ANTIMICROBIAL STEWARDSHIP PROGRAMS IN DIALYSIS CLINICS REDUCE INFECTIONS, COSTS

Highlights

- On a national level, implementation of antimicrobial stewardships in outpatient dialysis facilities would result in 2182 fewer infections caused by multidrug-resistant organisms and *Clostridium difficile* (a 4.8% reduction) per year.
- It would also lead to 629 fewer infection-related deaths (a 4.6% reduction) and a cost savings of $99,804,603 (a 4.7% reduction) per year.

Washington, DC (August 23, 2018) — A new analysis indicates that implementing antimicrobial stewardship programs in out-patient dialysis facilities can lead to significant and meaningful reductions in infections caused by multidrug-resistant organisms, infection-related deaths, and costs. The findings appear in an upcoming issue of the *Clinical Journal of the American Society of Nephrology* (CJASN).

Infections due to antimicrobial-resistant bacteria continue to rise and are associated with considerable morbidity and mortality. Much of the problem results from antibiotic exposure, which can cause the emergence and dissemination of resistant bacteria. Because up to 30% of antimicrobials (which include antibiotics) administered in out-patient dialysis facilities are not indicated or are not optimal based on national guidelines, antimicrobial stewardship programs are needed in these facilities. Such programs seek to promote the appropriate use of antimicrobials, improve patient outcomes, and reduce microbial resistance.

Erika D’Agata, MD, MPH (Brown University) in collaboration with Cornerstone Research Group Inc., a global health economics and outcomes research company, developed a model to examine the potential impact of such programs. Using an analytical model, the team predicted that, on a national level, implementation of antimicrobial stewardships would result in 2182 fewer infections caused by multidrug-resistant organisms and *Clostridium difficile* (a 4.8% reduction) per year. It would also lead to 629 fewer infection-related deaths (a 4.6% reduction) and a cost savings of $99,804,603 (a 4.7% reduction) per year.
“This paper emphasizes the importance of improving antimicrobial prescribing in dialysis facilities in improving the health of patients on maintenance hemodialysis,” said Dr. D’Agata.

Study co-authors include, Diana Tran, MSc, Josef Bautista, MD, Douglas Shemin, MD, and Daniel Grima, MSc.

Disclosures: The authors reported no financial disclosures.


The content of this article does not reflect the views or opinions of The American Society of Nephrology (ASN). Responsibility for the information and views expressed therein lies entirely with the author(s). ASN does not offer medical advice. All content in ASN publications is for informational purposes only, and is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This content should not be used during a medical emergency or for the diagnosis or treatment of any medical condition. Please consult your doctor or other qualified health care provider if you have any questions about a medical condition, or before taking any drug, changing your diet or commencing or discontinuing any course of treatment. Do not ignore or delay obtaining professional medical advice because of information accessed through ASN. Call 911 or your doctor for all medical emergencies.

Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients. ASN has more than 18,000 members representing 124 countries. For more information, please visit www.asn-online.org or contact the society at 202-640-4660.

Tweet: Antimicrobial stewardship programs in dialysis clinics reduce infections, costs.

Facebook: New research indicates that implementing antimicrobial stewardship programs in outpatient dialysis facilities can lead to substantial reductions in infections caused by multidrug-resistant organisms, infection-related deaths, and costs. The findings appear in the Clinical Journal of the American Society of Nephrology.

Media contact. Christina O’Reilly at 401-641-0950 christina.oreilly@lifespan.org

The American Society of Nephrology®, ASN®, Kidney Week®, CJASN®, JASN®, NephSAP®, and ASN Kidney News® are registered trademarks of ASN