Medical Xpress

Infection prevention and control programs are essential to antibiotic stewardship efforts

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Infection prevention and control (IPC) and antibiotic stewardship (AS) programs are inextricably linked, according to a joint position paper published today by the Association for Professionals in Infection Control and Epidemiology (APIC), the Society for Healthcare Epidemiology of America (SHEA), and the Society of Infectious Disease Pharmacists (SIDP) in APIC and SHEA's peer-review journals, the *American Journal of Infection Control* and *Infection Control and Hospital Epidemiology*.

This paper is an important update to a 2012 paper that affirmed the key roles of infection preventionists (IPs) and healthcare epidemiologists (HEs) in promoting effective use of antimicrobials in collaboration with other healthcare professionals. The new paper highlights the synergy of IPC and AS programs, including the importance of a well-functioning IPC program as a central component to a successful AS strategy.

"The issues surrounding the prevention and control of infections are intrinsically linked with the issues associated with the use of antimicrobial agents and the proliferation and spread of multidrug-resistant organisms," said Mary Lou Manning, PhD, CRNP, CIC, FSHEA, FAPIC, lead author of the new paper. "The vital work of IPC and AS programs cannot be performed independently. They require interdependent and coordinated action across multiple and overlapping disciplines and clinical settings to achieve the larger purpose of keeping patients safe from infection and ensuring that effective antibiotic therapy is available for future generations."

Antimicrobial stewardship programs encourage the appropriate use of antimicrobials (including antibiotics) to minimize overuse, improve patient outcomes, reduce microbial resistance, decrease the spread of infections and preserve the efficacy of antibiotics. Multidrug-resistant organisms cause a significant proportion of serious healthcare-associated infections (HAIs) and are more difficult to treat because there are fewer and, in some cases, no antibiotics that will cure the infection. The Centers for Disease Control and Prevention (CDC) states that each year in the United States at least 2 million people become infected with bacteria that are resistant to antibiotics and at least 23,000 people die as a result.

According to the paper, when AS programs are implemented alongside IPC programs, they are more effective than AS measures alone, verifying that a well-functioning IPC program is fundamental to the success of an AS strategy.

"It is important that all clinicians depend on evidence-based IPC interventions to reduce demand for antimicrobial agents by preventing infections from occurring in the first place, and making every effort to prevent transmission when they do," said 2018 APIC President Janet Haas, PhD, RN, CIC, FSHEA, FAPIC . "IPC and AS programs are intrinsically linked, making effective collaboration essential to ensure patient safety."

The three societies present their position against a backdrop of increased awareness of antimicrobial resistance among healthcare providers, policy makers, and the public, and national action plans and forums designed to address the issue, which emphasize the important role of IPC programs in advancing successful AS interventions across the continuum of patient care.

"IP and HE leaders are IPC subject matter experts who are also trained

with social and behavioral skills that allow them to effectively engage with different professional disciplines within healthcare to promote, implement, evaluate, support and sustain IPC strategies across practice settings. These are similar skills as those exhibited by leaders of successful AS programs," said Keith Kaye, MD, MPH, FSHEA, president of SHEA.

APIC, SHEA, and SIDP support the CDC Core Elements of AS framework and identify the synergy of IPC and AS within each element of the CDC recommendations. In addition, the three societies believe that microbiology laboratory staff members and clinical microbiologists play an essential role in successful IPC and AS programs.

"IPs and HEs engage a diverse range of clinical disciplines across practice settings in HAI prevention. The work of physician and pharmacist AS program leaders is greatly enhanced by the support of other key groups, including IPC programs," said Elizabeth Dodds Ashley, PharmD, MHS, BCPS, Duke University Department of Medicine and president of SIDP.

The authors acknowledge that successful AS programs require a significant investment on the part of the healthcare facility. "Changing practices and prescribing patterns and learned behaviors of physicians, nurses, pharmacists, and other healthcare providers will take time and investment, but it is critical to affect a long-term solution to the rise of AMR and CDI infections," they state in the paper.

The authors urge healthcare leaders to prioritize IPC and AS as part of wider patient safety initiatives and recommend that IPC and AS leaders collaborate in communications to the C-suite. "Given the synergy between AS and IPC programs, IPC and AS program leaders should seize every opportunity to benefit from each other's expertise and organizational influence and partner when making the case for program

support and necessary resource allocation to clinical and administrative leadership."

More information: Mary Lou Manning et al, Antimicrobial Stewardship and Infection Prevention—Leveraging the Synergy: A Position Paper Update, *Infection Control & Hospital Epidemiology* (2018). DOI: 10.1017/ice.2018.33

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