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Perceived Quality of Healthcare in Public Hospitals of West Bengal: Can Patients' Education and Media Exposure Affect It?

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ABSTRACT

Measurement of quality of healthcare always has been a grey area in social science due to presence of asymmetric information and ignorance about medical details of the patients. As an alternative, social scientists measure the perceived quality of health care received in terms of amenities, patient-practitioner, relationship and organizational factors, which basically indicate the experience of the patient during the health seeking episode. The objective of the current paper is to measure the perceived quality received in the tertiary medical colleges in West Bengal, a state in India where a dominant share of hospitalization takes place in government-run facilities and often results in overcrowding. The paper also attempts to explore the effect of access to mass media and higher education on these three dimensions of quality of healthcare. Using principal component analysis to construct the quality indices on information of 300 respondents (hospitalized patients just before their discharge) from a primary survey, three consecutive nested OLS regressions were run to find the influence of access to mass media and education on each of the indices. Measurement located lowest indices for organizational factors. The index for amenities of care has reported better quality, though there are variations among hospitals. Patient practitioner relationship has also left much to be desired especially in hospitals beyond the state capital city of Kolkata. Though education of the patient does not control the quality perceived, exposure to media correlates strongly with all three types of quality index, hinting that awareness and information are gathered not by mere general education, rather access to printed and/or electronic media help the patients receive and mould their expectations for health care. Survey experience reflects that when the patient is better endowed with information about his rights, he is paid better attention and better care indicating towards dual nature of services.

Key Words: Quality of healthcare, Amenities of care, Patient-practitioner relationship, Organizational factors, Principal component analysis, Nested regression

INTRODUCTION

The proverb "Health is Wealth" perhaps most succinctly describes the importance of health, a typical human capital stock, that remains crucial for productivity and earning capacity of a person, as well as his ability to consume and receive utility from any other good and service. To maintain the health stock, healthcare services are demanded and received in an economy, depending upon the existing healthcare system characteristics.

Access to healthcare is a pre-requisite for obtaining quality care; it is concerned with the relationship between need, provision and utilization of health services (Gulliford et al., 2001). A very large literature, both theoretical and empirical, have attempted to outline the need for access to healthcare either through public provision or through private market. The pricing, affordability, effectiveness etc are dealt with at length in this regard. Acknowledging the importance of access to healthcare, the public agencies in most of the developing

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countries have attempted to improve the availability and access to healthcare to the people especially belonging to vulnerable groups, namely residing in rural areas, the poor, the ethnic minority, women and children. The common objectives have been to make certain architectural corrections in the basic healthcare delivery system to enable it to effectively handle the increased allocation and promote policies strengthening public health management and service delivery in the country. With no exception, Government of India introduced mass-based healthcare reform under National Rural Health Mission since 2004-05. The Mission's goal was to achieve universal access to equitable and quality healthcare services responsive to people's needs.

It is apparent that the timely use of healthcare services helps in bringing about improvements in quality of care and subsequently attain better health outcome. Quality in healthcare has always been a grey area in literature, as well as in policy dimensions. Consumers are not able to make logical economic choices based on price and quality of the good, as healthcare does not fit into the traditional definition of an economic good (Newbrander and Rosenthal, 1997). Cofounded with serious asymmetric information, uncertainty and externality, healthcare market cannot be readily analysed by positive economics with many of the basic assumptions of the latter being completely violated (Hurley, 2000). Consequently, normative analysis of need and equity is called for, identifying the barriers for the poorer and vulnerable population to utilize the healthcare services. In this blurred area of positive and normative economics, the issue of quality is grossly under-focussed and understudied, primarily owing to more serious information asymmetry. The definition, indicators and measurement of quality of healthcare all remain difficult and complex zones in the domain of economics.

