

## CLEAN PILOT STUDY TO ASSESS THE EFFECTIVENESS OF A TRAINING PACKAGE TO IMPROVE ENVIRONMENTAL HYGIENE IN HEALTHCARE FACILITIES

This was a 3-hospital before-and-after pilot evaluation of a training intervention for hospital cleaning in Dar-es-Salaam. The training intervention was adapted from original materials developed by the organization SoapBox (UK) with the adaptation and implementation of the training conducted by Muhimbili University of Health and Allied Sciences (MUHAS). Independent evaluation of the training intervention and measurement of the impacts of the intervention (in terms of knowledge, physical behaviors and microbiological surface cleanliness) was conducted by staff from Ifakara Health Institute (IHI), in collaboration with the London School of Hygiene and Tropical Medicine (UK). There was also some preliminary measurement of the prevalence of Hospital-acquired Infections in the three hospitals.

**Results: Qualitative results:** the adaptation process took place in October to December 2018 and training of champions in January 2019. Selection of champions was appropriate with 8 staff from each facility attending. The training was done well by the MUHAS team. One transfer training took place in each facility in January 2019 with good delivery of training in each session, although some limitations were noted.

**Quantitative results:** Questionnaires, direct observations, UV gel dots and surface bacterial counts (via dipslides) were used to measure the outcomes of the intervention between Oct 2018 and May 2019. There were some improvements in knowledge and observable behaviors relating to cleaning the hospital wards. For surface microbiology (as measured by dipslides), improvement occurred during the pre-intervention period and after the intervention there appeared to be further improvement. Hospital-acquired infection prevalence varied widely.

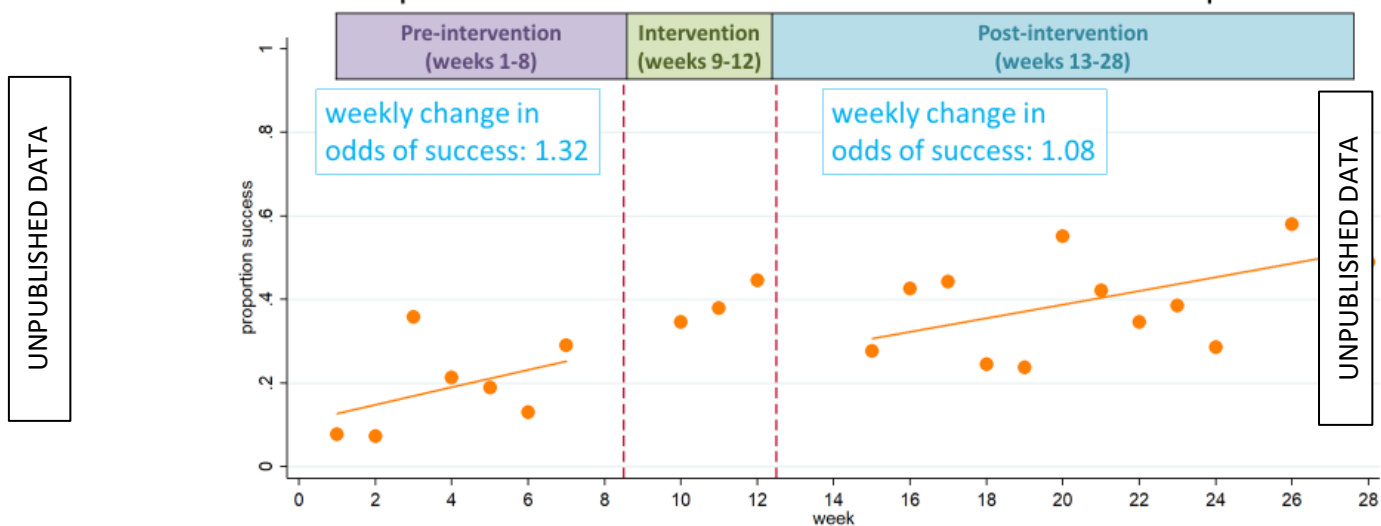
**The Method also Appreciated by Champions and Cleaners**

*"Even the teaching method was good, we liked it....."*  
~FGD facility2, cleaners, P8

*"They taught us well, they used notes, they also taught us without notes [but] with equipments, how to use the equipments, how to wear PPE, how to hold a mop, things like that"*  
~FGD facility3, Cleaners, P1

*"The training at Muhimbili was very different, most of them were hands on and there was no projection....there were group discussion, practical, they were very interesting such that even if you were tired, as you know you can be lecturing while people are sleeping, but the way the training was conducted everybody participated fully, that is what I saw"*  
~FGD Facility1, Champion, P2

Dipslide results over time across all hospitals



**Conclusion:** The intervention was successfully adapted for hospitals in Tanzania, although some further improvements should be made for any future deployment. There is preliminary evidence of some beneficial effects of the intervention on health worker knowledge, behaviour and surface bacteria counts in maternity units of Tanzanian hospitals. Further roll-out and study of the impacts of this training intervention in hospitals in low-income settings is warranted.

