

Poster # 42

Title of poster: Survey of Canadian Intensive Care Unit Pharmacists' Attitudes, Knowledge, and Use of Probiotics for Patients (Pro-Surve)

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Abstract

INTRODUCTION: Ventilator-associated pneumonia (VAP) is a lung infection that affects 10-25% of patients in the Intensive Care Unit (ICU) . PROSPECT (Probiotics: Prevention of Severe Pneumonia and Endotracheal Culture Trial: A Pilot Trial) is currently underway to assess the feasibility of a larger trial of probiotics to prevent VAP and other infections. In conjunction with the PROSPECT Pilot Trial, we conducted a survey of ICU pharmacists.

OBJECTIVES: To assess Canadian ICU pharmacists' attitudes toward the use of probiotics in critically ill patients; secondary objectives were to evaluate their knowledge and self-reported use of probiotics for critically ill patients.

METHODS: We surveyed pharmacists providing care to ICU patients in Canada. The survey instrument was rigorously designed according to previous guidelines. Following a literature review, a preliminary version of the survey was generated. This version was pre-tested by experts in the areas of survey development, natural health products, and/or critical care. Pilot and reliability tests of English and French versions of the survey were conducted by 5 ICU pharmacists (3 English and 2 French). Possible respondents were identified by telephoning inpatient pharmacies of all Canadian hospitals known to have ICUs. Of 356 total pharmacists identified, 9 were excluded due to participation in survey development, 12 could not be reached to obtain their email address, and 10 declined to provide one. Following an electronic announcement by the Canadian Society of Hospital Pharmacists, the final survey was distributed via email to 325 Canadian ICU pharmacists. The French version was sent to pharmacists in Quebec, and the English version to all others. Three waves of follow-up will occur via email at one, two, and three weeks after the first distribution. The survey will close after 5 weeks.

RESULTS: At the time of abstract writing (after the first follow-up email), 137 pharmacists had

responded to the survey (42% response rate). Of these, 70% said probiotics were available in their institution, and another 6% indicated availability only under certain circumstances. 80% of respondents stated that they would "never" recommend probiotics for VAP prevention in critically ill patients, while 61% said they would "never" recommend them for prevention of C. difficile infection. 6% believed that probiotics are "definitely safe" for VAP prevention, while 34% were "unsure". 56% of respondents accurately estimated the cost of a daily dose of probiotics as less than \$5, and 65% indicated that they had used probiotics for at least one patient in the last year (in any formulation, for any purpose). However, 73% identified the "absence of written guidelines or protocol" as a barrier to usage of probiotics in their ICU practice.

CONCLUSION: Preliminary survey results indicate that probiotics are available in most institutions, and that the majority of Canadian ICU pharmacists have used probiotics for patients in the last year. However, most pharmacists do not recommend them routinely for prevention of VAP in critically ill patients.

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