Nonetheless, quality of healthcare is of interest to the consumers, the providers and the society as a whole (Newbrander and Rosenthal, 1997). To ensure a reasonable standard of services they receive, the consumers need to play an active role in assessing the quality of care they receive. Providers, both private and public, have an interest in providing quality healthcare. Private providers do know that quality of care is indeed important to patients and will certainly influence the choice of health service provider and this fact motivates them to improve quality of care so that they can fulfil the objective of earning greater revenue generated from

higher demand for their services. On the other hand, it may appear that public providers may not be interested in improving quality of care as they receive uniform fees, though professional ethics dictate them to do what is best in the interest of patients. It has been observed that both public and private providers would like to provide best quality care for reasons classified as self-regulation or self-correction (De Geynt, 1995). Society's interests in enhancing quality of care are many. It wants to ensure that health providers adhere to certain norms and standards, health resources are utilized efficiently and equity prevails so that access to good quality care is not dependent on patient's income, education, social class or geographic location. Hence the motivation behind measuring quality of healthcare is the intent of bringing about improvement in health outcomes taking care of the social gradient.

Theoretically, under the persistent excess demand and absence of pricing mechanism in public sector in a typical developing country, the provision of services is rationed by increased waiting time and degradation of patient-provider relationship, coupled with overall fall of amenities and technical quality (Goodman et al., 2001). Here, under strong principal-agent problem, the providers (doctors, nurses and hospitals) have no incentive to correct this quality, which might impede utilization of such services in long run (Haddad et al., 1998). Private hospitals with predominately privately insured patients may find that third-party reimbursement rates more than cover the cost of care. These facilities can afford to have excess inventory (empty beds) – so that supply exceeds demand. In such a competitive market, providers have an incentive to compete by providing higher quality and more amenities to the patients. At the extreme, if healthcare is primarily financed by private out-of-pocket expenditures, providers compete with each other in terms of both price cuts and quality improvements. In short, while quality of healthcare is expected to improve to receive more patients in a competitive market, it tends to deteriorate in response to enhanced demand, in a market characterised by supply bottlenecks and absence of pricing mechanism.

Measurement of quality and available evidence:

World Health Organization (WHO) defines quality of care as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes. It should be effective, safe

and people-centred. Donabedian's (2005) three components approach comprising of structure-processoutcomes for evaluating the quality of care may be used to measure the quality of healthcare beyond its technical components. While the latter cannot be evaluated either by patient or his/her family due to asymmetric information and lack of technical knowledge, most of the social science literature on measurement of quality in healthcare is concentrated on the aforesaid three aspects of patient's perceived experience of healthcare receipt. Structural measures have traditionally received the most attention since government surveys and record keeping about the availability of resources such as numbers of hospital beds and personnel and quantities of supplies is generally done (Mohanan et al., 2016). However, whether these resources are being used productively in delivering highquality care to patients depends on the process, including the capacity of health-sector workers. Measuring the quality of the process of delivery of care and the resulting health outcomes is challenging indeed, and requires methods and approaches that go beyond standard service statistics and facility surveys.

It is possible to conceive quality of care as a product of two factors, namely science and technology of healthcare and the application of that science and technology in actual practice (Donabedian, 2003). These taken singly or in a variety of combinations constitute a definition of quality and when measured in one way or another signifies quality. However, measuring clinical quality of care is beyond the scope of our study. Our major concern is how patients perceive quality of care they receive and therefore people's perception about quality of healthcare should be at the centre of any discussion relating to quality of care. In an effort to measure quality as perceived by patients, acceptability, which contemplates compliance with the wishes, desires and expectations of the patients and their family members is identified. A definition of acceptability can be developed in three parts: accessibility (which includes organizational factors), patient practitioner relationship (between patient and all the providers associated with the stay of the patient: from doctor to nurses, from ward boys to female medical attendants) and amenities of care (including beds, cleanliness of room and toilet etc.). Accessibility refers to the ease with which patients can access care and includes organizational factors such as the days and hours when providers are open to receive patients and the manner in which they are oriented to the facilities. Patient-practitioner relationship captures the elements of personal concern, empathy, respectfulness, willingness to take time, effort to explain and give attention to the patient's preferences The amenities of care are the circumstances under which care is given and includes properties such as convenience, privacy, comfort, restfulness, cleanliness, good food, and so on.

