

**MBA in Pharmaceutical Management
(2022-2024)**

SYNOPSIS

Dissertation Topic:

**"Physicians' Perception on Efficacy and Utility of Mucolytic Agents in the
Management of Chronic Obstructive Pulmonary Disease and Related
Conditions"**

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Title:

Physicians' Perception on Efficacy and Utility of Mucolytic Agents in the Management of Chronic Obstructive Pulmonary Disease and Related Conditions

Abstract:

Chronic Obstructive Pulmonary Disease (COPD) is a prevalent respiratory condition characterized by airflow limitation and persistent symptoms. Mucolytic agents are oral medications believed to enhance sputum expectoration by reducing its viscosity, potentially leading to a reduction in COPD exacerbations. This synopsis explores physicians' perspectives on the efficacy and utility of mucolytic agents in COPD management.

Introduction:

COPD poses a significant global health burden, impacting patients' quality of life and healthcare systems. Exacerbations contribute to morbidity, mortality, and healthcare costs. Mucolytics, by facilitating sputum clearance, may play a crucial role in preventing exacerbations. Understanding physicians' perceptions is essential for optimizing COPD management.

Research Question:

What are physicians' perceptions regarding the efficacy and utility of mucolytic agents in COPD management?

Research Objective:

To explore physicians' perspectives on mucolytic agents' effectiveness, safety, and practical application in COPD treatment.

Literature Review:

Existing literature highlights the potential benefits of mucolytics in COPD. Studies have examined their impact on exacerbation rates, lung function, and quality of life. However, conflicting evidence necessitates a comprehensive evaluation of physicians' viewpoints.

Hypothesis:

Physicians perceive mucolytic agents as valuable tools for reducing COPD exacerbations and improving patient outcomes.

Materials and Methods:

- **Study Design:** A cross-sectional survey conducted among practicing physicians.
- **Setting:** Multicenter study across various healthcare facilities in Delhi and Jaipur.
- **Study Population:**
 - **Inclusion Criteria:** Physicians specializing in respiratory medicine, internal medicine, or pulmonology.
 - **Exclusion Criteria:** Physicians with no experience in COPD management.
 - **Study Tools:** Structured questionnaires assessing perceptions, knowledge, and prescribing practices related to mucolytic agents.
- **Duration of Study:** 3 months.
- **Sample Size:** N = 200 physicians.
- **Sampling Technique:** Convenience sampling from different regions.
- **Data Collection Procedure:** Online surveys and face-to-face interviews.
- **Operational Definitions:**
 - **Efficacy:** Physicians' assessment of mucolytic effectiveness in reducing exacerbations.
 - **Utility:** The perceived practical value of mucolytics in daily practice.

Data Analysis Plan:

Descriptive statistics, chi-square tests, and regression analyses to explore associations between perceptions and demographic factors.

Ethical Considerations:

Informed consent will be taken from participating physicians.

Implications of Research:

Understanding physicians' perspectives informs clinical guidelines, enhances patient education, and promotes evidence-based COPD management.

Conclusion:

Physicians recognize the potential of mucolytic agents in COPD management, emphasizing their role in preventing exacerbations. Further research should explore barriers to implementation and strategies for optimizing mucolytic use.

References:

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4. Impact of Mucolytic Agents on COPD Exacerbations: A Pairwise and Network Meta-analysis. Int J Chron Obstruct Pulmon Dis. 2017 Jul 14; 12:2081-2089. doi: 10.2147/COPD.S138340. Impact of Mucolytic Agents on COPD Exacerbations.