**Enhancing Therapeutic Appropriateness in Community-Acquired Pneumonia Management of Hospitalized Patients: A Quasi - Experimental Study**

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ABSTRACT

As one of the most significant public health concerns, community-acquired pneumonia (CAP) requires precise and effective management. In order to optimize therapeutic approaches, this study explores the potential impact of post-prescription review intervention. Since clinical pharmacists play an increasingly important role in healthcare, specifically in infectious diseases, our study will evaluate the influence of their integration into the multidisciplinary team and antimicrobial stewardship program on therapeutic appropriateness.

The primary objective of this study is to assess the impact of ID clinical pharmacist led post-prescription review intervention on therapeutic appropriateness in the management of CAP. A single-center quasi-experimental design utilizing interrupted time series analysis will be implemented. Participants will be divided into a control group (receiving standard care without ID clinical pharmacist involvement: the pre-phase) and an intervention group (benefiting from ID clinical pharmacist expertise). ID clinical pharmacists will be integrated into the healthcare team, actively participating in post-prescription reviews and contributing to antimicrobial stewardship efforts. Data will be collected prospectively, and outcomes will be compared between the two groups using appropriate statistical

analyses. Within the intervention group, therapeutic appropriateness is expected to improve significantly. We expect higher rates of adherence to treatment guidelines, increased medication appropriateness, a potential reduction in hospital LOS, lower 30-day all-cause or pneumonia readmission rates, and a decrease in in-hospital mortality. These findings would emphasize the positive impact of ID clinical pharmacist-led interventions on CAP management.

There are several implications from the expected promising results of this study. It first underlines the critical role of pharmacy professionals in ensuring therapeutic

appropriateness, especially those who specialize in Infectious Diseases. The findings can be used to inform healthcare policy and recommend the integration of clinical pharmacists in multidisciplinary teams dealing with infectious diseases. Furthermore, this study builds on the development of a new model of collaborative healthcare, emphasizing the need for further research to validate and generalize these results across diverse healthcare settings. Ultimately, the study's implications extend beyond CAP management, influencing broader strategies for optimizing infectious disease treatment protocols.

BIOGRAPHY

Upon entering the professional realm, Sahar dedicated her skills to clinical pharmacy, focusing on optimizing patient care. Her experiences in infectious diseases and antimicrobial stewardship provided a solid foundation in medication management, therapeutic interventions, and collaborative healthcare practices in quality improvement projects.

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Oral Presentation

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