A few studies have been identified which explore healthcare quality. A survey conducted among Bangladeshi citizens admitted in hospitals (within and outside the country) within the last one year revealed that the quality of service in private hospitals scored higher than public hospitals for nursing care, tangible hospital matters (like cleanliness, supply of utilities and availability of drugs) (Siddiqui, 2007). The overall quality of service in the foreign hospitals was better than that in the private hospitals in Bangladesh in all aspects. The users of organized private-sector and tertiary facilities in Matlab, Bangladesh perceived the quality of services better than informal care providers and peripheral public facilities (Anwar, 2009). Behaviour and attitude of service providers and availability of medicines were significant predictors for perceived quality of care.

Clients reported relatively high levels of perceived quality in Afghanistan and the variation observed was mostly related to the patient's interaction with the health worker and not to other health facility characteristics, such as cleanliness, infrastructure, service capacity and the presence of equipment or drugs (Hansen et al., 2008). Often patients choose from among multiple facilities available, rather than just visit the nearest facility in anticipation of receiving improved quality of care bypassing low quality facilities (Klemick, 2009). This behaviour alters the projected benefits to health interventions, reduces the value of focusing on the staff qualifications and increases the value of focusing on travel time and the motivation of current staff. Creating quality indices from standard DHS data of 2012 in Indonesia, by identifying indicators of quality of healthcare as recommended in the guidelines of the WHO Integrated Management of Pregnancy and Childbirth, Dettrick et al, 2016 indicate particular disparities in the quality of care received by the poor as well as those living in outlying regions. Assessing quality of care provided at a tertiary hospital of Sikkim by patient's degree of responsiveness, it was found that a significant proportion of patients experienced discrimination for different reasons such as lack of money, the language they speak or for having insurance from a company (Rahman and Khalda, 2019).

Similar analysis of patient's perception of health care quality is virtually absent for any public sector hospital in West Bengal, characterized by high demand for care exceeding supply. With an overwhelming share of patients preferring to utilize public hospitals in this eastern overpopulous Indian state, juxtaposed with narrow fiscal space of the state administration has resulted in over-crowding and fall in quality. The provision of services in these hospitals is characterized by long waiting time, degradation of patient-provider relationship and fall in the quality of amenities of care.

Given this background, the objective of the paper is to locate the quality of healthcare that patients receive and rate the amenities of care they receive, patient practitioner relationship they experience and organizational factors they face. In West Bengal, access to and utilization of healthcare (institutional delivery, ante natal care, immunization of children etc.) improved significantly following the NRHM (as reflected in state factsheets of NFHS 3,4,5), improvement in health status indicators (like IMR, U5MR) have been sluggish, calling for deeper enquiry into the quality of healthcare received once the patients reach facilities. While the tertiary teaching hospitals in the state are supposed to bear a heavy burden of patients within the public sector, we hold the study of patient-related healthcare in four major tertiary hospitals in West Bengal. Our specific objectives are two: first, to measure the quality of amenities of care, patient practitioner relationship and organizational factors from the patients' point of view in tertiary hospitals of West Bengal and second, to see the impact of access to mass media and higher education on these three dimensions of quality of healthcare. Since most of the information about government's health schemes etc are available on printed and/ or electronic media, access to media ensures information and awareness.

