

RESEARCH SPOTLIGHT...



Mark Duffett, BSc (Pharm), MSc, RPh, ACPR CSHP Foundation Research Grant Recipient

“Medication Decision-Making in Critically Ill Children: A Survey of Canadian Pediatric Critical Care Clinicians”

Mark Duffett and his co-investigators, Deborah Cook, Karen Choong, Lehana Thabane and Thuva Vanniyasingam, received a CSHP Foundation grant of \$4,083 in 2011.

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

A: The idea for this project came from two common challenges in the Pediatric Intensive Care Unit (PICU): changing clinician behaviour and making decisions about therapy in the face of limited pediatric-specific evidence.

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

A: We surveyed pharmacists and physicians who work in Canadian PICUs. Respondents rated the factors that influence their decisions about medication use in five commonly encountered clinical scenarios. We received 117 responses, with at least one from 95% of the PICUs in Canada. The three factors reported to most strongly influence clinician decision-making overall were severity of illness, physiologic and adverse effects. Factors least likely to influence decision-making were drug costs, unit policies, and non-critical care randomized controlled trials. There were significant differences in importance ratings between physicians and pharmacists for five of the factors.

Q: How will the results of the research be used?

A: These results will allow us to take a more nuanced approach to quality improvement and knowledge translation in pediatric critical care by considering the variability in decision-making due to the clinical problem and clinician characteristics. The results were presented at the 2014 World Congress on Pediatric Intensive and Critical Care in Istanbul, Turkey.

Q: How will your research impact patient care?

A: Providing safe and effective care in the PICU requires teamwork and frequent changes in clinical practice. This project allows us to better understand the differences among the team members and to tailor our approaches to implementing practice change.

Q: What role, if any, did the research grant play in supporting your professional career?

A: This survey is part of my PhD work which focuses on the role of randomized controlled trials in pediatric critical care. The survey would not have been possible without this research grant, and the success of this project has certainly made my other applications for funding more competitive.

Q: Why is an organization like the CSHP Foundation important to hospital pharmacists?

A: The CSHP Foundation Research Grants are an excellent way to encourage high-quality research by Canadian hospital pharmacists. They fund a wide range of projects and are particularly accessible to researchers who may not have had previous funding.

Publication:

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