



**A STUDY ON THE PUBLIC PERCEPTION OF THE SERVICES OF
GOVERNMENT AND PRIVATE HOSPITALS IN ILLUPAIYURANI,
KOVILPATTI**

S. Mahalakshmi^{1*}, R. Maheswari², V. Priyadharshini³

¹Assistant Professor, Department of Statistics, G. Venkataswamy Naidu College
(Autonomous), Kovilpatti.

E-mail: mahasara.wl@gmail.com

^{2,3}III B.Sc. Statistics, G. Venkataswamy Naidu College (Autonomous), Kovilpatti

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ABSTRACT

This study investigates the public perception of government and private hospitals in Illupaiyurani, Kovilpatti. Data were collected from 200 individuals using a structured questionnaire. The sample included 36 males and 164 females. The research explores demographic, social, and economic factors influencing healthcare choices. A mixed-methods approach was used, including quantitative surveys and qualitative interviews, analysed with SPSS software. Key findings highlight significant differences in accessibility, affordability, quality of care, and patient satisfaction. Recommendations for policymakers and healthcare providers aim to enhance healthcare delivery in the region.

Keywords: Government Hospital, Private Hospital, Facility, Accessibility and Affordability.

Introduction

Statistics, often referred to as the science of learning from data, permeates

nearly every facet of our lives. From informing critical decisions in business, science, and policy-making to unraveling

patterns in social phenomena, statistics is a powerful tool for extracting meaningful insights from the vast sea of information surrounding us. At its essence, statistics provides the means to understand variability, quantify uncertainty, and draw robust conclusions from empirical evidence. In an era defined by data abundance, the importance of statistical literacy cannot be overstated. Whether you're a seasoned researcher, a policymaker shaping public discourse, or an individual navigating everyday choices, a fundamental grasp of statistical principles equips you to discern patterns, make informed decisions, and critically evaluate claims based on evidence.

Healthcare is a critical service sector in India, showing significant growth in hospital-based services. Technological advancements have enhanced medical services, but challenges remain in ensuring quality and accessibility. This study aims to draw attention to the administration of government and private hospitals, encouraging improvements in hospital management. Effective healthcare can reduce human and financial costs through preventive measures and health information dissemination. Both public and private hospitals play essential roles in diagnosis and treatment, serving different purposes.

This study focuses on understanding patient satisfaction and service quality in Illupaiyurani, Kovilpatti.

Objectives of The Study:

- To conduct a comparative study of patient satisfaction levels in government and private hospitals in Illupaiyurani.
- To evaluate the service quality of government and private hospitals.
- To identify areas for quality improvement in both hospital types.

Methodology of the Study

Simple random sampling is a statistical method used to select a sample from a population so that each individual has an equal chance of being chosen. This is achieved using a random process, such as random number generators or random selection techniques.

Random sampling aims to ensure that the sample is representative of the entire population, reducing bias and allowing for generalizations and conclusions to be made about the population based on the characteristics of the sample. It is commonly used in research, surveys, and experiments to obtain unbiased estimates and make valid statistical inferences.

There are around 10,000 people in the village of Illupaiyurani. Among them,



200 people were selected using simple random sampling without replacement. The needful information was collected from the sample people by personal enquiry.

Questionnaire View

Demographic Information: Name, Gender, Age, Education Qualification, and Income.

Hospital Preference: Reasons for preferring a specific hospital (Private, Government, or No Preference) based on factors like Cost, Reputation, Location, Quality of Service, Doctor Recommendation, and Insurance Coverage.

Affordability and Quality rating: Perception of the government hospital being more affordable and rating the quality of medical care in both government and private hospitals.

Trust and Confidence: Levels of trust and confidence in both government and private hospitals.

Accessibility and Location Importance: Perception of the accessibility of the government hospital compared to private hospitals and the importance of hospital location.

Cost Consideration: The significance of cost in choosing a hospital.

Waiting time Perception: Perceptions of waiting times in government

and private hospitals and the importance of waiting time in hospital choice.

