

# **An Economic Inquiry into Healthcare Setup and Patients Mobility from Lalbag Subdivision, Murshidabad, West Bengal, India.**

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## **ABSTRACT**

**Introduction:** *Studies of patient mobility have traditionally focused on international and intercontinental medical tourism as a primary factor in transnational patient movement.*

**Aim of the study:** *The Main Aim of The Study Is To An Economic Inquiry Into Healthcare Setup And Patient Mobility*

**Material and method:** *Research always begin with a research topic or a problem and it always begins with a problem; it always begins with a problem and it always begins with a problem.*

**Conclusion:** *Findings from the current research highlight the importance of patient input in evaluating healthcare providers' competence and efficiency.*

## **1. INTRODUCTION**

### **1.1 Overview**

In order to construct a health care system that is efficient, high-quality, and affordable for its patients, there has to be a harmony between the supply and demand for the amount, quality, and variety of specialised medical treatment. The capacity of a patient to get medical care at a location that is physically distinct from where they are now located is referred to as "patient mobility." Mobility makes it possible for patients to have access to a greater number of providers, which in turn increases the competitiveness of the market and the efficiency of the health care system as a whole. People who are in desperate need of prompt medical attention but are still able to keep their expenditures low will often go to tremendous lengths, including crossing international boundaries, to get it. Patient mobility is a method that has been accepted by the worldwide community as a technique to promote access and fairness in the delivery of healthcare. For instance, the European Union has put in place regulations that make it easier for patients to freely migrate between the various member nations of the EU. Studies of patient mobility have traditionally focused on international and intercontinental medical tourism as a primary factor in transnational patient movement.

### **1.2 Health System And Health Policies In India**

India has a hybrid system for providing medical care, which is more often referred to as a combination of public and private health services specialised groups. In metropolitan India, you may find the great majority of private medical care suppliers, who provide secondary and tertiary consideration medical care administrations. Core medical services are the primary focus of India's medical services policy, which are largely responsible for the country's expanding patient healthcare infrastructure. In addition, because to the all-encompassing character of it, it is intended to give attention to preventative measures, accelerate healing, and rehabilitation. The many health policies and initiatives that India has in place aim to bring about an advantageous prosperity for all of its citizens. Therefore, in light of these premises, an optimal increase with appropriate guidelines in the advancement of patient treatment provided by pupil medical services, general wellbeing, sterilisation, clean drinking water, access to food, and information regarding practises related to cleanliness and maintenance is required.

## **2. LITERATURE REVIEW**

**Wirtz, Jochen & Lin, Chen & Das, Gopal (2022)** The purpose of this research was to compare and contrast the approaches to achieving cost-effective service excellence (CESE) in healthcare delivery that have emerged in China, India, and Singapore. The ensuing possibilities for further study are underlined. The writers' extensive work and travel in these three nations serves as the basis for this research. China seems to be farther forward in the adoption and widespread usage of digital platforms and associated technology than the developed nations of the West. As a consequence of this digital ecosystem, advancements in digital healthcare have been made that improve access, safety, and efficacy for all users.

**Kamble, Prakash & Ovhall, Vishal (2022)** A comprehensive analysis of healthcare delivery in rural Maharashtra is presented in this research report. Health care provided by the

government in rural Maharashtra: what do the studies say? The research revealed that the supply of public hospitals and beds in Maharashtra is much lower than the state's need. However, primary health centres were established in all towns thanks to the National Rural Health Mission. As a result, residents in rural areas now have timely and affordable access to medical care. More hospitals and beds are required in both rural and urban regions of the modern and populous state of Maharashtra.

**Jadhav, Nitin (2022)** This research examines the perspectives of women in India's booming private healthcare industry, where 66 percent of the population seeks medical attention. For reproductive health-related disorders, private healthcare costs are 5.4 times higher than public healthcare costs; around 75% of women giving birth in private institutions in Gujarat had catastrophic health expenditures. While health insurance is meant to help with these costs, studies of public health insurance have not been adequate to the task of addressing women's health concerns.

