

HO-MDRO rate per 1000 patient-days was assessed using mixed-effects Poisson regression using rate ratios (RR), which accounts for unobserved heterogeneity between units while controlling for number of tests ordered per month per hospital unit. HH adherence was stratified in quartiles (Q1: 24-43%, Q2: 43-51%, Q3: 52-61%, Q4: 61-84%). **Results:** During the study period, there were 23 million HH opportunities and 1875 MDROs in 772,930 patient-days. HH adherence increased from 41% January 2021 to 57% September 2022. ESBL, MSSA, and CDIFF accounted for most MDROs (Figure 1). The mean monthly HH adherence rate was 52% per unit, with a median of 1.66 (IQR: 0-3.5) MDROs/1000 patient-days. Mixed-effects Poisson regression suggested no significant overall relationship between HH adherence and MDRO rate (Figure 2). A close to null association was observed when comparing quartile two to quartile one (RR: 0.97, 95% CI: 0.82, 1.15), quartile three to quartile one (RR: 0.96, 95% CI: 0.79, 1.17), and quartile four to quartile one (RR: 1.05, 95% CI: 0.86, 1.28). Results were similar across hospitals (Figure 3). **Conclusions:** Although implementing an EHHMS led to an improvement in HH adherence, we were not able to demonstrate a resultant decrease in HO-MDROs. Potential explanations include the relatively rare outcomes of interest, unrecognized confounders, and the complex interaction between HH and HO-MDROs, since poor HH adherence on a unit may lead to increased attention from infection prevention and therefore increased focus on other MDRO prevention measures.

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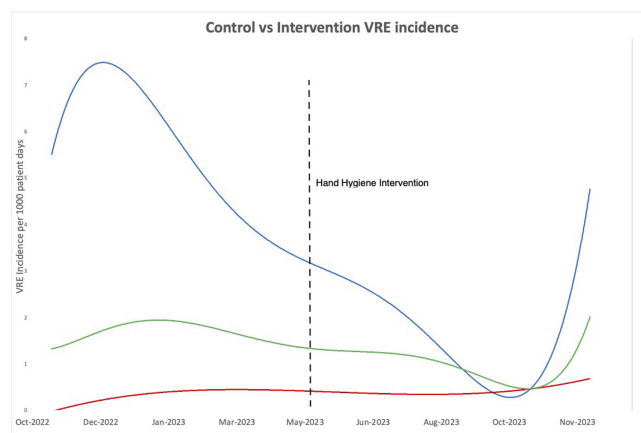
Poster Presentation - Poster Presentation

Subject Category: Hand Hygiene

Empowering Patient Hand Hygiene and Reducing Infection in the Oncology Population

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Background: Significant focus has been placed on healthcare worker hand hygiene, but little attention has been assigned to the role of patient hand hygiene (HH) in reducing hospital acquired infections. Therefore, in this quality improvement study, we examined the impact of providing patients with hand hygiene products around mealtime on increasing patient HH adherence and on reducing acquisition of nosocomial antibiotic resistant organisms. **Methods:** Patients on two inpatient leukemia units at a tertiary oncologic center were provided with a single use pre-packaged alcohol wipe on their meal trays prior to every meal (three times daily). Additionally, an information card explaining to patients how and when to use the alcohol wipe was provided on the meal trays three times a week. Both the wipe and instructions were designed with input from patient representatives at the hospital. Two oncologic control units were selected where no specific intervention for patient hand hygiene was conducted. Patient hand hygiene adherence on the control and intervention units were measured through once monthly patient interviews conducted after meals where patients were asked to recall whether they washed their hands prior to eating (using any product). Vancomycin Resistant Enterococcus (VRE) incidence was compared on the intervention and control units during the 7 months prior and 7 months following initiating the intervention. **Results:** During the seven-month intervention period, more than 15 000 wipes were dispensed to patients on the intervention units. Through interview, 91% of 87 patients on the intervention units reported cleaning their hands before eating a meal using any cleaning product compared to 72% of 68 patients on the control units ($X^2 = 9.32, p = 0.002$). Furthermore, on the intervention units, 30 (38%) patients endorsed using the provided hand hygiene product. During intervention period, the combined incidence rate of VRE the intervention units was 1.85 case/1000 patient-days compared to 5.35 cases/1000 patient-days during the 7 months prior to intervention



($t = 3.24, p=0.007$)(Figure 1). **Conclusions:** This patient-centered quality improvement intervention increased patient hand hygiene and potentially reduced VRE incidence in a vulnerable oncologic population. This practical intervention that incorporated the patient perspective provided accessible hand hygiene products with simple instruction and reminders required minimal participation of unit staff. Further application of the intervention in non-oncologic populations is needed to further establish the relationship between patient hand hygiene and the acquisition of nosocomial infections.

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Subject Category: Implementation Science

Managerial Influence on Infection Prevention and Control (IPC) Implementation in Israeli Hospitals: A Doctoral Research Study

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Background: This research, part of a doctoral study, aims to examine the impact of managerial factors on the implementation of Infection Prevention and Control (IPC) measures in Israeli hospitals. The study focuses on identifying key facilitators and barriers from the perspectives of physician and nurse managers, with an emphasis on understanding the integration of managerial strategies and theoretical frameworks in IPC implementation. **Objective:** The objective is to explore specific managerial factors, both facilitators and barriers, influencing the effective implementation of IPC measures. The research investigates these influences through the lens of physicians and nurses managing IPC units in public hospital settings. **Methodology:** A mixed-method approach was adopted, involving in-depth interviews with ten IPC-Unit managers (five physicians and five nurses) and a comprehensive questionnaire distributed among IPC-Unit heads. The study's demographic and professional profiles of participants are detailed in Table 1. The data collection process encompassed an Activity Assessment Questionnaire (2-AAQ) and an Organizational Change Implementation Questionnaire (3-OrgChangeImplQ), with the distribution of responses categorized by implementation stages and sociological theories (Tables 2-4). **Result:** Managerial autonomy emerged as a significant catalyst for IPC implementation, with supportive leadership and resource allocation being critical. Differences in approaches between physician and nurse managers were observed, reflecting diverse strategies in planning, execution, monitoring, and maintenance of IPC measures. The findings also revealed a natural alignment with sociological theories, particularly Normalization Process Theory (NPT) and Diffusion of Innovations (DOI), despite a lack of formal training in these areas. **Conclusions:** The study underscores the multifaceted nature of IPC implementation, highlighting the importance of managerial autonomy,