RESEARCH GRANT SPOTLIGHT...





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"Impact of Antimicrobial Stewardship Strategies in the Emergency Department: A Qualitative Systematic Review"

Dr. Emily Black, and co-investigators Dr. Kyle Wilby, Dr. Tasha Ramsey, and undergraduate research student Mia Losier received a CSHP Foundation Research Grant of \$500.

Q: How did the concept/idea for your research project come about?

A: Most literature evaluating the impact of antimicrobial stewardship interventions has focused on stewardship in the inpatient setting. We were interested in identifying successful interventions in the emergency department which could be implemented in practice and also hoped to identify areas where additional research was needed.

Q: Please briefly describe your research project and what it revealed.

A: This study was completed as a systematic review. A literature search of antimicrobial stewardship interventions delivered in the emergency department was completed in Medline, EMBASE, CINAHL, Scopus, and Web of Science. Forty-three studies met inclusion criteria. The most common antimicrobial stewardship interventions evaluated were patient or provider education and guideline implementation. Results showed a mixed benefit of implementing interventions. Where identified, stewardship interventions primarily resulted in improved delivery of care (increased appropriateness of prescribing or adherence to guidelines) or a decrease in antimicrobial utilization. The quality of the studies was low, with most rated as having unclear or high risk of bias.

Q: What impact will your research have on hospital pharmacy and patient care?

A: To our knowledge this is the first systematic review to evaluate antimicrobial stewardship interventions in the emergency department. In addition, our study highlights pharmacist participation in antimicrobial stewardship initiatives as identified by included studies. Results from this review can be used by policy makers, antimicrobial stewardship teams, and antimicrobial stewardship pharmacists to develop stewardship interventions in the emergency department which have the most evidence to support improved delivery of patient care or patient outcomes.

Q: What role did this CSHP Foundation research grant play in supporting your project?

A: The Foundation's research grant provided the funding needed to complete the systematic review. In addition, the undergraduate research student's salary was covered by an establishment grant from the Faculty of Health Professions at Dalhousie University.

Q: Why should healthcare professionals, decision makers and the public pay attention to research done by pharmacists?

A: Pharmacists focus on medication-related issues and are often able to identify research needs through their experience practicing in direct patient care settings. Research completed by pharmacists has the potential to address important issues faced by healthcare providers in clinical practice.

Poster Presentations: Losier M, Ramsey TD, Wilby KJ, Black EK. A Systematic Review of Antimicrobial Stewardship Interventions in the Emergency Department. Presented at the Canadian Society of Hospital Pharmacists, Pharmacy Practice Conference, Toronto, Feb 5, 2017; and at the 22nd Annual ID Research Day & 9th Annual CCfV Symposium, Halifax, April 11, 2017.

Publication (pending): Losier M, Ramsey TD, Wilby KJ, Black EK. A Systematic Review of Antimicrobial Stewardship Interventions in the Emergency Department. Annals of Pharmacotherapy. 2017. In Press.

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