Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Other

Sex representation of editors, editorial boards, and authors of infectious diseases and healthcare epidemiology journals

Aldo Barajas-Ochoa; Manuel Ramirez-Trejo; Aditee Dash; Jillian Raybould and Gonzalo Bearman

Background: Academic publishing is not exempt from potential structural disparities. We assessed the sex representation among the editors and on editorial boards by their level of influence in the decision of a manuscript of the leading journals focused on infectious diseases and healthcare epidemiology. We also explored whether the sex of the first or last author correlates with the sex of the editors in a convenience sample of these journals. Methods: In a cross-sectional study, the 40 top infectious disease journals (Scimago Journal and Country Rank) and 4 healthcare epidemiology journals were selected. The names and positions of the editorial members were extracted from the journal's website, and a decision-making level was assigned (ie, editor-in-chief as level 1, board members as level 3). Next, the first and corresponding authors' names of all 2019 research articles published in a convenience sample of 15 of these journals were retrieved for the second aim. A digital gallery was used to assign one of the binary denominations of woman or man based on the probability that a name was culturally given to a woman or man. Differences were determined by χ^2 and linear regression. Results: Overall, 2,416 names were retrieved from the editorial boards of 44 journals; 799 (33%) were assigned as women and 1,617 (67%) as men. The decision-making level showed 70 (3%) at the editor-in-chief level, 756 (31%) at the associate editor level, and 1,600 (66%) as editorial board members. The frequency distribution of assigned gender by decision-making level showed 21 (30%) women and 49 (70%) men at the editor-in-chief level; 263 (35%) women and 493 (65%) men at the associate editor level; 515 (32%) women and 1,075 (68%) men at the editorial board level. Some journals showed an even sex distribution, such as Clinical Infectious Disease or Microbiology Spectrum. However, others were significantly unbalanced. We retrieved 2,725 articles from the convenience sample of infectious disease-focused journals. Women were the first authors in 1,373 (50%) and the last authors in 974 (35%). Editorial board sex composition and sex of authors showed no significant correlation. Trends between infectious disease-focused and healthcare epidemiology-focused journals were similar. Conclusions: Although the data showed uneven sex representation on the editorial boards of infectious disease-focused and healthcare epidemiology-focused journals, there is no apparent vertical segregation or influence on publishing by sex. A generational transition seems to be occurring in editorship and authorship in the field.

Disclosures: None

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Subject Category: Other

Speaker demographics at the Society for Healthcare Epidemiology of America (SHEA) Spring Conference, 2019–2022

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Background: The Society for Healthcare Epidemiology of America (SHEA) serves as a national platform for infection prevention and antibiotic stewardship. Like many professional healthcare societies over the last decade, the SHEA has pledged to provide equitable opportunities to individuals in the organization. The impact of these efforts remains undetermined. This study evaluated trends in speaker demographics at the annual SHEA Spring Conference from 2019 to 2022. **Methods:** SHEA leadership or staff provided demographic information on SHEA members and Spring conference speakers (excluding poster sessions) from 2019 to 2022. We excluded 2020 due to conference cancellation. Data were summarized using descriptive statistics,

and χ^2 analysis was used to evaluate changes over time. Individual speakers were compared with member demographics. Self-reported SHEA speaker and member demographics were available for sex, race or ethnicity, age, primary practice setting, and professional degrees. Speaker professional degree was not available for 2022. Results: In total, 447 speaker slots were filled by 218 unique speakers over the 3-year period. The SHEA average annual membership between 2019 and 2022 with self-reported demographics included 55.2% female and 44.8% male members, with race reported as follows: 69.3% White, 21.4% Asian, 6.0% Hispanic or Latino, 2.9% Black, 0.4% American Indian/Alaska Native/Native Hawaiian/Pacific Islander (AIAN/ NHPI). However, almost half of the members did not report a race or ethnicity. The SHEA speakers during the same period were 63.5% female and 36.5% male, with 68.2% White, 13.3% Asian, 3.8% Black, 3.4% Hispanic/Latino, and 0.8% AIAN/NHPI. Only 13.4% of speakers did not report race or ethnicity. Every year, there were fewer than 6 speakers in each of the Black, Hispanic or Latino, AIAN/NHPI race or ethnicity categories. In 2019, 49.2% of speakers were aged 41-50 years, compared with 28.6% of members in that age group (P = 0.0029). By 2022, 35.6% of speakers were aged 41–50 years, compared with 29.3% of members in that age group (P = .074). In 2021, pharmacists represented 11.9% of speakers compared with 2.9% of members, and members with nondoctoral degrees represented 11.1% of speakers compared with 21.4% of members (P < .0001). In each year, there was a statistically significant association between primary practice setting and speaker or member representation, with underrepresentation of community or private-practice speakers relative to their proportion of membership: 2019 (7.5% speakers vs 14.3% members), 2021 (6.5% speakers vs 15.2% members), 2022 (4.3% speakers vs 15.7% members) (P < .05) . Conclusions: Although there has been more equitable speaker age representation and an increase in pharmacist speakers at the SHEA Spring Conference over time, practitioners from community settings and those with nondoctoral degrees remain underrepresented relative to the SHEA membership. Racial or ethnic minoritized individuals remain underrepresented as members and speakers compared with the general US population. Intentional interventions are needed to consistently achieve equitable speaker representation across multiple demographic groups at the SHEA Spring Conference.

