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Background: Annual flu vaccination is the most effective way to prevent the disease and its complications. Vaccine effectiveness (EV) varies from season to season, requiring annual re-evaluation. The objective of this study was to estimate the preliminary effectiveness of the influenza vaccine until epidemiological week 4 of the 2019–2020 season, in patients admitted to a tertiary-level hospital. **Method**: We conducted a case-control study at University General Hospital, Alicante, Spain, during the 2019–2020 season. We included all patients hospitalized with influenza confirmed by laboratory test (ie, PCR positive for influenza) during the period between epidemiological week 40 of 2019 and epidemiological week 4 of 2020. These were considered cases, and those with clinical suspicion of influenza and negative RT-PCR were considered controls. Vaccination coverage was calculated in cases and in controls, determining the odds ratio. We calculated the vaccine effectiveness (VE) and its 95% confidence interval using the following formula: VE = (1 − odds ratio) ×100. **Result**: We included 545 patients: 61 cases and 484 controls. The overall EV for influenza cases prevention was 40.7% (95% CI, −17.1 to 70.1), and for those >1 year of age, the overall EV was 56.9% (95% CI, 13.9–78.5). **Conclusion:** The 2019–2020 Influenza vaccine was effective in preventing influenza cases in patients admitted up to week 4 of the 2019–2020 season. These results are preliminary and may vary; they should be re-evaluated at the end of the season.

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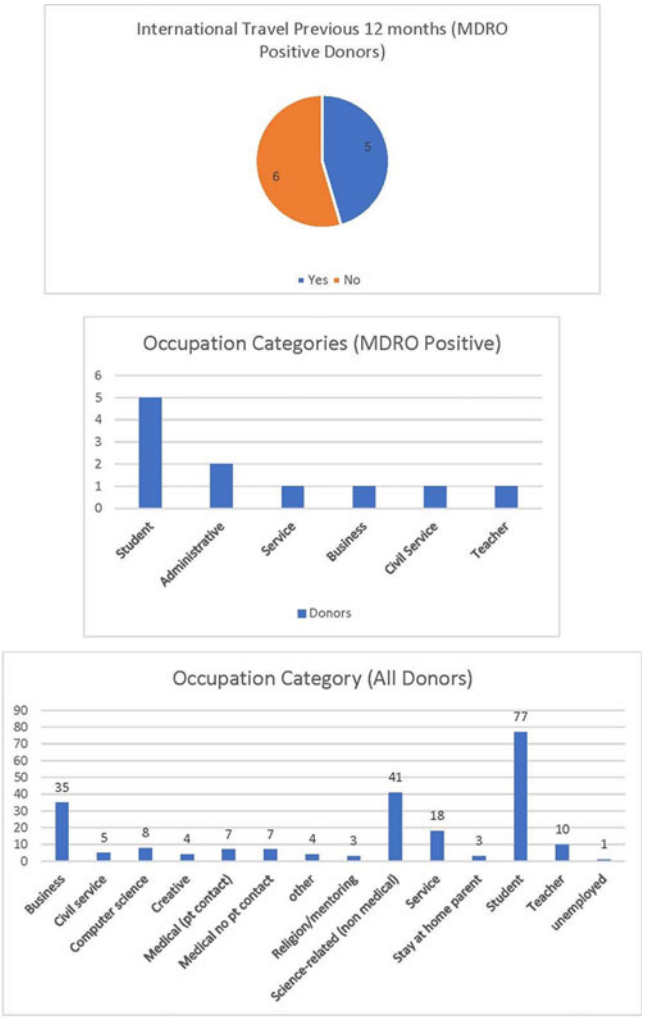

Fig. 1.

