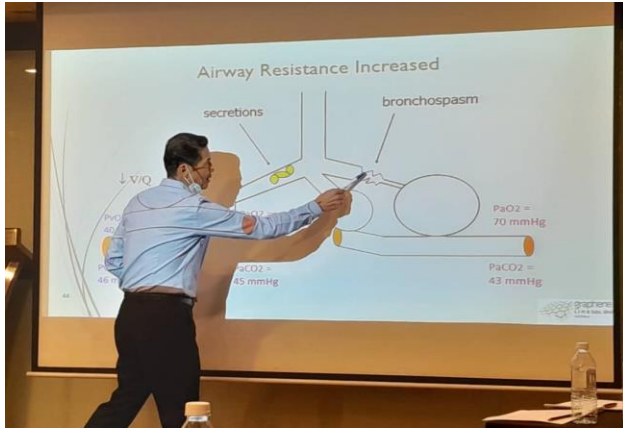
**Part I:** Assessment of participants’ knowledge on the respiratory system and mechanical ventilation.

In Table 1 below, we assessed the before- and after-training knowledge and the percent (%) change after training. The mean score is based on the 10-point psychometric Likert Scale (i.e. 1-10).

Table 1.

Assessment Category	Mean Score (n=17)		Percent Change After Training
	Before Training	After Training	
a) Knowledge of the respiratory system.	4.4	7.2	63.6%
b) Knowledge on mechanical ventilation.	3.6	7.1	97.1%

The results from Table 1 showed that the participants knowledge on the respiratory system and mechanical ventilation were much lower prior to the training, with reported mean scores of 4.4 and 3.6 respectively. Subsequently, after training, the mean scores increased by 63.6% to 7.2 for the respiratory system and by 97.1% to 7.1 on mechanical ventilation.



Theory lectures by trainer - Mr. Marvin Mah.



Hands-on breakout session on mannequin station.

**Part II:** Assessment on the learning needs, presentation by the speakers, breakout sessions and the duration of the program. The median and mean scores on the four (4) categories are presented in Table 2 below.

Apart from the training, there are various ongoing activities to clinically test the Medkaire Ventilator, securing the necessary approvals from the relevant authorities while at the same time enhancing it.

Table 2.

Assessment Category	Mean Score (n=16)*
a) Learning needs met by training content of program.	7.9
b) Clarity of the speakers on the content presented.	8.4
c) Break-out sessions for learning about respiration and mechanical ventilation.	8.4
d) Duration of the program.	8.6

\*There was one (1) less respondent in the Part II assessment as the individual did not realize the single page questionnaire was double-sided.

In all four categories shown in Table 2 above, the mean scores of >7 suggest that the participants were pleased with the training on the overall.



All smiles with the Medkaire Ventilator (NASA/JPL rebrand).