

BACKGROUND

Despite the recognized importance of hand hygiene (HH) in reducing hospital-acquired infections (HAIs), many clinical settings lack formal hand hygiene education. This project aims to enhance HH compliance through education, reinforcement, observation, and visual reminders.

- The disparity in compliance is caused by insufficient resources and feedback ¹
- Formal education increases staff confidence in HH technique ²
- Hospitals may decrease infectious diseases transmission and HAI rates by introducing formal education on HH ³
- HH compliance may also be enhanced by applied interactive education⁴

METHODS

The framework for this project is Stetler's model. ⁵

- PowerPoint explaining the need for HH and formal education
- Brochure on facts and guidelines about HH
- Tactile reinforcement using Glo-germ and UV light
- Quiz and questionnaire to assess knowledge and determine barriers faced that prevent HH
- Laminated signage as visual reminders to perform HH ⁶
- HH survey asking for feedback, questions, and concerns

REFERENCES

- ¹Winship, S., & McClunie-Trust, P. (2016). Factors influencing hand hygiene compliance among nurses: an integrative review. *Kai Tiaki Nursing Research*, 7(1), 19+.
- ²World Health Organization. (2023). *First-ever WHO research agenda on hand hygiene in health care to improve quality and safety of care*. World Health Organization.
- ³Toney-Butler, T., Gasner, A., & Carver, N. (2023). *Hand hygiene - StatPearls - NCBI bookshelf*. National Center for Biotechnology Information.
- ⁴Altin, N., & Eren Gok, S. (2022). The importance of education in the compliance of healthcare workers with hand hygiene. *Journal of Ankara University Faculty of Medicine*, 75(3), 379-387.
- ⁵Melnyk, B. M. & Fineout-Overholt, E. (2019). *Evidence-based practice in nursing & healthcare: A guide to best practice* (4th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- ⁶World Health Organization. (2020). *Hand hygiene for all initiative: Improving access and behaviour in health care facilities*. World Health Organization.
- ⁷Müller, S. A., Diallo, A. O., Rocha, C., Wood, R., Landsmann, L., Camara, B. S., Schindwein, L., Tounkara, O., Arvand, M., Diallo, M., & Borchert, M. (2021). Mixed methods study evaluating the implementation of the WHO hand hygiene strategy focusing on alcohol-based handrub and training among health care workers in Faranah, Guinea. *PLOS ONE*, 16(8).
- ⁸Marin, T. (2021). *Hand hygiene compliance: Interventions in healthcare settings - jbi.global*. JBI.
- ⁹Vaughan-Malloy, A. M., Chan Yuen, J., & Sandora, T. J. (2023). Using a human factors framework to assess clinician perceptions of and barriers to high reliability in hand hygiene. *American Journal of Infection Control*, 51(5), 514-519.

INTERVENTIONS

- Step 1: Educational session targeting all nurses on the Respiratory Rehabilitation Unit using a PowerPoint presentation and brochure with a QR-code leading to a quiz and questionnaire
- Step 2: Physical reinforcement demonstration using Glo-germ and Ultraviolet (UV) light
- Step 3: Incorporation of HH champions to promote and sustain proper HH practices among colleagues
- Step 4: Placement of Alcohol-based hand sanitizers at nurses' station and other areas where access to soap and water is limited
- Step 5: Distribution of pins for nurses to wear on badge reels or scrubs
- Step 6: Visual observation of nurses to assess HH compliance
- Step 7: Post-survey to gauge impact of project

IMPACTS

- Improve patient safety and infection control. ^{6, 7}
- Increase nurses' awareness of their role in preventing disease transmission.⁷
- Improve HH compliance rates by ~60%. ⁸
- Decrease hospital-acquired infection rates ³.

CONCLUSIONS

- Visual reminders and access to hand sanitizer promote adherence to HH guidelines and reduce HAIs ⁵
- Tactile reinforcement using glo germ and UV lights may aid future initiatives aimed at improving infection control practices in healthcare settings ⁴
- HH compliance and education contribute to efforts to enhance healthcare outcomes ³
- Proper HH technique and improved compliance reduces healthcare costs associated with preventable infections. ⁹