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Presentation Type:

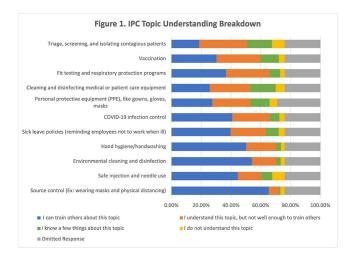
Poster Presentation - Poster Presentation

Subject Category: Other

Oregon Project Firstline: A needs assessment of healthcare personnel infection prevention knowledge and training preferences

Nicholas Ida; Judith Guzman-Cottrill; Roza Tammer; Rebecca Pierce and Dat Tran

Background: Infection prevention and control (IPC) competency is critical for healthcare personnel (HCP) and patient safety. In collaboration with the CDC new national IPC training collaborative called Project Firstline, the Oregon Health Authority's (OHA) Healthcare Associated Infection (HAI) Program established a state-level program in 2021. The goal of Oregon Project Firstline is to provide relevant, accessible, and engaging IPC training materials for our state's HCP. We assessed the IPC learning needs of Oregon's healthcare workforce, and to understand the preferred methods and formats of training across the various HCP roles. Methods: OHA's HAI program recruited HCP by distributing electronic surveys through multiple healthcare, regulatory, and public health partners' email listservs and HCP-targeted newsletters. Survey responses were recorded from September 23 to December 10, 2021. The HAI program assessed respondents' IPC knowledge, online and in-person job training preferences, frequently used training devices, and trusted sources for IPC information. An individual's understanding of an IPC topic was categorized based on their selfassessed confidence in their knowledge and ability to teach the topic to others. In total, 6,382 surveyed responses were analyzed. Results: The average understanding among HCP was lowest in IPC topics



relating to triage and isolation of contagious patients and fit testing of respiratory protection devices. For these topics, 3,208 HCP (66.21%) and 3,657 HCP (75.48%) HCP, respectively, did not understand the topic well enough to teach others (Fig. 1). The highest number of HCP (n = 2,512, 39.36%) requested additional training in methods on how to educate others about IPC topics (ie, "train the trainer"). Surveyed respondents most frequently used personal computers for job trainings in both work and at-home settings (n = 4,603, 72.12%) and 3,437 HCP (53.85%) were open to either in-person or remote formats for job education. The CDC and OHA were the most frequented and trusted IPC sources among surveyed HCP: 4,124 HCP (64.62%) and 3,584 HCP (56.16%), respectively. **Conclusions:** IPC is a critical topic in HCP training across all healthcare facility types and employee roles. Effective educational planning includes understanding the learners' knowledge needs and preferred methods of learning. Our learning needs assessment identified important IPC knowledge gaps and will help ensure that our training courses will be offered in effective educational formats for Oregon's diverse HCP. Future training will include appropriate triage of potentially infectious patients, respiratory fit testing, and general IPC "train the trainer" sessions. Additionally, we will offer both in-person and remote options.