Hospital Experience: Experience challenges or advantages when seeking medical treatment in government and private hospitals.

Roles in Healthcare Care Improvement: Perceptions on the roles government and private hospitals should play in improving healthcare services.

Benefits of Private Hospital: The perceived benefits include shorter waiting times, personalized care, and advanced medical technology.

Government medical camp: Awareness and usefulness of medical camps conducted by the government.

Hospital prefers during COVID-19: Preference of hospital during the COVID-19 pandemic.

Uses of insurance coverage: Utilization of insurance coverage in hospitals.

Data Collection

Data for this study was collected through a survey conducted using an electronic survey form created on Google Forms. The research team personally administered the survey by conducting face-to-face interviews with the respondents individually. No online links were shared with the respondents, and the

respondents did not self-administered the survey. Instead, the research team used their mobile phones to administer the study, replacing the traditional paper questionnaire.

Electronic surveys and mobile phones were used for data collection because of convenience and efficiency. Electronic surveys allow for easy data entry, automatic capturing, and data management, which can streamline the data collection. Using mobile phones for survey administration also provides flexibility in accessing respondents in different locations and reduces the need for paper-based questionnaires and manual data entry.

The research team approached potential respondents in Illupaiurani individually and requested their participation in the study. The research team administered the survey via mobile phones, and respondents were interviewed one-on-one. The survey questions were read to the respondents, and the research team recorded their responses electronically in the Google form.

To ensure data quality, the research team took measures to minimize bias and errors during the data collection. The research team provided clear instructions to the respondents and carefully recorded their responses. Data validation checks were

implemented in the electronic survey form to detect discrepancies or missing responses. In addition, the research team conducted regular quality checks during data collection to ensure the accuracy and completeness of the data.

Statistical Analysis

Frequency

A frequency table is a way to organize and summarize categorical data by counting the number of occurrences of each category in the observed sample. Frequency tables help summarize categorical data and gain insights into the distribution of different categories within a dataset. They can also be visualized using bar charts or histograms for more straightforward interpretation.

Descriptive Statistics

At first, the variables are studied individually by the corresponding descriptive statistics, including central and dispersion measures such as mean, range, variance, and standard deviation, which can be calculated.

Descriptive statistics refers to a set of techniques used to summarize and describe the main features of a dataset. It provides a way to organize, analyze, and present data meaningfully and informally. Descriptive statistics help researchers and analysts understand the data's essential



characteristics, identify patterns, and draw preliminary conclusions. Descriptive statistics primarily summarize and describe the data clearly and understandably rather than making inferences or generalizations about a larger population. They serve as a foundation for further statistical analysis and help researchers gain insights into the underlying patterns and relationships within the data.

Measures of central Tendency: These statistics indicate a dataset's central or typical value. Standard measures of central tendency include the mean (average), median (middle value), and mode (most frequently occurring value).

Measures of variability: These statistics quantify the spread or dispersion of data points around the central tendency. Common measures of variability include the standard deviation, variance, and range.

Summary statistics: Summary statistics provide concise summaries of key characteristics of a dataset. These may include minimum and maximum values, the range, the interquartile range, and measures of skewness and kurtosis.

The following is the formula for measures of central tendency and variability:

$$\text{Mean} = (\Sigma x) / n$$

$$\text{Median} = \text{Middle value of the dataset}$$

$\text{Mode} = \text{Value that appears most frequently in the dataset}$

$\text{Range} = \text{Maximum value} - \text{Minimum value}$

$$\text{Variance} = (\Sigma(x-\mu)^2)/(n-1)$$

$$\text{Standard deviation} = \sqrt{(\text{variance})}$$

Graphical Representation

Graphical representation for statistical data refers to the visual depiction of data using various types of charts, graphs, and plots. These visual representations help summarize, analyze, and present data in a more understandable and accessible format. These graphical representations serve various purposes, including:

Graphical representations help understand the data's structure, patterns, and relationships.