Presentation Type:
Late Breaker Poster

Low Carriage Rates of Multidrug-Resistant Organisms in Prospective Stool Donors in a Large Fecal Microbiota Transplantation (FMT) Stool Bank

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Background: Fecal microbiota transplantation (FMT) has emerged as standard of care for *Clostridioides difficile* not responsive to antibiotic therapy. Rigorous screening of healthy donors is critical to patient safety. As part of routine donor evaluation for FMT, multidrug-resistant organism (MDRO) screening is performed to assess the presence of extended-spectrum β-lactamase–producing organisms (ESBLs), vancomycin-resistant enterococci (VRE), carbapenem-resistant Enterobacteriaceae (CRE), and methicillin-resistant *Staphylococcus aureus* (MRSA). Carriage rates of these organisms in a healthy, low-risk population are largely unknown. We report MDRO carriage rates among individuals screened for a stool donation program at a large-scale FMT stool bank. **Methods:** Individuals were screened at a nonprofit stool bank (OpenBiome, Cambridge, MA). Potential donors underwent in-person clinical assessment, including MDRO risk factors (eg, travel, occupation, healthcare exposure). If they met the clinical assessment criteria, laboratory testing, including MDROs, was performed. Once enrolled in the donor program, donors underwent repeated clinical and laboratory screening at 60-day intervals, with intermittent health checks throughout the donation period. Stool samples provided at 60-day intervals were screened for MDROs (ie, ESBL, CRE, VRE), and nasal swabs for MRSA were tested using culture-based methods. All stool samples tested for MDROs from prospective and enrolled donors were included. **Results:** Between February 2017 and July 2019, 247 individuals were screened for MDROs. Overall, 11 samples (0.04%) tested positive for ESBL, MRSA, or VRE. No CRE carriers were identified. Also, 2 individuals tested positive twice for ESBL, resulting in 13 of 1,688 (0.77%) positive screens. International travel in the previous 12 months was reported by 6 of 11 MDRO carriers. Occupations typically associated with MDROs were not observed in carriers. Most of the MDRO-positive donors were students; however, students make up the majority of the stool donor cohort. **Conclusions:** This study is the first to report background MDRO carriage rates in a population of otherwise

healthy FMT stool donors. Although rare, MDROs were detected and should be part of standard guidelines for FMT donor screening. Most subjects testing positive for MDROs had defined risk factors associated with MDRO carriage, including international travel or exposure to healthcare environments. However, occupational exposure was not a factor associated with carriage in this study. Standardized donor screening guidelines for FMT are urgently needed to ensure that MDROs and risk factors for MDRO carriage are routinely screened for by all FMT providers. Stool banks present a unique public health opportunity to evaluate the background carriage rate of MDROs in healthy populations.

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Observed Time Burden With Isolation Precautions at Three University-Affiliated Hospitals in Korea

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Background: Isolation precautions (IPs; ie, patient isolation with transmission-based precautions) are essential in hospital infection control interventions to prevent the transmission of healthcare-associated infections. Because IPs require healthcare personnel (HCP) to use personal protective equipment (PPE; eg, gown, gloves, and mask) to enter patient isolation rooms and perform hand hygiene (HH) frequently, IPs are often regarded as cumbersome tasks and may lead to fewer HCP visits. This observation study examined the time burden of IPs (ie, PPE use and HH) from time spent on HCP tasks, including patient treatment and care, in patient isolation rooms. **Methods**: With institutional review board approval, participating hospitals were recruited. At each hospital, assigned infection control nurses observed HCP tasks at patient isolation rooms of interest and recorded each task's duration, using a stopwatch or timer and an observation form. For each observation block (ie, a duty period at 1 observation unit, regardless of the number of observed isolation rooms), unit-related information was collected, including the numbers of hospitalized patients, admission patients, discharge patients, isolation patients, and nurses. For each block, IP proportions were calculated by total time spent on IP divided by the total time spent on all tasks. Descriptive statistics, *t* test, ANOVA, and regression analyses were conducted using STATA version 16.0 software. **Results**: Three university-affiliated hospitals (838 average hospital beds, range 811–855) participated from April 2 to May 18, 2019 (for 7–9 days). In total, 2,901 tasks were monitored and the total time spent was 164,973 seconds; most tasks were done by nurses (89.2%) and females (86.8%). Although the most time-intensive task was procedures (eg, intravenous infusion) followed by medication, PPE use was the most frequent task followed by HH (Table 1). Regarding IP proportions, an overall average of 23.6% of total task time was spent on IPs (16.1% for PPE use and 7.5% for HH) in patient isolation rooms (Table 2). Notably, tasks in the tuberculosis isolation room of hospital B showed a greater HH proportion (13.7%) than PPE proportion (13.5%) because HCP usually use N95 masks only. Wards, compared to intensive care units (ICUs), showed higher PPE proportions (19.2%), potentially due to PPE stock in the nurse station and less PPE education compared to ICUs. **Conclusions:** Our study results demonstrated the substantial amount of time spent on IP compliance among all task durations in patient isolation rooms. To improve IP compliance, this time burden needs to be considered with greater system support, such as more nursing staff.