**Almansoori, Afrah & Alshamsi, Mohammed & Salloum (2021)** Because people's health is so crucial to their survival, it's crucial to monitor it, identify problems, and take appropriate action, including via prevention measures. Knowledge management (KM) in the healthcare area is crucial to the development of various procedures that guarantee the availability of excellent healthcare systems. In this research, we provide a comprehensive review of the literature on KM processes in the context of healthcare.

**Sadanandhan, Dannya & Viswanathan, Balachandran (2021)** Travelers who go abroad in search of economical, high-quality medical care are sometimes referred to as "medical tourists." In today's globalised and more competitive industrialised economy, medical tourism has emerged as a major source of revenue for many countries. The healthcare system in India has seen dramatic changes recently.

### 3. RESEARCH METHODOLOGY

Research is the formal, rigorous, and exhaustive process of carrying out a scientific analysis; it always starts with a research topic or a problem and entails a planned and extensive inquiry, often culminating in a written record of procedure. Research always begins with a research topic or a problem and it always begins with a problem; it always begins with a problem and it always begins with a problem. Secondary sources, such as a study of the relevant literature, are what a researcher will turn to in order to augment the information obtained from primary sources. As a matter of fact, research methodology lays out the comprehensive explanation of the research variables and procedures; hence, it is reasonable to state that it plays a crucial function in every investigation.

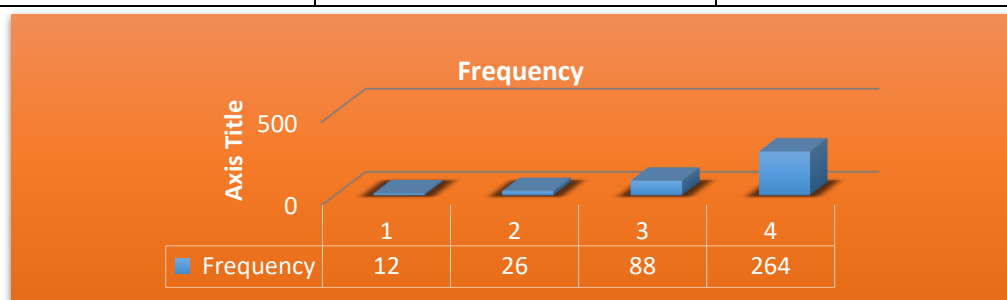
### 4. RESULTS

#### 4.1 DEMOGRAPHIC PROFILE OF THE STUDY

Sampling is 444 sampling method purposive random sampling. 444 of the total respondent's representation of Muslim community was dominant (53 %), it is followed by Hindus (43%).

**Table 1 Religion**

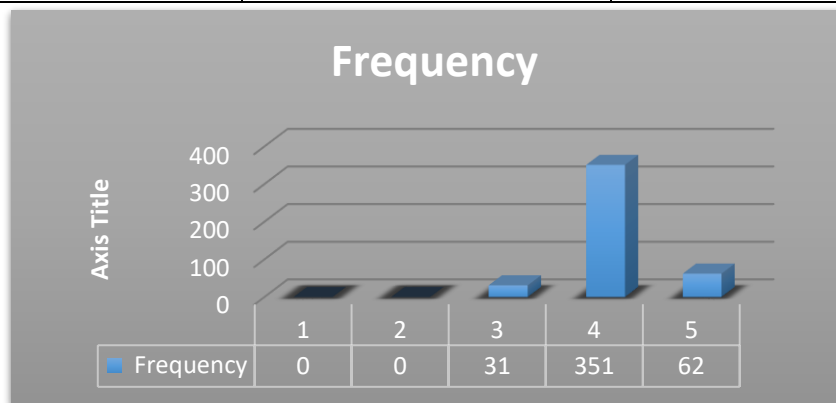
| Religion  | Frequency | Percentage |
|-----------|-----------|------------|
| Hindu     | 191       | 43.02      |
| Muslim    | 237       | 53.38      |
| Jain      | 14        | 3.15       |
| Christian | 2         | .45        |
| Total     | 444       | 100        |



