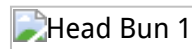


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NEW USM INNOVATION: HEAD-BUN SAVES PROCEDURAL COST OF ENDOTRACHEAL INTUBATION

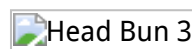


KUBANG KERIAN, 25 May 2015 – Universiti Sains Malaysia (USM) has successfully introduced an apparatus which could reduce the cost in administering the procedure of Endotracheal Intubation, which is the insertion of a tube into a patient's breathing cavity to assist in breathing, as the patient could no longer breathe on his or her own during the anaesthetization process in the Operations Theatre.

The apparatus, which is known as the Head-Bun is said to be more practical and takes less than 8 seconds to be applied. It functions to provide support to the patient's head and improves on the weaknesses of the Head Ring such as cracking easily within 6 months, utilising imported materials which may delay the procurement process, lacking in height to maintain the patient's breathing patterns, having a small internal circumference and unable to provide support to the patient's occiput, with a jelly-like texture becoming too soft due to frequent usage during the Endotracheal Intubation procedure on patients in the Operations Theatre.

Head Bun, which has received international recognition, is the result of an innovation project by the Lateral Team from Hospital Universiti Sains Malaysia (HUSM) led by Operations Theatre Head Nurse, Hajah Norizan Jusoh, 51, who has worked and having experience of more than 28 years doing such a procedure.

According to Norizan, Endotracheal Intubation is a crucial procedure in anaesthetizing a patient as during administration, the flow of oxygen should be allowed to stop to the brain no more than the tolerable limit of less than 20 seconds.



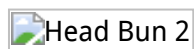
"Disruption to the flow during the procedure will occur due to the fact of the patient's anatomy, the Head Ring, the Laryngoscope and other factors which could result in Hypoxemia, Cardiac Arrest, Hypoxic Brain Death and Asystole or flatline," explained Norizan.

She further stated that, at Hospital USM, her team constantly strives to search for creative and innovative measures to be implemented in the Operations Theatre, in ensuring that the patient would be in a stable condition after operation.

"Head-Bun measures the circumference which supports the back portion of the head or occiput and the measurement of its height, which is needed to suit the patient's breathing cavity as it opens or 'it's fixable, suitable for all'. It is also long-lasting up to more than one year and assists in hastening the Endotracheal Intubation procedure from an average time of 12 seconds to 8 seconds, while fulfilling the safety aspects as the circumferential size of the apparatus adheres to the anatomical requirements of the patient's head and the height measurement complies to the patient's needs," she further added.

The procurement period for the material used normally takes one week compared to Head-Ring that requires 6 months to a year to procure, subject to the availability of budget, supplier and supply/stock.

Before this, Hospital USM used to spend more than RM13,000 each year to purchase Head-Ring; now it only needs around RM400 a year, with a cost reduction of more than 97% when using Head-Bun during the Endotracheal Intubation procedure in the Operations Theatre.



Lateral Group, comprising of 10 members including Operations Theatre nurses, Reconstructive Surgeons and General Anesthetist, was set up in November 2011 with the aim of improving the quality of services towards excellence for the patients' well-being.

This project has received numerous recognitions and the innovation has also won several awards, among them the Anugerah Emas 2013 in the Pertandingan Inovasi Perbadanan Perpustakaan Awam Kelantan dan Petronas 2013, Emas Tiga Bintang at the Regional Convention On Team Excellence Wilayah Timur 2013 as well as Konvensyen Kumpulan Inovatif dan Kreatif (KIK) Peringkat Kampus Kesihatan. In 2014, it was also listed among the top 10 innovations in the country and bagged the Gold Medal for Malaysia in Sri Lanka.

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