METHODOLOGY

Data:

A primary survey was done on 300 inpatients of four government-run tertiary medical college hospitals in West Bengal in 2019. The hospitals, chosen randomly from the full list of tertiary medical colleges, were SSKM Hospital, Chittaranjan Hospital, Burdwan Medical College and Hospital and Bankura Sammilani Medical College

locations of which can be seen from Fig. 1. These hospitals assume great importance in providing care to the patients in the state. SSKM is the first government run super speciality hospital in West Bengal, with large catchment area covering Kolkata, South 24 Parganas and beyond; Chittaranjan Hospital is located in the heart of the city of Kolkata and caters to patients from diverse social backgrounds. Burdwan Medical College and Hospital and Bankura Sammilani Medical College and Hospital provide care to many patients living in the respective districts of Burdwan and Bankura. A total of 300 IPD patients from three departments namely medicine, maternity, and orthopaedic1 were interviewed with a structured questionnaire. In the selected wards every third patient who was discharged on that day was interviewed to maintain randomness. The questionnaire consisted of four sections: information about household details were taken in Section 1, general information on the hospital were noted in Section 2, inpatient information was taken in Section 3 and lastly in Section 4 information about overall impression on the hospital were taken. All questions were in binary form, with answer 1 representing good quality and 0 indicating bad quality.

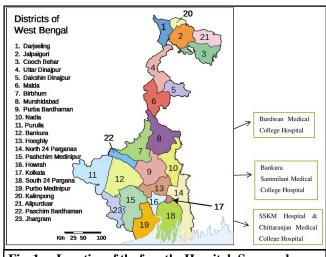


Fig. 1: Location of the four the Hospitals Surveyed

Methodology:

When talking about perception of quality of healthcare, following Donabedian 2003, three main domains need to be identified: amenities available for the patients, patient-provider relationship and organizational infrastructure available. To measure quality of healthcare,

^{1.} The choice of the departments was done based on requirement of more invasive and medicines as per doctors.

| Table 1: Indicators under each index | | | | | |
|--------------------------------------|--|--|--|--|--|
| Index | Indicators | | | | |
| Amenity | comfortable bed, clean bed sheets, peace at night, number of times room was cleaned, disinfectants used, hygiene maintained while serving food, foul smell in room, clean bathrooms, pests/pets in room, quantity of food, quality of food, taste of food, overall cleanliness of food, staff ensuring that patients are not disturbed | | | | |
| Relationship | brief plan of stay explained at the time of admission, how often nurses listened carefully, how often nurses explained matters in a way that could be understood, behaviour of nurses, behaviour of nursing superior, how often doctors listened carefully, behaviour of junior doctors, behaviour of senior doctors, behaviour of Group D staff, behaviour of food delivery staff, behaviour of sweepers, behaviour of security guards, staff believed in pain, helped in finding comfortable position while in pain, quick to respond when asked for pain relief, given medication for pain even when not asked for, staff enquired about pain in movement, staff provided help till patient is satisfied with pain relief, staff knowledgeable about pain management, staff co-operative in treating pain | | | | |
| Organization | presence of help desk, finding the way to the ward, satisfactory admission procedure, accompanied to the ward by, warmth of ward staff, orientation to the ward, duration after which nurse came to attend, duration after which doctor came to attend, taken care in the ward by, medicines given by, convenience of visiting hours, patient party regularly informed about the health status of patients, rules easy to abide by, prior information about discharge given | | | | |

three indices measuring amenities of care (amenity), patient practitioner relationship (relationship) and organizational factors (organisation) need to be constructed. For constructing the index for amenities of care 14, for patient practitioner relationship 21 and for organizational factors 19 indicators were used. All these queries were recorded in binary form: 1=Yes and 0=No. Table 1 lists the indicators in each type of index.

Principal component analysis (PCA) was used to construct the indices following the methodology used for creating wealth index scores by Fry, Firestone and Chakraborty in 2014. For each of the indices the appropriateness of PCA was tested using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy.

The index for each individual was then standardized by using the formula

$$I = \frac{I - I_{min}}{I_{max} - I_{min}}$$
 where I denotes the specific

index.

In this way, three separate indices are calculated for each respondent in the survey.

