Applying WHO hand hygiene initiatives into practice: is 100% achievable? Noel Abela, Michael. A.Borg, Zvetlana Farrugia Mater Dei Hospital, Malta





Introduction

- Healthcare facilities aim at reducing HAI by introducing strategies that ensure quality of care and safeguard patient safety.
- In 2010 Mater Dei Hospital launched officially the hand hygiene campaign with the logo 'STOP, RUB and GO'.
- The campaign was designed on the WHO multimodal strategy,¹ which was based on the work of Pittet et al 2000.²

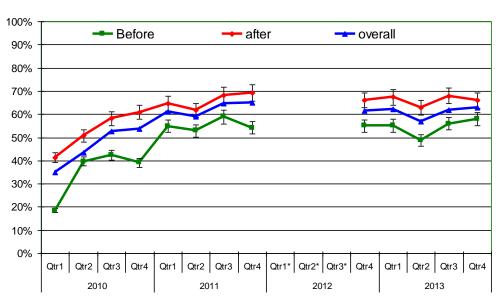
Application of WHO hand hygiene improvement strategy at Mater Dei Hospital, Malta:

The hand hygiene improvement strategy focuses on five objectives:

- 1. Reminders at the work place
- 2. Monitoring hand hygiene and feedback
- 3. Staff Training
- 4. System Change
- 5. Improving institutional safety climate



Results



* not enough data for analysis Figure 1: Hand hygiene compliance - overall, before

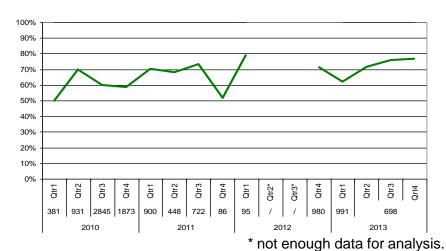
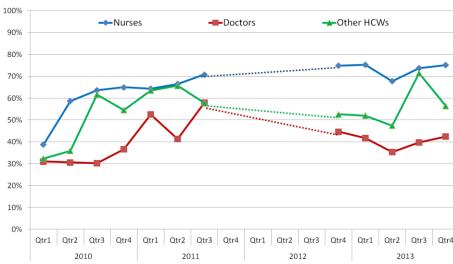


Figure 3: Proportion hand hygiene opportunities undertaken with alcohol hand rub (AHR) per quarter from 2009 to 2013



* not enough data for analysis Figure 2: Hand hygiene compliance - differences by professional groups.



Figure 4: Alcohol Hand Rub (AHR) consumption 2008-2014

Conclusion

- Mater Dei Hospital has implemented an effective hand hygiene improvement campaign which doubled the level of HH compliance from its previous 30%.
- Several publications report compliance levels of 90% or more but these were invariably done by ward staff and their validity may be questioned.⁴
- We believe that these results, which have coincided with a significant reduction in MRSA bacteraemia incidence, were primarily achieved through an organisational culture change.
- Conducting audits centrally, together with feedback and top management intervention, increased accountability, especially among nurses.
- Compliance among doctors still remains unacceptably low.
- Our hospital aims to maintain, and improve, the results achieved by adopting a long term sustainability and promotion strategy, using continuation and reinforcement of core activities over time.⁶
- However we believe that expecting 100% is unrealistic and not cost-effective; indeed modelling studies also suggest it is likely to be unnecessary.^{7,8}

References:

- 1. WHO. Guide to implementation of the WHO multimodal hand hygiene improvement strategy. 2009. http://www.who.int/gpsc/5may/Guide_to_Implementation.pdf
- 2. Pittet D, Hugonnet S, Harbarth S, et al. Effectiveness of a hospital-wide programme to improve compliance with hand hygiene. Lancet 2000; 356:1307-12.
- 3. Sax H, Allegranzi B, Chraïti MN, Boyce J, Larson E, Pittet D. The World Health Organization hand hygiene observation method. Am J Infect Control 2009;37:827-34.
- 4. Stone S, Kontowski G, Gallagher R, Storr J, Teare L. Keeping hand hygiene high on the patient safe Agenda WHO's call to action reminds us that "patients have a voice too" BMJ 2012;346:f2699
- 5. Borg MA, Camilleri L, Waisfisz B. Understanding the epidemiology of MRSA in Europe: do we need to think outside the box? Journal of Hospital Infection 2012; 81: 251-256
- 6. Allegranzi B, Gayer Ageron A, Damani N, et al. Global implementation of WHO's multimodal strategy for improvement of hand hygiene: a quasi-experimental study. Lancet 2013:10:843-51.
- 7. Beggs CB, Shepherd SJ, Kerr KG. Increasing the frequency of hand washing by healthcare workers does not lead to commensute reductions in staphylococcal infection in a hospital ward. BMC Infectious Diseases 2008, 8:114
- 8. D.J. Gould, N.S. Drey, S. Creedon. Routine hand hygiene by direct observation: has nemesis arrived? Journal of Hospital Infection 2011,290-293