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Table 1.

Table 1. Summary of Observed Frequency and Total Time Spent for Each Task Category at Patient Isolation Rooms

Task Category	Observed Frequency				Observed Total Time Spent (Seconds)			
	Hospital A	Hospital B	Hospital C	All Hospitals	Hospital A	Hospital B	Hospital C	All Hospitals
	N (%)	N (%)	N (%)	N (%)	Sum (%)	Sum (%)	Sum (%)	Sum (%)
PPE use*	419 (51.5)	231 (46.3)	769 (48.4)	1,419 (48.9)	7,719 (13.4)	3,160 (13.9)	9,124 (10.8)	20,003 (12.1)
Hand hygiene	175 (21.5)	124 (24.8)	340 (21.4)	639 (22.0)	2,563 (4.4)	2,355 (10.4)	5,518 (6.5)	10,436 (6.3)
Procedures	54 (6.6)	31 (6.2)	145 (9.1)	230 (7.9)	13,469 (23.4)	5,384 (23.7)	22,715 (26.9)	41,568 (25.2)
Assessment	46 (5.7)	17 (3.4)	78 (4.9)	141 (4.9)	4,378 (7.6)	1,102 (4.9)	2,227 (2.6)	7,707 (4.7)
Administration	19 (2.3)	NA	114 (7.2)	133 (4.6)	2,073 (3.6)	NA	22,070 (26.1)	24,143 (14.6)
Device management	14 (1.7)	19 (3.8)	35 (2.2)	68 (2.3)	4,932 (8.6)	1,439 (6.3)	2,701 (3.2)	9,072 (5.5)
Nursing care	11 (1.4)	8 (1.6)	37 (2.3)	56 (1.9)	6,297 (10.9)	230 (1.0)	11,372 (13.4)	17,899 (10.8)
Environment management	24 (3.0)	6 (1.2)	21 (1.3)	51 (1.8)	7,883 (13.7)	86 (0.4)	1,514 (1.8)	9,483 (5.7)
Medication	6 (0.7)	26 (5.2)	15 (0.9)	47 (1.6)	699 (1.2)	3,434 (15.1)	1,279 (1.5)	5,412 (3.3)
Observation	21 (2.6)	10 (2.0)	9 (0.6)	40 (1.4)	2,304 (4.0)	1,005 (4.4)	2,133 (2.5)	5,442 (3.3)
Education	11 (1.4)	10 (2.0)	11 (0.7)	32 (1.1)	700 (1.2)	1,382 (6.1)	1,912 (2.3)	3,994 (2.4)
Test & sampling	13 (1.6)	7 (1.4)	4 (0.3)	24 (0.8)	4,659 (8.1)	2,627 (11.6)	639 (0.8)	7,925 (4.8)
Feeding	NA	10 (2.0)	11 (0.7)	21 (0.7)	NA	503 (2.2)	1,386 (1.6)	1,889 (1.1)
Total	813 (100)	499 (100)	1,589 (100)	2,901 (100)	57,676 (100)	22,707 (100)	84,590 (100)	164,973 (100)

Note. * PPE use frequency counted all different items' donning and doffing individually; PPE, personal protective equipment; NA, not applicable