To find the influence of access to mass media and education on each of the indices, three consecutive nested OLS regressions were run. Access to media has been captured by three categories: no exposure, exposure to either newspaper or TV, exposure to both newspaper and TV. Education has three categories as well: illiterate and primary, secondary and higher than secondary. Three consecutive nested models were used to explore the possibility adding more sets of control variables one by one. Model 1 included household characteristics as independent variables. In Model 2 individual

characteristics were taken as independent variables along with household characteristics. In Model 3 healthcare characteristics were also considered. Access to media and education remained the focal variables in all three models. The variables included in household, individual and healthcare characteristics are the following:

- (i) **Household level characteristics**: Economic status, income sufficiency, religion, living standard and location.
- (ii) **Individual level characteristics**: gender and possession of bank account
- (iii) **Healthcare level characteristics**: individual departments and hospitals

To determine the economic status of the respondents, data on family monthly expenditure and family size of each respondent was collected and monthly per capita expenditure (MPCE) calculated using

$$MPCE = \frac{Family\ expenditure}{Family\ size}$$

Then they were grouped as poor and non-poor using the poverty line of MPCE 1407INR in urban areas and 972 INR in rural areas estimated by Rangarajan Committee in 2014 (Planning Commission, 2014). Income sufficiency was recorded according to the response to whether they found their income to be sufficient to run the family in the last one year. Religion of the respondents was categorized into being Hindus and non-Hindus. Living standard scores were created considering quality of drinking water (filtered/unfiltered) available, type of lighting (electricity/other sources) used, type of sanitation (improved/unimproved) used, drainage (covered/open/no drain) available. Location of the respondents relate to

their place of residence being in urban/rural areas. Gender of the patients was recorded as either male or female and information about whether the respondent/spouse had a bank account was also recorded on yes and no. BPL, income sufficient, Hindu, residing in urban area, male and not bank account holder respondents were taken as reference categories for the respective variables. Among the four hospitals surveyed, SSKM Hospital was taken as the reference category and among the three departments surveyed, Medicine Department was taken as the reference category.

The models are the following:

Model 1:

Quality = $\alpha + \beta_1$ media + β_2 education (household level characteristics as controls)

Model 2:

Quality = $\alpha + \beta_1$ media + β_2 education (household and individual level characteristics as controls)

Model 3:

Quality = $\alpha + \beta_1$ media + β_2 education (household, individual and healthcare level characteristics as controls)

RESULTS AND DISCUSSION

Sample characteristics:

Table 2 shows the sample characteristics of the patients' survey. The highest share of patients having BPL cards as well as reported to be BPL goes to Bankura

Sammilani Medical College Hospital. The perceived sense of income insufficiency is the highest among its patients too, followed by Burdwan Medical College. It may be noted that a much higher proportion of patients feel that they have insufficient income to run their families than the number of patients who are identified as BPL across the four hospitals. Among the hospitals, Chittaranjan Medical College serves the highest share of non-Hindu population, primarily because the catchment area is Muslim dominated. The living standards are expectedly better for patients in two Kolkata hospitals. SSKM receives the highest share of educated patients, closely followed by Bankura Sammilani Medical College. Even if located in Kolkata, Chittaranjan Medical College receives lowest share of better educated patients.

Indices for healthcare quality:

The indices for amenities of care, patient practitioner relationship and organizational factors have been computed using principal component analysis. The value for Kaiser-Meyer-Olkin measure of sampling adequacy for amenities of care, patient practitioner relationship and organizational factors were found to be 0.76, 0.80 and 0.60 respectively indicating data from the primary survey is suitable for principal component analysis, though the value for organizational factors just cross the benchmark reference level.

