Experience of speaking valve programme for mechanical ventilated tracheostomized patients in Hong Kong: Multidisciplinary approach

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Introduction
The ability to speak is fundamental for communication. Most of the tracheostomized patients who required mechanical ventilation were deprived of the ability to speak and limited in communication. Simple means of communication like nodding head and hand-writing are not always sufficient to convey their physical and psychological needs. Several studies revealed that mechanical ventilated patient will have higher level of anxiety, frustration and fear when experienced difficulty in communication (Patak L., 2006 & Grossbach I., 2007). With the use of speaking valve, numerous studies shown that it could lessen patient's anxiety by talking with friends and caregivers (Batty, 2009; Lindgren & Ames, 2005) and reported a higher quality of life in mechanical ventilated patients (Hess, 2005). Therefore, in 2014, the Ventilator Support Team (VST) in a regional hospital had launched a multidisciplinary speaking valve programme for mechanical ventilated patients.

Objectives
(1) To help mechanical ventilated patient to regain speech; (2) To enhance patient's psychosocial well-being and quality of life

Methodology
The VST nurse worked in close collaboration with speech therapist, parent team and ventilator team doctors. Target patients were recruited under preset criteria. Retrospective case review of patients in this speaking valve programme was performed.
Result
Two patients were recruited. The first patient was a 75-year-old man who suffered from demyelinating disease who required long-term invasive mechanical ventilation. The second patient was a 57-year-old woman with refractory myasthenia gravis who required long-term non-invasive ventilation via tracheostomy. Both of them demonstrated the effective and safe use of the Passy-Muir speaking valve (PMV). The result was encouraging that patients not only had returned of their voice, the quality of speech and duration of un-interrupted speech were significantly improved. With the use of the PMV, they could communicate freely with the caregivers and their family of their needs, both physical and psychological. They encountered less frustration and we would understood their needs better. Moreover, patients could regain their autonomy and actively discuss the plan of care with doctor. In conclusion, the multidisciplinary speaking valve programme helps the mechanical ventilated patients in regaining the speech by the use of PMV. Also, it enhances patients' autonomy, psychosocial well-being and quality of life.