

**Methods:** The study was carried out between June 2015 to September 2018 in ten (10) tertiary hospitals included in IPC program. Data were collected in 10 intense care units using methods and tools provide by WHO, a particular attention was paid to handling devices such as intravenous catheter, urinary catheter and dressing. We used R version 3.5.2 for statistics

**Results:** HCW'S compliance with the five moments for hand hygiene increased from baseline 16.83 % CI 95% (16.32- 17.36) to 40. 2% CI 95% (39.6 - 41.1), the indication 3 was the most observed from baseline 31% CI 95% (29.49 - 32.64) to 55.7 % CI 95% (54.21 - 57.3). The most commonly observed handlings were the manipulation of venous catheters 63,2%, the highest compliance was noticed with the manipulation of dressing 75, 3 %. Bloodstream infection decrease from 18% CI 95% (17.09- 18.26 to 4.8% CI 95% (4.49- 5.04)

A wide variation in handhygiène compliance among hospitals was observed, the most important result was the lower incidence of bloodstream during these 3 years

**Conclusion:** Efforts to involve more hospitals in hand hygiene program should be intensified,with local financing

**Keywords:** Patient safety, World Health Organisation, Behavior change, Hand hygiène

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**Disclosure of Interest:** None declared

#### P156

##### INVESTIGATING THE EFFECT OF SHORT DAILY HAND HYGIENE PRACTICE ON ACHIEVING PROFICIENCY: A PROSPECTIVE COHORT STUDY

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**Introduction:** Hand hygiene training aims to develop participants' proficiency in performing the World Health Organization technique without prompts. In this study we explored the impact of short daily hand hygiene practice with feedback (deliberate practice) in achieving proficiency.

#### Objectives:

**Methods:** Staff and students in a university volunteered to practice hand hygiene using the SureWash® app on their phone or tablet on a daily basis for four weeks. App data provided information on the frequency of practice and the achieved level of performance. In addition, once a week participants were observed, by the researchers, performing hand hygiene using the SureWash® ELITE system to assess their level of performance.

The assessment at which proficiency was achieved was translated into the number of training sessions required, and investigated in relation to data gathered on the participants' gender, age group, previous training experiences, manual dexterity, and adherence with the protocol, using T-tests.

**Results:** Data from 47 participants demonstrated that 38 (81%) achieved proficiency. The mean number of sessions to achieve proficiency was 24.3 (sd = 17.8). Daily practice decreased from 28% (N = 13) in week 1 to 15% (N = 7) in week 4. There was no significant difference in age, previous training or manual dexterity but males required fewer training sessions to achieve proficiency (15.3 v 27.83, t (35.92) = -2.914, p = .006). The analysis was power calculated for moderate effects.

**Conclusion:** Our results suggest that the use of short daily hand hygiene practice shows promise in promoting proficiency. They

challenge the current culture of single training sessions repeated annually or biannually as being sufficient to achieve proficiency. We recommended that infection prevention and control teams consider the use of deliberate practice for use in hand hygiene training along with concurrent longitudinal evaluation of its effectiveness in comparison to current practice.

**Disclosure of Interest:** None declared

#### P157

##### ACCEPTABILITY AND TOLERABILITY OF ALCOHOL-BASED HAND HYGIENE PRODUCTS FOR ELDERLY RESIDENTS IN LONG-TERM CARE; A CROSSOVER STUDY

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**Introduction:** Efforts to improve hand hygiene in healthcare settings have largely targeted healthcare worker (HCW) compliance but its importance for patients, including those in long-term care facilities (LTCFs), is receiving increased attention. Alcohol-based hand rub (ABHR) can lead to improved compliance.

**Objectives:** To determine acceptability and tolerability of two ABHRs for hand hygiene of elderly LTCF residents using a modified version of the WHO protocol.

**Methods:** 36 elderly LTCF residents participated in this crossover study. A modified and translated (Chinese) version of the WHO protocol for evaluation of two or more ABHRs was used to evaluate product acceptability and tolerability for one gel (bottle with reclosable cap) and one foam (pump). During each 3-day testing period, participants received their own portable bottle of ABHR. A research nurse objectively assessed hand skin integrity at baseline and throughout the study. Skin moisture content was determined using a Moisture Checker (STR, Ca, USA). Participants rated ABHR tolerability and acceptability using the WHO checklist at the end of each test period.

**Results:** Both products passed the WHO criteria for acceptability and tolerability. The foam (86%) scored higher than the gel (51%) for ease of use possibly because some participants found the cap of the gel bottle difficult to open due to finger stiffness. No evidence of damage to skin integrity was observed. Overall, skin moisture content improved by the end of the study. Residents preferred either test product to the ABHR rinse currently in use by the LTCF.

**Conclusion:** Elderly LTCF residents were willing to use ABHR for hand hygiene. Both ABHRs were well tolerated and preferred over the usual product. Forgetfulness and difficulties in hand rubbing due to finger stiffness was a barrier for some residents. HCW-assisted hand hygiene at specified times daily and reminders to perform hand hygiene could offer a feasible and sustainable strategy to overcome these challenges.

**Disclosure of Interest:** None declared

## Poster session: Behaviour

#### P158

##### IMPROVING WASTE MANAGEMENT PRACTICES AMONG HEALTH CARE WORKERS IN A LARGE PUBLIC HOSPITAL IN UGANDA.

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