**Figure 1 Religion**

**Table 2 Age**

| Age     | Frequency | Percentage |
|---------|-----------|------------|
| 0 – 14  | 95        | 21.40      |
| 15 – 29 | 121       | 27.25      |
| 30 – 44 | 72        | 16.22      |
| 45 – 59 | 98        | 22.07      |
| Above60 | 58        | 13.06      |
| Total   | 444       | 100        |

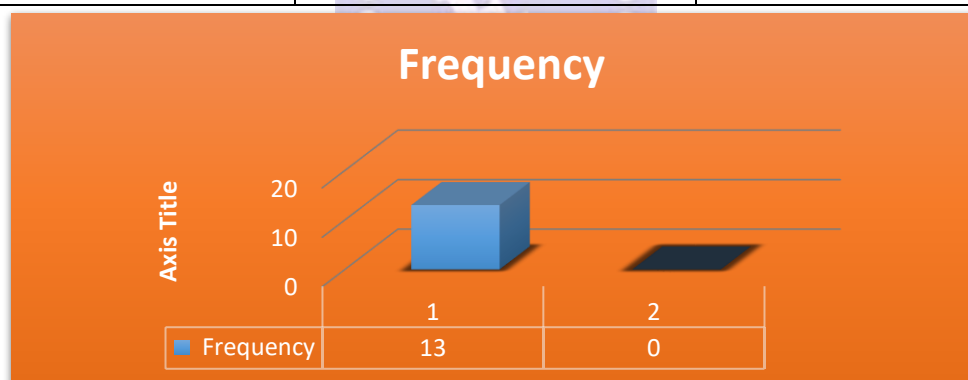


**Figure 2 age**

Patients were of the age group.21.4 % belong to the age 0 – 14, 27.2 % from 15 – 29, 16.2 % from 30 – 44, 22.1 % from 45 – 59 and another 13.1 % belong to the senior citizen group. therefore, patients from are age group although are different proportion.

**Table 3 Sex**

| Sex    | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 136       | 30.63      |
| Female | 308       | 69.37      |
| Total  | 444       | 100        |



**Figure 3 Sex**

Most of the patients are females about 69 % and only the remaining 31 % are male.

#### 4.2 REGRESSION ANALYSIS

A dependent variable, often known as the 'outcome variable,' is the focus of regression analysis, which is a collection of statistical procedures used to estimate the associations between two variables. Particularly, one or more independent variables, which are sometimes referred to as "predictors," "covariates," or "features." The linear regression analysis is the most popular kind of regression analysis. In this type of study, the researcher seeks to discover the line (or a more sophisticated linear combination) that best fits the data. A dependable way of determining which factors have an influence on a subject of interest may be found via the use of regression analysis. You are able to accurately establish which variables matter the most, which ones can be disregarded, and how these elements impact each other by going through the process of doing a regression analysis. A researcher has to specify a dependent variable that they believe

is being impacted by one or more independent factors in order to carry out a regression analysis. This may be a single variable or many variables.

#### 4.2.1 Predictors of Patient's Satisfaction of Ss1w Or Multiple Regression Models (Dependent Variables: Patient Satisfaction)

**Table 4 Regression analysis for overall patients' satisfaction of SS1W Regressionb**

| Model | R                  | RSquare      | Adjusted RSquare | Std. Error oftheEstimate |
|-------|--------------------|--------------|------------------|--------------------------|
| 1     | 0.865 <sup>a</sup> | 0.748        | 0.741            | 0.41461                  |
|       |                    |              |                  |                          |
| Model | Change statistics  |              | Durbin-Watson    |                          |
|       | df2                | Sig. FChange |                  |                          |
| 1     | 442 <sup>a</sup>   | 0.000        | 1.714            |                          |

