

Effectiveness of Staff Compliance to VAP Bundle in Aswan Heart Center

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Background:

(Ventilator-associated pneumonia (VAP) is nosocomial pneumonia that may develop in patients on mechanical ventilation for more than 48 hours. VAP is one of the most common preventable hospital-acquired infections in the Intensive Care Unit (ICU) with a rate of per 1000 ventilated days (Riddick et al., 2019). It is associated with an increased duration of ventilation, hospital length of stay, and cost. VAP is considered a key hospital quality indicator and a target for preventative strategies. Patients with VAP experience serious adverse events such as increased risk of mortality, prolonged hospital stay, extended ICU length of stay (LOS), and prolonged mechanical ventilation (MV). Moreover, the associated rising healthcare costs may financially burden the patients and their families (Samra et al., 2017).

In 2022, Aswan Heart Centre (AHC) updated the documentation tool of the VAP Bundles to enhance the auditing and observation process to prevent incidents and reduce the length of stay.

Aim and objectives:

Enhance staff compliance with the Ventilator-Associated Pneumonia Bundle in the intensive care units in AHC.

Methods:

Staff nurses in both ICUs, adult and pediatric, received additional training in order to enhance their practice in VAP prevention. An audit was conducted by the charge nurses at AHC using an online observational VAP bundle chart.

The checklist was made available in the patients' files for all of the staff members. Efforts were made to observe the application of the VAP Bundle so as to ensure its effectiveness.

Result:

The data collection process focused on the VAP bundle elements such as head elevation, oral care, and suction.

An increase in attention to the VAP bundle checklist during the starting process of the audit was noticed by the staff.

750 random observation samples from January 2022 till the end of December 2022.

The following chart shows the effect of the daily rounds and the new implementation of the VAP bundle checklist.

There was a 20% improvement.

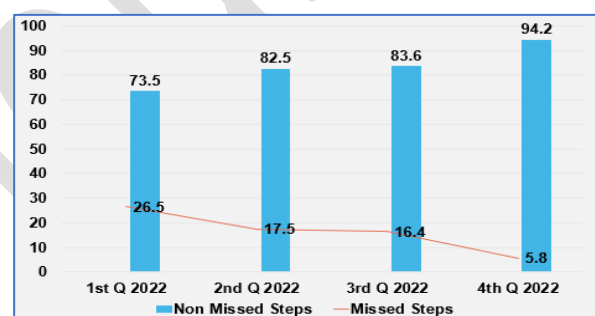


Figure (1)

Conclusion:

Compliance with the VAP Bundle improved when observed closely. Minimal practice affects VAP bundle compliance and improves the numbers.

Keywords:

VAP, Ventilator, Hospital, VAP bundle, Staff compliance