

hand hygiene; therefore, a more robust strategic approach is needed. One such strategy is customized audit with real-time feedback. A literature review highlighted the effectiveness of audit coupled with specific feedback. This approach was also supported by several guidelines and regulatory bodies that recognized the importance of audit and feedback in hand hygiene improvement efforts. For example, the World Health Organization (WHO) has emphasized 5 core components of improving hand hygiene. One of these components is evaluation and feedback. We sought to provide feedback to healthcare personnel when they do not show compliance with the Five Moments of Hand Hygiene. We aimed to achieve >95% hand hygiene compliance among healthcare staff. **Methods:** Information on the use of the hand hygiene feedback card was provided to the auditors. The hand hygiene feedback card procedure began in all the wards in May 2020. This process first started with orientation of the auditors regarding the hand hygiene feedback card, followed by auditing hand hygiene practice. Staff who did not comply with hand hygiene procedures were given real-time feedback via a card that specified the missed hand hygiene movement. **Results:** Overall hand hygiene compliance among healthcare staff increased by 6% after the hand hygiene feedback card procedure was implemented. **Conclusions:** Overall, the hand hygiene feedback card was effective in improving hand hygiene. Through this quality improvement project, significant and sustained gains in hand hygiene compliance rates of >95% can be achieved.

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Subject Category: Hand Hygiene

Abstract Number: SG-APSIC1171

A new approach of hand hygiene observation with focus on healthcare worker (HCW) category

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Objectives: The past hand hygiene (HH) compliance rate has indicated the low number of opportunities for some healthcare workers (HCWs) because the infection control liaison officer (ICLO) tended to capture opportunities from nurses who were available, despite the proportional allocation of opportunities per HCW type based on the World Health Organization (WHO) HH methodology. Therefore, HH compliance rates may not have accurately represented the specific HCW type, which may have affected the overall HH compliance rate. We sought to determine an accurate baseline of HH compliance rate with consistent number of opportunities across all HCW categories. **Methods:** HH auditors were ICLOs trained in HH observation by the infection control nurse (ICN) according to the WHO “My Five Moments of Hand Hygiene.” HH observations were conducted bimonthly with assigned areas focusing only on 1 HCW category for each session: nursing, medical, clinical support services, or environmental services. A briefing session was given on the day of observation, with the goal of collecting 20 opportunities per area with HCW focus during their peak activities. Direct feedback and positive reinforcement were given to HCWs after observations were completed. **Results:** A survey of 96 ICLOs indicated that observations based on HCW focus allowed them to capture more HH opportunities and concentrate on their observations. The new approach showed a significant increase in number of opportunities across all HCW categories that was more representative. We also successfully determined a new baseline for all HCW categories, with further breakdown of HCW type. **Conclusions:** A new methodology of HH observation with a focus on HCW category has resulted in more HH opportunities across all HCW categories and improved representation of the HH compliance rate.

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Hospital-wide study to evaluate the tolerability and acceptability of alcohol-based hand rubs according to WHO protocol, and healthcare worker hand hygiene behavior during the COVID-19 pandemic

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Objectives: To evaluate the tolerability and acceptability of 3 different alcohol-based hand rub (ABHR) products, and to determine factors influencing hand hygiene (HH) behavior among healthcare workers (HCWs) during the COVID-19 pandemic. **Methods:** A cross-sectional study was conducted in Sarawak General Hospital, a 1,034-bed tertiary-care state hospital. A self-administered 7-point Likert scale questionnaire was adapted from the WHO ‘Protocol for Evaluation of Tolerability and Acceptability of ABHR.’ The study was conducted between November 12 and 26, 2021, based on 3 types of ABHR products. Participation in answering the questionnaire was voluntary, so consent was implied. The Student *t* test was used to determine the significant differences among the ABHR product. The χ^2 distribution test was performed to evaluate the characteristics of ABHR products. **Results:** We received a response rate of 35% (1,598 of 4,628); 82% of respondents were female, and the overall cohort had a mean age of 35 years. Also, 972 (61%) of 1,598 respondents were nurses, and 1,490 (93%) of 1,598 respondents used ABHR at least 5 days every week. Of 1,598 respondents, 1,156 (72%) indicated that ABHR products were easily accessible at the point of patient care. Evaluation of ABHR products showed that respondents were receptive to all product colors ($P < .0114$) and had no color preference ($P > .05$). Comparison among ABHR products yielded no statistical difference ($P > .05$) for ‘smell,’ ‘stickiness,’ ‘irritation,’ or ‘drying speed.’ ‘Drying effect’ of all products was statistically significant ($P < .0252$). The overall satisfaction for all products was good ($P < .0022$). HCWs did not expect their HH compliance to improve even if they were provided with their preferred choice of ABHR. Of 1,598 respondents, 783 (49%) correctly used a palm-full of ABHR for HH, and 1,275 (80%) indicated that hospital management should organize more HH-related awareness and continuous medical education on HH. **Conclusions:** A comparison among different ABHR characteristics mostly showed no statistically significant difference regarding tolerability and acceptability. These findings suggest that different ABHR products will not influence HH behavior during COVID-19 pandemic.

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12-hydroxystearic acid upregulates skin antimicrobial peptides in skin models and provides long-lasting protection from bacterial challenge from a handwash formulation

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Objectives: We evaluated the role of 12-hydroxystearic acid (12HSA) in upregulating skin antimicrobial peptides (AMPs) in *in vitro* and *ex vivo*