**Table 5 Predictors of patients' satisfaction of SS1W Coefficientsa**

| Model      | StandardizedCoefficients | T      | Sig.               | 95.0% ConfidenceIntervalforB |            | CollinearityStatistics |       |
|------------|--------------------------|--------|--------------------|------------------------------|------------|------------------------|-------|
|            | Beta(B)                  |        |                    | LowerBound                   | UpperBound | Tolerance              | VIF   |
| (Constant) | 0.227                    | 0.846  | 0.399              | -0.301                       | 0.754      |                        |       |
| 1          |                          |        |                    |                              |            |                        |       |
| Emer_IV1   | -0.024                   | -0.406 | 0.685              | -0.168                       | 0.110      | 0.346                  | 2.887 |
| ADT_IV2    | 0.055                    | 0.831  | 0.407              | -0.104                       | 0.255      | 0.273                  | 3.658 |
| Phy_IV3    | 0.004                    | 0.083  | 0.934              | -0.123                       | 0.134      | 0.432                  | 2.313 |
| Food_IV4   | 0.315                    | 4.782  | 0.000 <sup>b</sup> | 0.195                        | 0.468      | 0.277                  | 3.604 |
| Diag_IV5   | 0.036                    | 0.483  | 0.630              | -0.120                       | 0.198      | 0.213                  | 4.700 |
| Care_IV6   | 0.545                    | 8.201  | 0.000 <sup>b</sup> | 0.412                        | 0.673      | 0.273                  | 3.663 |

Table 4 presents the findings of a study that included multiple regressions, which helped to discover the factors that successfully predict the level of patient satisfaction with SSIW. As we can see from the table, the value of the multiple correlation coefficients between the predictors and the outcome is given by the variance that is explained by the predictors. These predictors include IV1, IV2, IV3, IV4, IV5, and IV6 as well as the predictive variables R. This information can be found by looking at the table. The fact that the value of R is 0.865 suggests that the predictors' variable does have a considerable influence on the result of the patient's overall level of satisfaction with the treatment they received. Because the alternative hypothesis has a P-value that is less than 0.05, it has been determined to be plausible and is thus accepted. The coefficient of determination, or R<sup>2</sup>, is a statistical metric that indicates how much of the variability in the result can be attributed to the predictors. Under the heading of total patient satisfaction, the variables referred to as IV1, IV2, IV3, IV4, IV5, and IV6 each indicate an independent variation. Therefore, the predictors are excellent markers of the overall satisfaction in SSIW, and the model is a satisfactory match for the data sample that was used in the study. The modified R<sup>2</sup> provides insight into the extent to which the model generalises, and its value is quite close to that of R<sup>2</sup>. The value of SSIW's modified R<sup>2</sup> is calculated to be 0.741. The value is 1.714 according to Durbin Watson's figures for SSIW It shows that the mistakes in the regression are not related to one another, and in addition, this assumption statistic is quite near to 2. (and between and 3). Therefore, there will be no autocorrelation for any of the patients.

#### 4.2.2 Predictors of Patients, Satisfaction Of Ss2e Or Multiple Regression Models (Dependent Variables: Patient Satisfaction)

**Table 6 Predictors of patient satisfactions of SS2E Regressionb**

| Model | R                  | R <sup>2</sup> | AdjustedR <sup>2</sup> | Std. Error oftheEstimate |
|-------|--------------------|----------------|------------------------|--------------------------|
| 1     | 0.842 <sup>a</sup> | 0.709          | 0.701                  | 0.57873                  |
| Model | Changestatics      |                | Durbin-Watson          |                          |
|       | df2                | Sig. FChange   |                        |                          |
| 1     | 226                | 0.000          | 1.701                  |                          |



**Table 7 Predictors of patient satisfactions of SS2E**

| Model |            | Standardized Coefficients | T      | Sig.               | 95.0% Confidence Interval for B |             |
|-------|------------|---------------------------|--------|--------------------|---------------------------------|-------------|
|       |            | Beta (B)                  |        |                    | Lower Bound                     | Upper Bound |
| 1     | (Constant) | 0.448                     | 2.292  | 0.023              | 0.063                           | 0.832       |
|       | Emer_IV1   | -0.133                    | -1.798 | 0.074              | -0.294                          | 0.013       |
|       | ADT_IV2    | 0.209                     | 2.335  | 0.020 <sup>b</sup> | 0.033                           | 0.396       |
|       | Phy_IV3    | 0.086                     | 1.062  | 0.289              | -0.074                          | 0.248       |
|       | Food_IV4   | 0.002                     | 0.026  | 0.980              | -0.177                          | 0.182       |
|       | Diag_IV5   | 0.207                     | 2.344  | 0.020 <sup>b</sup> | 0.033                           | 0.379       |
|       | Care_IV6   | 0.505                     | 6.220  | 0.000 <sup>b</sup> | 0.368                           | 0.709       |