Table 3 reveals that in all four hospitals the average value of indices is highest for amenities of care, followed

| | SSKM Hospital | Chittaranjan Medical College | Burdwan Medical College | Bankura Sammilani Medical College |
|--|------------------|---------------------------------|----------------------------|--------------------------------------|
| BPL card holders | 25.3 | 41.3 | 49.3 | 64.0 |
| BPL patients (as per reported expenditure) | 60.0 | 73.3 | 72.0 | 89.3 |
| Patients with income insufficiency | 81.3 | 96.0 | 80.0 | 97.3 |
| Religion: Hindu | 69.3 | 42.7 | 60.0 | 89.3 |
| Location: Rural areas | 54.7 | 58.7 | 85.3 | 94.7 |
| Living conditions: in pucca or semi pucca houses | 73.3 | 60.0 | 20.0 | 37.3 |
| Households with electricity | 96.0 | 90.7 | 80.0 | 76.0 |
| Households with improved sanitation | 25.3 | 18.7 | 1.3 | 4.0 |
| Gender: Female | 45.3 | 34.7 | 48.0 | 54.7 |
| Education: Illiterate and Primary | 25.3 | 58.7 | 34.7 | 26.7 |
| Secondary | 54.7 | 33.3 | 61.3 | 61.3 |
| Higher than Secondary | 20.0 | 8.0 | 4.0 | 12.0 |
| Access to media: newspaper | 61.3 | 36.0 | 41.3 | 50.7 |
| TV news | 76.0 | 54.7 | 54.7 | 57.3 |
| Access to bank account | 53.3 | 42.7 | 48.0 | 65.3 |

Source: Analysis of primary data

| Table 3: Summary Statistics of Indices | | | | | | |
|--|-------------------|--------------------|-----------------------------------|--------------------|------------------------|--------------------|
| | Amenities of care | | Patient Practitioner Relationship | | Organizational factors | |
| | Mean | Standard deviation | Mean | Standard deviation | Mean | Standard deviation |
| All hospitals | 0.65 | 0.25 | 0.52 | 0.25 | 0.35 | 0.26 |
| SSKM | 0.83 | 0.10 | 0.69 | 0.18 | 0.48 | 0.21 |
| Chittaranjan | 0.58 | 0.31 | 0.52 | 0.24 | 0.38 | 0.21 |
| Burdwan | 0.53 | 0.26 | 0.40 | 0.26 | 0.32 | 0.31 |
| Bankura | 0.65 | 0.18 | 0.48 | 0.22 | 0.25 | 0.23 |

Source: Analysis of primary data

by patient practitioner relationship and then organizational factors. Low levels of reported quality for organizational factors indicate towards major flaws in the official procedures, right from admission to discharge. In non-Kolkata-based hospitals, especially in Burdwan, there is much to be desired for patient-provider relationship too. The patients have rated the amenities or the tangible matters much higher than those regarding interaction with the providers for all the hospitals. Hospital-wise comparison shows that SSKM is much ahead among the hospitals for all three indices. Bankura Sammilani Medical College is second to SSKM for amenities of care, but is at the bottom of the table for organizational factors. Chittaranjan Hospital, located in the metropolitan city of Kolkata, fares better than the two rural hospitals in relationship and organizational factors, but surprisingly lags behind Bankura Sammilani for amenities of care. Burdwan is at the bottom of the table for indices for

amenities and relationship.

Regression results:

Variance inflation factors for Models 1, 2 and 3 are 1.32, 1.35 and 1.61, respectively. Tables 4, 5 and 6 bring out that though education of the patient does not control the quality perceived related to amenities and organizational factors, exposure to media correlates strongly with all three types of quality index. The results remain robust with addition of newer sets of control variables across the three models. The higher the exposure, the higher the quality received. This identifies a *unique feature* of quality of care in hospitals in West Bengal. Normally, better endowed patients report to have lower quality of care due to higher expectations. That is observable for patient-provider relationship here too as patients with secondary education perceive quality to be lower than patients with primary or no education. The

| Table 4: Regression results – Amenities of Care | | | | | |
|---|---------------------------------|---------|---------|---------|--|
| | | Model 1 | Model 2 | Model 3 | |
| Access to mass media (No exposure to | Exposure to either media | 0.08** | 0.09** | 0.06* | |
| media reference) | Exposure to both media | 0.15*** | 0.15*** | 0.11*** | |
| Education (illiterate and primary | Secondary education | -0.04 | -0.04 | -0.04 | |
| reference) | Higher than secondary education | -0.05 | -0.05 | -0.06 | |
| Household characteristics | | Yes | Yes | Yes | |
| Individual characteristics | | | Yes | Yes | |
| Healthcare characteristics | | | | Yes | |

