

**SYNOPSIS FOR THE SUBMISSION OF DISSERTATION TO
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**Assessment of Attitude and Knowledge of Telemedicine Use in IPD
Cancer patients**

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1. TITLE OF THE STUDY: Assessment of Attitude and Knowledge of Telemedicine Use in IPD Cancer Patients

2. INTRODUCTION:

Regular hospital visits are frequently required for treatment and monitoring in cancer therapy. Reducing these visits using telemedicine could improve patient convenience and possibly lower healthcare expenditures. The purpose of this study is to evaluate the attitudes and understanding of cancer patients receiving inpatient care at Rajiv Gandhi Cancer Institute and Research Center, Rohini, Delhi with reference to the usage of telemedicine.

3. RESEARCH QUESTIONS:

- To what extent, the IPD patients aware of telemedicine?
- What are the attitudes of IPD cancer patients towards using telemedicine for consultations with their health care providers?

4. OBJECTIVES:

- To evaluate the IPD patients' awareness and knowledge of telemedicine services offered within the hospital.
- To explore the key barriers and facilitators to telemedicine adoption in inpatients.
- To identify areas for improvement and enhance service quality.
- To identify factors influencing patient comfort and willingness to utilize telemedicine services.

5. HYPOTHESIS:

- **Hypothesis 1 (Knowledge):** In-patients with cancer will have a limited understanding of telemedicine applications in their care.

Rationale: While telemedicine use is growing, some cancer patients, particularly older adults, may not be familiar with the technology or its potential benefits in their treatment.

- **Hypothesis 2 (Attitude):** In-patients with cancer will express positive attitudes towards using telemedicine for consultations and follow-up appointments but may have reservations regarding medication management via telemedicine.

Rationale: Patients may appreciate the convenience of telemedicine for consultations and follow-ups, but medication management might raise concerns about accuracy or missing crucial physical examinations

6. MATERIALS AND METHODOLOGY:

Study Design: A cross-sectional survey design will be employed. A self-administered questionnaire or researcher-administered interview format will be used to collect data from a inpatients diagnosed with cancer. The questionnaire will encompass:

- Demographics
- Current knowledge of telemedicine
- Attitudes towards using telemedicine for various aspects of cancer care
- Factors influencing willingness to use telemedicine (e.g., technical skills, privacy concerns)

Setting: Rajiv Gandhi Cancer Institute and Research Centre, Rohini, Delhi

Study Population:

a. Inclusion Criteria:

- **Diagnosed with cancer:**
- **Admission status:** IPD cancer patients
- **Age:** 18 years or older
- **Cognitive ability:** Potentially able IPD patients
- **Consent:** Informed written consent

b. Exclusion Criteria

- **Terminal illness:** Patients in the terminal stages of cancer might not benefit from telemedicine interventions focused on future consultations or medication management.
- **Acute medical condition:** Exclude patients with critical or unstable medical conditions requiring constant in-person monitoring.
- **Language barriers:** Consider language proficiency if the study materials or telemedicine consultations aren't available in multiple languages.
- **Prior negative experience with telemedicine:** This might introduce bias towards negative attitudes.

Duration of the study: March 18,2024 –June 17,2024

Sample size: 50 IPD cancer patients

Sampling Technique: Convenience Sampling

Data collection Procedure:

- Upon data collection from questionnaires or interviews, meticulously review all responses for completeness and accuracy.
- Code all categorical data (e.g., gender, age group, cancer type) with numerical values for easier statistical analysis.
- Descriptive Analysis:
 - ✓ To analyze demographic data using frequencies, percentages, means, and standard deviations which provide a basic profile of your sample population (age, gender, cancer type, etc.).
 - ✓ To analyze knowledge-based questions by calculating the percentage of correct and incorrect answers for each question which reveal areas where patients possess adequate knowledge and areas requiring educational interventions.
 - ✓ For attitude-based questions (likely using Likert scales), calculate:
 - Mean scores for each statement to gauge overall sentiment towards different aspects of telemedicine use (e.g., consultations, medication management).
 - Standard deviations to assess the level of agreement/disagreement within the sample population.
- Conduct correlational analysis (e.g., Pearson correlation) to investigate potential relationships between variables.
- ✓ Correlate knowledge scores with demographic data (age, education level) to explore potential knowledge gaps based on these factors.
- ✓ Correlate attitude scores with demographic data or self-reported internet usage frequency to investigate potential influences on patient attitudes.
- Analyze how demographic data (e.g., age, internet usage) might influence knowledge and attitudes towards telemedicine. This can provide insights into potential variations within your sample.
- Discuss the need for future research employing more robust sampling methods.
- Visualizations: Consider creating visualizations (bar charts, histograms) to represent the distribution of demographic data, knowledge scores, and attitude scores. These visuals can effectively present your findings alongside the statistical tables.

DATA ANALYSIS:

Descriptive statistics will be used to summarize patient demographics, knowledge levels, and attitudes. Correlational analysis will explore relationships between knowledge, attitudes, and influencing factors.

EXPECTED OUTCOME:

This study will provide valuable insights into inpatients with cancer's understanding and receptiveness towards telemedicine in their care. The findings will contribute to:

- Identifying educational needs regarding telemedicine for cancer patients.

- Developing training programs to enhance patient comfort and adoption of telemedicine services.
- Informing the design and implementation of telemedicine programs specifically tailored for cancer care.

ETHICAL CONSIDERATIONS:

- Informed consent obtained from all the study participants.

IMPLICATIONS OF RESEARCH:

- To educate inpatients about telemedicine use
- Improved patient care
- Optimizing Health Care Delivery
- Future Research Directions

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