Disclosures: None

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Subject Category: Other

Environmental factors associated with invasive mold infections at a tertiary-care hospital

Lindsey Tully; Schuyler L. Gaillard; Lucy Zheng; Tara Millson; Princy Kumar and Joseph Timpone

Background: Invasive mold infections (IMIs) in hospitalized patients can result in significant morbidity and mortality. Environmental factors, such as hospital construction and negative air-pressure rooms (NAPRs), have been associated with hospital-acquired IMI. Increased utilization of NAPRs during the COVID-19 pandemic created a unique opportunity to examine the impact of NAPRs on IMI risk. Methods: From 2018 to present, a new pavilion was being constructed adjacent to our hospital. The Theradoc platform was used to identify positive mold cultures among adult patients hospitalized at our institution between March 1, 2017, and October 15, 2022. We performed a retrospective chart review of 262 mold isolates to determine patient demographics, timing of IMI, and their relationship to hospital construction and exposure to NAPR. IMI incidence was compared across 3 observation periods: (A) before hospital construction; (B) during hospital construction alone; and (C) during hospital

construction and NAPR enhancement during the COVID-19 surge. Hospital-acquired IMI was defined as an infection that occurred >72 hours after admission. A REDCap database was created for data storage and R software was used for data analysis. Results: Of the 262 mold isolates identified, 61 cases were classified as IMI, of which 29 were hospital-acquired IMI. The mean age of IMI patients was 51.8 years, and 55.2% were male. Among them, 20.7% were exposed to NAPR during admission; 65.5.% were immunocompromised; and 2 patients were diagnosed with COVID-19. The all-cause mortality rate among hospital-acquired IMI cases was 79.3% (23 of 29). Also, 82.8% of hospital-acquired IMI cases were respiratory in nature, with 83.3% of these cases due to Aspergillus spp. Yearly rates of hospital-acquired IMI were 3.0 before construction versus 5.6 during construction (periods B and C). Yearly rates of hospitalacquired IMI, respiratory IMI, and invasive pulmonary aspergillosis by period were as follows: Period A had 3 hospital-acquired IMI cases per year, 2 hospital-acquired respiratory IMI cases per year, and 3 hospitalacquired invasive pulmonary aspergillosis cases per year. Period B had 4.5 hospital-acquired IMI cases per year, 3.5 hospital-acquired respiratory IMI cases per year, and 3.0 hospital-acquired invasive pulmonary aspergillosis cases per year. Period C had 6.5 hospital-acquired IMI cases per year, 5.4 hospital-acquired respiratory IMI cases per year, and 5.0 hospitalacquired invasive pulmonary aspergillosis cases per year. Conclusions: Hospital-acquired IMI was associated with a high mortality. Our data demonstrate a >2-fold increase in yearly incidence of hospital-acquired IMI before construction compared with during construction in association with increased implementation of NAPR. We have now reversed the trend in NAPR at our hospital's designated COVID-19 units.

Disclosures: None

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Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Outbreaks

Fanny pack transmission of carbapenem-resistant Acinetobacter baumannii

Amber DelleFave; Juliana Mandarano and Nayef El-Daher

Background: Carbapenem-resistant Acinetobacter baumannii (CRAB) is a gram-negative coccobacillus that has garnered notoriety as a formidable cause of nosocomial infection with significant mortality. This organism poses a significant threat due to its multitude of resistance mechanisms and ability to endure within the environment. In the summer of 2022, a 350-bed acute-care hospital identified an outbreak of CRAB among critically ill patients in the intensive care unit (ICU) and intensive nursing care unit (INCU). Here, we report actions taken to contain the outbreak and to identify a common environmental source. Methods: In total, 7 nosocomial CRAB infection cases were identified by the infection prevention team between July and September 2022. A multidisciplinary team reviewed the cases using relevant medical history and available microbial susceptibilities. Clinical culture sites include 1 PICC tip, 1 urine sample, 1 peritoneal fluid samples, 5 wounds, and 1 sputum sample. Of 7 infections, 6 met the criteria for hospital onset, with an average time to infection from admission $\,$ of 61 days. We quickly initiated universal contact precautions in the ICU and INCU for 6 weeks, enhanced daily cleaning of high-touch surfaces, provided staff and visitor education, conducted adenosine triphosphate (ATP) testing, collected observations, and performed selective environmental culturing based on observations. Results: In total, 71 environmental specimens were collected for culture. All were negative with the exception of 1 isolate obtained from the fanny pack of a wound-care nurse that was positive for CRAB. Also, 4 available patient isolates and the environmental isolate were sent to New York State Department of Health Wadsworth Center (NYSDOH Wadsworth) for genome sequencing, and relation to the same cluster was confirmed. Of 7 isolates, 6 were confirmed to express the blaOXA-23 resistance mechanism (1 was not available for testing). Subsequently, chart review identified that a wound-care nurse had had contact with all 7 patients within 30 days of their infections.