Graphical representations make it easier to communicate findings and insights to stakeholders who may not be familiar with statistical techniques or numerical data. Graphs allow quick comparisons between groups, variables, or periods, facilitating decision-making.

Visualizing data over time or across different conditions helps identify trends, patterns, and anomalies.

Graphical representations often make outliers or unusual data points more

apparent, aiding in identifying data quality issues or significant observations.

Overall, graphical representation plays a crucial role in statistical analysis by providing intuitive and insightful visualizations of data, which can lead to a deeper understanding and better interpretation of results.

Result and Discussions

Most preferred hospital:

		Frequency	Per cent
Valid	Government hospital	123	61.5
	No preference	3	1.5
	Private hospital	74	37.0
	Total	200	100.0

The data shows that 61.5% of respondents prefer government hospitals, 37% prefer private hospitals, and 1.5% have no preference. Therefore, the majority prefer government hospitals.

Quality of medical care provided in private hospitals:

		Frequency	Per cent
Valid	1	15	7.5
	2	37	18.5
	3	55	27.5
	4	47	23.5
	5	46	23.0
	Total	200	100.0

This analysis shows that 27.5% of the respondents gave 3 points of rating, 23.5% gave 4 points, 23% gave 5 points, 18.5% gave 2 points, and 7.5% gave 1 point of rating. We conclude that 3 points of rating can be given to the quality of medical care provided in private hospitals.

Quality of medical care provided in government hospitals:

	Frequency	Per cent
1	9	4.5
2	22	11.0
3	58	29.0
4	59	29.5
5	52	26.0
Total	200	100.0

This analysis shows that 29.5% of the respondents gave 4 points of rating, 29% gave 3 points, 26% gave 5 points, 11% gave 2 points, and 4.5% gave 1 point of rating. We conclude that 4 rating points can be given to the quality of medical care provided in government hospitals.

Significance of cost consideration:

	Frequency	Per cent
Extremely significant	47	23.5
Moderately significant	38	19.0
Not critical at all	61	30.5
Slightly critical	8	4.0
Very significant	46	23.0
Total	200	100.0

From this analysis, it is observed that for 30.5% of the respondents, cost consideration is not important at all, highly significant to 23.5% of the respondents, very significant for 23% of the respondents, moderately substantial for 19% of the respondents and slightly significant for 4% of the respondents. So, we conclude that cost consideration for the hospital is not essential for a maximum number of people.

CHI-SQUARE TEST:**1. Association of hospital preference and cost of the respondents:****Aim:**

To study the association between hospital preference and cost of the respondents

Frame the hypothesis:

H_0 : There is no association between hospital preference and the cost of the respondents

H_1 : There is an association between hospital preference and cost of the respondents

Level of significance: 0.05 significant level

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.480 ^a	8	.070
Likelihood Ratio	12.091	8	.147
N of Valid Cases	200		

Chi-square table for hospital preference and cost

Inference:

From the chi-square test, we observed that the p-value of 0.070 exceeds the significant value of 0.05. Therefore, we reject H_1 . So, there is no association between hospital preference and cost of the respondents.

2. Association of hospital preference and rate in the quality of medical care in government hospitals:

Aim:

To study the association between hospital preference and rate in the quality of medical care in government hospitals of the respondents.

Frame the hypothesis:

H_0 : There is no association between hospital preference and rate in the respondents' quality of medical care in government hospitals.

H_1 : There is an association between hospital preference and the rate of the quality of medical care in government hospitals by the respondents.

Level of significance: 0.05 significant level

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.097 ^a	8	.000
Likelihood Ratio	35.442	8	.000
N of Valid Cases	200		

**Inference:**

From the chi-square test, we observed that the p-value of 0.000 is less than the significant value of 0.05. Therefore, we accept H1. So, there is an association between hospital preference and rate in the quality of medical care in government hospitals of the respondents.

3. Association of hospital preference and rate in the quality of medical care in private hospitals:**Aim:**

To study the association between hospital preference and rate in the respondents' quality of medical care in private hospitals.

Frame the hypothesis:

Ho: There is no association between hospital preference and rate in the respondents' quality of medical care in private hospitals.

