Improving Hand Hygiene Compliance through Human Factors

Madeline Lim, SHHQ
Dr Ling Moi Lin, SGH
Dr Yin Shanding, CGH
Chew Junfang & Lin Xinyan, SHHQ

INTRODUCTION

With the release of World Health Organization (WHO) Guidelines on Hand Hygiene in Healthcare – First Global Patient Safety Challenge, Clean Care is Safer Care (2009), healthcare organizations over the world embarked in programs to create awareness, educate and remind healthcare workers, hospital administrators and health authorities to improve on hand hygiene compliance to prevent hospital-acquired infections (HAI).

Hand Hygiene Program in SingHealth

Multi-pronged approach from system change, training and education, evaluation and feedback to reminders to institutionalise a safety climate in our institutions had led to an increase in hand hygiene compliance from 20% in 2006 to 61% in 2010. In the same year, Singapore General Hospital was also recognised as one of the 4 Global Hand Hygiene Expert Centres by WHO.

METHODLOGY

Literature research was performed to identify key barriers that could affect hand hygiene compliance by healthcare professionals and they are categorised into various areas.

Barriers that Hinders Hand Hygiene Compliance

1. Patient needs
2. Workload, forgetfulness, perceptions on risk transmission and infections and patients’ feelings.
3. Other factors

CONDUCTING A POLL

A poll “Why is Practising Hand Hygiene so Difficult?” was then conducted to gather initial feedback from the healthcare professionals on the relevancy of key barriers to them.

Analysis of Overall Poll Results

The prevailing general barriers that influenced all healthcare professionals:

1. Perception on the need for repeated number of hand cleaning everyday (in particular compliance with the “5 Moments of Hand Hygiene”).
2. Alcohol rubs/soap irritate and dry their hands.

Conducting a Poll on “Why is Practising Hand Hygiene so Difficult?”

A poll “Why is Practising Hand Hygiene so Difficult?” was then conducted to gather initial feedback from the healthcare professionals on the relevancy of key barriers to them. This poll was targeted at the Doctors, Nurses and Allied Health Professionals.

Analysis of Results (Excluding General Barriers) by Healthcare Professional

- Doctors
- Nurses
- Allied Health

CONCLUSION

This project has shown that practising hand hygiene is a very personal decision. A multipronged strategy, supported by appropriate infrastructure, material as well as appropriate motivating factors are required to address specific barriers and healthcare professionals to encourage and further improve hand hygiene compliance.

ADDITIONAL INFORMATION

The project has successfully identified the key human factors that affect hand hygiene compliance. Further work to improve compliance using Human Factor Analysis and Classification System (HFACS) would be undertaken in a targeted manner to specific audience (e.g. clinicians, allied health professionals, nurses) and to address specific factors (e.g. frequency of cleaning hands and effects of alcohol rubs/soaps) for better control. These initiatives would have to involved the Infection Control Nurses (ICN) in the respective Institutions and be supported by SingHealth Infection Control and Prevention Workgroup (SICPW).

REFERENCES

1. WHO Guidelines on Hand Hygiene in Healthcare, WHO 2009
3. Improving Compliance With Hand Hygiene in Hospital, Didier Pittet, Infection Control and Hospital Epidemiology, Vol. 21, No. 6 (June 2000)

ACKNOWLEDGEMENTS

This project would not be possible without the encouragement and guidance from Prof Ng Han Seong, Mrs Tan May Yan, Ms Ng Mee Yoke and support from SingHealth Risk Management Office. Special thanks also go to our clinicians, nursing and allied health colleagues who had participated in the poll to make it a success.