In the SS2 region of West Bengal, the instrument of multiple regressions was used in order to identify the factors that contributed to the level of patient satisfaction. Table 7 presents the findings of the investigation. The value of the multiple correlation coefficients between the predictors and the result is shown in this table as a function of the variation that is explained by the predictors. These predictors also include IV1, IV2, IV3, IV5, and IV6 in addition to the predictive variable R. Given that the value of R is 0.842, it can be deduced that the predictor variable does, in fact, have a considerable influence on the result of overall patient satisfaction of a patient. Because the alternative hypothesis has a P value that is less than 0.0001 out of every 0.05, it has been determined to be true and has been accepted. R<sup>2</sup> is a statistic that indicates how much of the outcome's inherent variability may be attributed to the actions of the predictors. In this particular investigation, IV1, IV2, IV3, IV4, IV5, and IV6 are all considered to be independent variables. Together, they are responsible for around 70.9% of the total variances in terms of overall patient satisfaction. Therefore, the predictors are excellent markers of overall patient satisfaction in SS2E, and the model provides a satisfactory match for the data sample that was used in the study. The adjusted R<sup>2</sup> provides insight into the extent to which the model is generalizable and how well it approximates the value of R<sup>2</sup>. 0.701 is the value that should be assigned to the amended R<sup>2</sup> of SS2E. The model's Durbin-Watson value yield is 1.701, which shows that the mistakes of regression are independent and that it is free from autocorrelation. Additionally, the value has no connection to itself.

#### 4.2.3 One-Way Anova Test For Overall Patients Satisfaction Of SSE2

**Table 8 One-way ANOVA for overall patients' satisfaction of SS2E ANOVAa**

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.               |
|-------|------------|----------------|-----|-------------|--------|--------------------|
| 1     | Regression | 184.019        | 6   | 30.670      | 91.572 | 0.000 <sup>b</sup> |
|       | Residual   | 75.693         | 226 | 0.335       |        |                    |
|       | Total      | 259.712        | 229 |             |        |                    |

Based on the information in table 8 a one-way analysis of variance was performed to compare the levels of patient satisfaction brought about by various variables, including Care IV6, Emer IV1, IV3, IV4, IV2, and IV5. According to the results of the analysis of variance (ANOVA) and the processed data, which included patient satisfaction as a dependent variable and predictor factors such as IV6 (Hosp Env.), IV1 (Emergency Dept.), IV3 (Physician Quality), IV4 (Dietary service), IV2 (Admn Discharge), and IV5 (Diagnostic service) as independent variables, it was found that there was a significant level of 0.000. On the variables Care IV6, Emer IV1, Phy IV3, Diag IV5, ADT IV2, and Food IV4, the F was determined to be 91.572 when the threshold of significance was set at 5%. Therefore, the prediction demonstrated that the whole model was significant, and that there was a substantial association between the patient satisfaction strategies of SS2E and predictive parameters such as Care IV6, Emer IV1, Phy IV3, Diag IV5, ADT IV2, and Food IV4.

### 5. CONCLUSION

Findings from the current research highlight the importance of patient input in evaluating healthcare providers' competence and efficiency. As an added bonus, it should help bring the

issue of improving 'patient service' and the pleasure of patients to the attention of healthcare practitioners and academics. In any healthcare facility, where the primary goal of the emergency room, inpatient and outpatient services is to treat patients, patient satisfaction is a crucial metric. However, the concept of "patient satisfaction" in a more general sense throughout the Indian subcontinent has not received enough attention until recently. Our research into healthcare in West Bengal revealed certain difficulties, but they were hardly "exceptional." Most of India's government hospitals and tertiary care facilities have the same difficulties and complacent attitudes that drive patients to private providers, despite the exorbitant prices they charge. Despite the fact that both federal and state governments have introduced fresh policies/procedures with the 'goal' of 'patient satisfaction,' the bigger picture on the ground doesn't reflect such.

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