P values are indicated by asterisks, with * P<0.1, ** P<0.05, *** P <0.01 Source: Analysis of primary da

| Table 5: Regression results – Patient Practitioner Relationship | | | | | |
|---|---------------------------------|---------|---------|---------|--|
| | | Model 1 | Model 2 | Model 3 | |
| Access to mass media (No exposure to | Exposure to either media | 0.15*** | 0.14*** | 0.09** | |
| media reference) | Exposure to both media | 0.17*** | 0.16*** | 0.13*** | |
| Education (illiterate and primary reference) | Secondary education | -0.05 | -0.05* | -0.06** | |
| Education (initerate and primary reference) | Higher than secondary education | -0.04 | -0.05 | -0.07 | |
| Household characteristics | | Yes | Yes | Yes | |
| Individual characteristics | | | Yes | Yes | |
| Healthcare characteristics | | | | Yes | |

P values are indicated by asterisks, with * P<0.1, ** P<0.05, *** P<0.01 Source: Analysis of primary data

| Table 6: Regression results – Organizational factors | | | | | |
|--|---------------------------------|---------|---------|---------|--|
| | | Model 1 | Model 2 | Model 3 | |
| Access to mass media (No exposure to | Exposure to either media | 0.13*** | 0.12*** | 0.06* | |
| media reference) | Exposure to both media | 0.14*** | 0.13*** | 0.11*** | |
| Education (illiterate and primary reference) | Secondary education | -0.01 | -0.01 | -0.01 | |
| | Higher than secondary education | -0.08* | -0.09* | -0.08* | |
| Household characteristics | | Yes | Yes | Yes | |
| Individual characteristics | | | Yes | Yes | |
| Healthcare characteristics | | | | Yes | |

P values are indicated by asterisks, with * P<0.1, ** P<0.05, *** P <0.01 Source: Analysis of primary data

reason behind this may be that the attention and care they received from the health personnel did not meet their expectation. However, the positive correlation with media exposure and quality reports indicate that more aware patients can force the health staffs of facilities to offer them better quality of services, thus hinting towards a *dual nature of services* as found in Dutta *et al.* (2014).

Conclusion:

The USP of the paper lies in the fact that it attempts to locate three different components of perceived quality of healthcare in government-owned teaching medical college hospitals. The study reveals that the perceived quality for organizational factors, which entails various processes from the time of entry to discharge and require active support from the provider, is very low. The three measurement of quality spans the entire episode of healthcare seeking for hospitalization. However, tangible matters captured by the index for amenities of care have reported better quality, though there are variations among hospitals, with SSKM being far ahead of the others. Patient practitioner relationship has also left much to be desired especially in non-Kolkata based hospitals. It is also clear that awareness and information are gathered not by mere general education, rather access to printed and/or electronic media help the patients receive and mould their expectations for health care. Normally, perception about quality of healthcare is expected to reduce with better information, education and other resources. But the opposite results in this analysis call for deeper understanding of the field level. Survey experience reflected that when the patient is better endowed with information about his rights, services, particularly those related to human behaviour etc, he is paid better attention and better care.

This *dual nature of services* that comes out clearly from the study is alarming, since the very purpose of

setting up public hospitals is to reach out to vast sections of underprivileged and if the quality of care received depends on the patients' awareness, with quality received positively correlating to awareness, it is a lost game. Discrimination of this sort needs to be addressed at the earliest.

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