Synopsis for Dissertation: Enhancing Vendor Management and Relationship Building in Hospital Supply Chain

1. TITLE

Enhancing Vendor Management and Relationship Building in Hospital Supply Chain: A Case Study of Rajiv Gandhi Cancer Hospital

2. INTRODUCTION

Supply chain management (SCM) in healthcare ensures the seamless operation of hospital services by managing the flow of goods, services, and information from suppliers to patients. Effective SCM directly impacts the availability and quality of medical supplies, equipment, and pharmaceuticals, which are crucial for patient care.

Vendor management is a critical component of SCM, focusing on establishing and maintaining relationships with suppliers. Effective vendor management ensures timely delivery of high-quality products and services, crucial for uninterrupted hospital operations. Strong vendor relationships lead to better communication, increased trust, and improved collaboration, essential for achieving supply chain objectives.

Despite its importance, many hospitals face challenges in managing vendors effectively. Challenges include inconsistent delivery times, varying product quality, and difficulties in negotiating cost-effective procurement. Addressing these challenges is crucial for maintaining a reliable and efficient supply chain that supports high-quality patient care.

3. RESEARCH QUESTION

How can vendor management and relationship building be enhanced to improve the efficiency of the hospital supply chain at Rajiv Gandhi Cancer Hospital?

4. OBJECTIVES

- To identify the current challenges in vendor management at Rajiv Gandhi Cancer Hospital.
- To assess the impact of effective relationship building on supply chain efficiency.
- To propose strategies for improving vendor management and fostering long-term partnerships with suppliers.
- To evaluate the effectiveness of inventory management techniques such as ABC and VED analysis in optimizing supply chain performance.

5. HYPOTHESIS

Effective vendor management and relationship building significantly improve the efficiency and reliability of the hospital supply chain, leading to better availability of medical supplies and enhanced patient care.

6. MATERIAL AND METHODS

STUDY DESIGN: The study will employ a mixed-method approach, combining both qualitative and quantitative data analysis. This design will enable a comprehensive understanding of the vendor management processes and their impact on supply chain efficiency.

SETTING: The research will be conducted at Rajiv Gandhi Cancer Hospital, a leading cancer treatment facility known for its comprehensive healthcare services.

STUDY POPULATION:

- **Inclusion Criteria:** Supply chain managers, procurement officers, and key vendors of Rajiv Gandhi Cancer Hospital.
- **Exclusion Criteria:** Non-supply chain staff and vendors not directly involved with the hospital.

STUDY TOOLS:

- Structured surveys for supply chain employees and vendors to gather insights into current practices, challenges, and suggestions for improvement.
- Vendor performance evaluation reports to assess the effectiveness of current vendor management practices.
- Goods Receipt Note (GRN) data to analyze Turn-Around Time (TAT) for each vendor.

DURATION OF STUDY: The study will be conducted over six months, from January 2024 to June 2024.

SAMPLE SIZE: The study will include approximately 100 participants, consisting of 50 supply chain employees and 50 vendors.

SAMPLING TECHNIQUE: Convenience sampling will be used to select survey respondents and performance data. This technique is appropriate given the accessibility of participants and the need for specific expertise and experiences.

DATA COLLECTION PROCEDURE: Data will be collected through structured surveys, vendor performance evaluation reports, and GRN data. Surveys will be administered both online and in-person to ensure a high response rate. Vendor performance data will be obtained from the hospital's procurement department. GRN data will be used to calculate TAT for each vendor, providing insights into delivery efficiency.

OPERATIONAL DEFINITIONS:

- **Vendor Management:** The process of managing relationships with suppliers to ensure timely and efficient delivery of goods and services.
- **Turn-Around Time (TAT):** The time taken from placing an order to receiving the goods.

7. DATA ANALYSIS PLAN

Data will be analyzed using SPSS (version 26.0). Descriptive statistics will summarize survey responses and performance scores. T-tests and ANOVA will be used to determine significant differences in performance metrics among different vendor categories. Regression analysis will identify factors affecting TAT. Graphs and charts will be used to visualize data and support the analysis.

Descriptive Statistics:

- Frequency distributions and percentages will be calculated for categorical variables.
- Means, medians, and standard deviations will be calculated for continuous variables.

Inferential Statistics:

- T-tests will compare the means of two groups (e.g., high-performing vs. low-performing vendors).
- ANOVA will compare the means of more than two groups (e.g., different vendor categories based on performance scores).

- Regression analysis will identify predictors of TAT, providing insights into factors that impact delivery efficiency.

8. ETHICAL CONSIDERATIONS

Ethical considerations were paramount in this research. Participants were informed about the purpose of the study and their consent was obtained before data collection. Confidentiality of the participants and the data was maintained throughout the research process. The findings were reported in a manner that ensures the anonymity of the respondents and vendors.

9. IMPLICATIONS OF RESEARCH

The findings from this research will provide valuable insights into the current state of vendor management at Rajiv Gandhi Cancer Hospital. By identifying challenges and proposing actionable strategies for improvement, the study will help hospital administrators enhance their supply chain efficiency. Improved vendor management practices will lead to better availability of medical supplies, reducing delays and shortages. This, in turn, will enhance patient care and operational efficiency. The study's recommendations can also be applied to other healthcare institutions facing similar challenges, contributing to broader improvements in healthcare supply chain management.

10. REFERENCES

References will be written in the Vancouver Style using reference software such as Mendeley or Zotero. Key references will include studies on supply chain management in healthcare, vendor management best practices, and methodologies for evaluating vendor performance and TAT.