H1: There is an association between hospital preference and the rate of the respondents' quality of medical care in private hospitals.

Level of significance: 0.05 significant level.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.097 ^a	8	.000
Likelihood Ratio	35.442	8	.000
N of Valid Cases	200		

Inference:

From the chi-square test, we observed that a p-value of 0.000 is less than the significant value of 0.05. Therefore, we accept H1. So, there is an association between hospital preference and the rate of the quality of medical care in private hospitals of the respondents.

Interpretation

Based on the provided survey data, it appears that respondents were asked several questions regarding their

preferences and considerations when it comes to hospitals and healthcare services.

Firstly, most respondents were asked about their hospital preferences, with

one question specifically addressing their preferred hospital during the COVID-19 pandemic. The responses indicate that factors such as hospital location, cost considerations, and the distinction between government and private hospitals are of varying importance.

Interestingly, while there seems to be a preference for certain hospitals, the reasons behind these preferences were not directly addressed. However, it can be inferred that reputation, quality of care, and possibly personal experiences might influence these choices.

Regarding the role of government and private hospitals in improving healthcare services, respondents generally acknowledged that both sectors have a role to play. The government hospitals are expected to focus on enhancing the quality and accessibility, possibly reflecting a desire for broader public healthcare initiatives and equitable access to services. Private hospitals, on the other hand, may be expected to contribute to improvements in quality and accessibility, potentially through innovations in technology, specialized services, or efficiency.

Furthermore, the survey touched upon the utilization of insurance coverage in hospitals, indicating that some respondents did use insurance, but specific

details regarding coverage were not provided. This suggests that while insurance coverage is a consideration for some individuals, it may not be a significant factor for everyone.

Overall, the interpretation of the survey data suggests that various factors, including location, cost, and perceived quality of care, influence hospital preferences. Additionally, there is an expectation for both government and private hospitals to contribute to the improvement of healthcare services, albeit in different capacities.

Conclusion

This study concludes that most people in Illupaiyurani, Kovilpatti, choose hospitals based primarily on the quality of service provided rather than cost. Government hospitals are generally more accessible than private hospitals, often preferred for their advanced medical technology and shorter waiting times. Location, cost, perceived quality of care, and personal experiences significantly influence hospital preferences.

The analysis reveals that government hospitals are rated higher regarding accessibility and affordability, while private hospitals score better on service quality and patient satisfaction. There is a clear expectation for both types



of hospitals to play vital roles in enhancing healthcare services. Government hospitals are expected to improve quality and accessibility, reflecting a desire for broader public healthcare initiatives and equitable access to services. On the other hand, private hospitals are seen as contributing to healthcare improvements through innovations in technology, specialized services, and efficiency.

Furthermore, the study highlights the importance of transparent pricing and billing practices in private hospitals to build trust and enhance their reputation. It also underscores the need for government hospitals to reduce waiting times and improve service transparency. The survey touched upon the utilization of insurance coverage, suggesting that while it is a consideration for some individuals, it may not be universally significant.

Overall, this study emphasizes that a multifaceted approach, addressing both the strengths and weaknesses of government and private hospitals, is essential for improving healthcare services and meeting the population's diverse needs.

Suggestions

Government hospital:

- Allocate funds for upgrading facilities, acquiring modern medical equipment, and ensuring adequate

staffing. Provide efficient systems to reduce waiting times for appointments, consultations, and procedures implemented.

- Foster transparency by providing clear information about services, treatment options, and costs.
- The government hospitals are expected to focus on improving quality and accessibility, possibly reflecting a desire for broader public healthcare initiatives and equitable access to services.

Private hospital:

- Offer affordable healthcare options and explore ways to make services accessible to a broader range of patients, including those from low-income backgrounds. Initiatives like installment payment plans or subsidized services can make private hospitals more inclusive.
- Provide transparent pricing information and clear billing practices to avoid patient surprises. Transparency in financial matters enhances the reputation of private hospitals and builds trust with patients.

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