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Title
When a Home is Not a Home: MultiDrug-Resistant Organism (MDRO) Colonization and Environmental Contamination in 28 Nursing Homes (NHs)

Permalink
https://escholarship.org/uc/item/9b3372nr

Journal
Open Forum Infectious Diseases, 4(suppl_1)

ISSN
2328-8957

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Publication Date
2017-10-01

DOI
10.1093/ofid/ofx162.103

Peer reviewed
1694. Treatment as Prevention for Hepatitis C (TraP HepC): A Real-world Experience from the First 12 Months of a Nationwide Elimination Program in Iceland
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Session: 189. Hepatitis B and C Across the Lifespan
Friday, October 6, 2017: 8:30 AM

Background. Hepatitis C virus (HCV) infection is associated with significant morbidity and mortality. In Iceland, an island with a population of 330,000, has a HCV seroprevalence of 0.3% and an estimated total of 800–1000 patients. There is good access to health care among people who inject drugs (PWID) and Iceland thus serves as an ideal setting for a proof of concept intervention, aiming for elimination of the disease as a public health threat. If elimination is to be achieved PWID, who are key drivers of transmission, need to be a focus of treatment scale up.

Methods. All patients in the country infected with HCV were offered direct-acting antiviral agents (DAAs) starting in 2016. The regimens are chosen according to national guidelines; SOF/LDV + /RBV through October 2016 and SOF/VEL + /RBV thereafter. People who were recently infected during HIV infection with advanced liver disease are prioritized. PWID receive additional support to facilitate compliance. Various strategies are employed to enhance case detection and harm reduction. The goal is to initiate treatment for every patient in Iceland within 36 months (end-2018), of an end of HCV.

Results. Twelve months after launching the nationwide program 527 patients had been evaluated, 53–66% of the estimated total patient population. The mean age is 42 years (range, 17–70 years, 2 males to every female). The reported main route of infection was IDU (90%). At the time of evaluation, 33% reported recent (within 36 months) and 34% reported for elimination of domestic transmission of HCV.

Conclusions. A relatively large proportion of HCV infected patients in the community, including people actively injecting drugs, can be initiated on treatment in a short period of time. Current drug use does not preclude treatment success.

Disclosures. All authors: No reported disclosures.

1696. When a Home is Not a Home: MultiDrug-Resistant Organism (MDRO) Colonization and Environmental Contamination in 28 Nursing Homes (NHs)
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Session: 190. Resist MDROs in Healthcare
Friday, October 6, 2017: 2:00 PM

Background. The majority of healthcare-associated infections due to MDROs occur after post-discharge settings; the majority of infections in NHs can be prevented if infection prevention practices are adopted in NHs to help identify infection prevention activities needed to care for vulnerable patients in a medical home setting.

Methods. We conducted a baseline point prevalence study of MDRO colonization in 480 patients and 322 completed to schedule protocol. A total of 560 environmental swabs were obtained from 1400 residents. Nasal swabs were processed for MRSA and skin swabs were processed for MRSa, VRE, ESBL, and CRE. In addition, environmental swabs were collected from high-touch objects in resident rooms (bedrail, call button/ TV remote, door knobs, light switch, bathroom) and common areas (nursing station, table, chair, railing, and drinking fountain).

Results. A total of 2,797 body swabs were obtained from 1,400 residents. Overall, 48.6% (N = 680) of residents harbored MDROs; MRSa was found in 37% of residents (29.5% nasal, 24.4% skin) followed by ESBL in 16% (Table 1). Resident MDRO status was only known for 11% of MRSa (59/518), 18% ESBL (40/228), 4% VRE (4/99), and none of the CRE (0/13) carriers. Colonization did not differ between long stay (48.8%, 53/1094) vs. post-acute (45.7%, 146/306) residents (P = 0.38), but bedbound residents were more likely to be MRSa positive (34.7%, 6/17) vs. ambulatory residents (45.7%, 497/1088, P < 0.001). A total of 560 environmental swabs were obtained with 93% of common areas and 74% of resident rooms having an MDRO+ object with an average of 2.5 and 1.9 objects found to be contaminated (Table 2).

Conclusion. One in two NH residents are colonized with MDROs, which is largely unknown to the facility. MDRO carriage is associated with total care needs, but not long stay status. Environmental contamination in resident rooms and common areas is common. The burden of MDRO colonization and contamination is sufficiently high that universal strategies to reduce colonization and transmission are warranted.

Disclosures. All authors: No reported disclosures.

| Table 1. MDRO Colonization in Residents of 28 Nursing Homes |
| --- | --- | --- | --- | --- |
| **Site** | **All Residents** | **Any MDRO** | **MRSa** | **VRE** | **ESBL** |
| Nails, Axilla/Groin | 1,400 | 39% | 27% | 16% | 16% |
| Total Body Sites | 7,437 | 49% | 37% | 17% | 16% |

| Table 2. Environmental Contamination in 28 Nursing Homes |
| --- | --- | --- | --- | --- |
| **Site** | **Any MDRO** | **MRSa** | **VRE** | **ESBL** |
| Bedside Table & Bedrail | 85% | 61% | 36% | 32% |
| Full Bed & Mattress | 85% | 61% | 36% | 32% |
| Room: Door Knobs | 85% | 61% | 36% | 32% |
| Handrail (nursing) | 74% | 47% | 33% | 30% |
| Drinking Fountain or Urinal | 74% | 47% | 33% | 30% |
| Bath or Toilet | 74% | 47% | 33% | 30% |
| All Sites: Any MDRO | 85% | 61% | 36% | 32% |
