

ORAL PRESENTATION

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Implementation of WHO multimodal hand hygiene (HH) improvement strategy to reduce healthcare-associated infections (HAI) and VAP (ventilator-associated pneumonia) caused by multi-drug resistant acinetobacter baumannii (MDRAB) at Siloam Hospitals Surabaya (SHBS), Indonesia

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Introduction

SHSB is a 160 bed private hospital in Surabaya, Indonesia. The average length of stay (ALOS) is 9.52 d. In 2010, HAI rates at SHSB were high (3.12%) and HH compliance among healthcare workers (HCW) was low (73.34%). At the same time, SHSB had MDRAB outbreak among ICU patients with VAP rate of 10.99/device-days. Therefore, there was a need for quality improvement to reduce HAI and VAP caused by MDRAB.

Methods

The WHO strategy was implemented in 2010 in all departments and included: 1) *System change initiatives*: HH policy review and ward infrastructure survey q 6 m, dedicated budget for HH agents, evaluation of HCW tolerability and acceptability of alcohol-based handrub (ABHR) 2) *Training and education*: regular mandatory training for all HCW, doctor's forum and antibiotic stewardship case study, e-learning, etc... 3) *Evaluation and feedback*: monthly HH compliance audit and reporting to governing body, monthly feedback, external audits. 4) *Reminders in the workplace*: posters in public and point of care areas, reminders via paging system, fingerprint attendance machine, etc.... 5) *Institutional Safety Climate*: CEO support and commitment, QI

program, HH as key performance indicator, patient speak-up token in reminding doctors to perform hand hygiene.

Results

We conducted monthly HH audit compliance since 2010 with total number of 31267 opportunities during 2233 observation sessions. The overall hospital-wide compliance with HH increased significantly from 73% in 2010 to 88% in 2014 ($p < 0.0001$). The overall consumption of ABHR increased in parallel from 16.8 L in 2010 to 34.55 L per 1000 patient-days in 2014 ($p = 0.002$). HAIs rate decreased from 3.12 (2010) to 0.10 (2014) per 100 admission ($p = 0.02$). VAP caused by MDRAB decreased from 10.99/devices days (2010) to 0% (2014) per 1000 device-days ($p = 0.02$). Hospital ALOS decreased from 9.52 in 2010 to 4.38 in 2014.

Conclusion

Implementation of WHO Multimodal HH Improvement Strategy that is supported and committed by CEO and all hospital staffs, increased HCW compliance and subsequently reduced HAIs hospital-wide and VAP caused by MDRAB in ICU.

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Disclosure of interest

None declared.

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