Inpatients Perception about the Health Care Quality: Comparison of Public and Private Sector Hospitals in Karachi

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Abstract

This study was undertaken to analyze inpatients' perception about the health care quality in the hospitals of Karachi. As it was a comparative study, the population was divided into three groups. The inpatients perception was measured on the following variables: Communication quality of the health care service provider, experience of the health care service providers, quality of ward room and health care facility and the demeanor of the staff. The population was divided into three groups namely; public hospitals, private high hospitals, and private others. Sample size of hundred was drawn with convenience sampling from each of the three groups. Data was collected through a questionnaire developed on QSP (Quality Service Performance). The data analysis was done at two levels. The overall analysis of population was done for the sample size of 300. The analysis did not prove to be quiet revealing as the group effect caused the low performer to remain hidden behind the curtain of averages. The group comparison through one-way ANOVA proved to be the real opening. To support the findings of one-way ANOVA, relevant percentages were also calculated. Public sector hospitals and private others are found to be the group which needed improvement.

Keywords: *Inpatient satisfaction, Patient Perception, Demeanor of the hospital staff, Health care quality.*

1. Introduction

Health care is one of the necessities of life. In Pakistan, the situation of health care is not up to the mark. WHO reports (www.who.int) in the last few decades have consistently shoen how the health care in Pakistan has laged behind in terms of quality. Birth attended by skilled health personnel in Pakistan is 39% against the regional value is 58%. There are 8.1 doctors in Pakistan for every 10,000 people while the regional value is 11 doctors per 10,000. There are 5.6 nurses in Pakistan for every 10,000 people while the regional average is 15.4. According to Nishtar (2007) population bed ratio which was 1594 in 1991 could not be increased in fact it declined to 1538 in 2006. Private hospitals, public sector hospitals and charity hospitals are doing their job. Of course, the quality differs. Private hospitals lead in the quality but with a greater deviation. Some private hospitals like Aga Khan University Hospital, Liaquat National Hospital and OMI hospital touch the highest levels of quality. There are other private hospitals which lack in many respects if not most. Public sector hospitals, where majority of the poor go to get treatment, show a dismal level of health care quality. Squeezed by poverty,

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the poor can go either to government hospitals or charity hospitals. The quality of health care hospitals needs to be studied in order to know what areas need improvement.

The troubles of life are more disturbing to the poor of a country. They are the hardest hit group in Pakistan. Life is miserable for them and even future prospects are as bleak as the present scenario. The current lowest ebb in the country has fettered the poor to the lowest possible condition of living. The soaring prices of flour and sugar have made their living even more difficult. But these tribulations which seize their lives are not so hard. Health and education which have become necessities of life have made life difficult for them. The menace of poverty makes it difficult for them to get health and education.

Public health sector is in ramshackle condition, but still the semblance of health provision stands on weak footing. When compared with other South Asian countries, Pakistan shows an abysmal performance. Pakistan had the highest in South Asia 101 per 1000 under five mortality Akram & Khan (2007 & WHO (2006). The other indicators also show the similar picture. Of course, there is a need to increase the number of health service providers and facilities. Quality of health care is another area which also requires attention.

This researech will explore what patients perceive about the health care quality. The model used for this purpose is called managerial model of health care. Previously it was thought that maintaining quality is costly; now, the thinking is "Not maintaining quality is costly". Ignoring quality gnaws at the erring firm from two sides. One is of course nobody buys a defective or faulty unit and the other is increased cost of production. Both of them collectively robust enough to send the erring firm out of business. The cost of ill quality attains more importance when it comes to health care as the human is the direct service taker in it. Think of zero defects and safety of processes; they make themselves highly sought-after in the health sector. The different aspects of quality considered important by different writers can be summarized as follows:

1. Tangibility
2. Reliability
3. Responsiveness
4. Competence
5. Courtesy
6. Credibility
7. Security
8. Access
9. Communication
10. Understanding the customer

Complexity of attributes of quality in health care and heterogeneity of services makes it difficult to define quality in health sector. The aspects of quality which patients can correctly measure are 'service quality' while the ones which they can not are the part of 'clinical quality' of health care.

(OPQ) overall perception of quality measure tells that service quality depends upon the perception of the patients or customer of health care. Some of the variables which are used to measure the quality of health care are:

1. Interpersonal Characteristics
2. Location
3. Ambience
4. Medical Care
5. Information
6. Accessibility

Although patients fail to perceive the importance of clinical quality, it is equally or even more important than service quality. The reason for this inability is the lack of knowledge and ensuing lack of understanding. Professional talk of morbidity, mortality rate, recovery rate, recurrence of the illness which appear to have very less to do with the variables mentioned above to measure service quality in health care.

Three different ways have been used so far which are namely:

1. Servequal
2. QSP (Quality Service Performance)
3. QPP (Quality from Patient Perspective)

Servequal and QPP use two levels questioning. First stage is to measure the perceived reality and the second was to measure the subjective importance given by the respondents to the variable. Unlike Servequal and QPP, QSP uses only one stage questions. The respondents are asked to show their satisfaction level at 10 point scale The purpose of this study is to see whether the inpatients are satisfied with health care quality given to them. The study went through different aspects of treatment which includes:

1. Communication with Patients
2. Perceived competence of service provider
3. Perceived quality of facilities
4. Demeanor of hospital staff

2. Literature Review & Conceptual Framework

Quality is extremely important in health care. Think of zero defects and safety of processes; they make themselves highly sought-after in the health sector. They surely improve the efficiency of the health care Diego Prior (2006).

Defining quality in health sector is difficult. Patients can not understand the technicality of treatment given to them. Quality of health care has been equated with satisfaction of the patients. As patients are not capable of understanding the technicality of the treatment or predicting the outcome of the treatment; they can only show their pleasure or displeasure with the functionality of provision of health care. Morgan and Murgatroyed (1994) categorized the patients into passive customers who are dominated by professional and in no way in a position to understand the technical aspect of the service being decided by the knowledgeable doctors. Tomes and Stephen (1995) laments that research of health care is limited to the function of health care. In order to get the real satisfaction of the customer, the broader model is required which can take into consideration at least the outcome of health care service. The literature available shows that researchers have to restrict themselves to one of two aspects of quality in health care.

Quality assessment studies in health care can take one of these three directions (Fisher, 1971) which are namely; cost, medical outcome and patient satisfaction. Medical outcome is beyond the capability of the respondent to gauge. The last component of quality assessment of health care comes to the patient satisfaction studies.

The sovereignty of customer has already been accepted. The opinion of customer reigns supreme. There are two bents to this sovereignty when it comes to the health

sector. One is unlike the product service shows heterogeneity in it and with it customers vary in their definition of quality as different customers are likely to have different perceptions of quality. The second twist is customer's inability to understand the technical aspects of health care. Aldana (2001) tentatively proposes patient satisfaction to be a useful measure if the patient has accurate assessment of health care quality. Aldana states that there is a gap between the satisfaction of customers and the quality of health care according to professional standards. The patients have benchmark in their mind based on their previous experiences not on any professional understandings. According to Aldana these were the rank-wise predictor of patient satisfaction in government hospital of Bangladesh:

- Provider behavior toward patient, especially respect and politeness
- Respect for privacy
- Short waiting time

The two variables, service provider experience and duration of consultation time which are professionally more important failed to be important factors in patient satisfaction in this particular study. So the point which emerges here is that customer's perception might not encompass what is to be considered quality in health sector.

This discussion points toward an important fact that customer satisfaction might not be as revealing as much it is being supposed to be. Professional insight needs to be incorporated in the satisfaction study to correctly assess the health care quality. There is a need to have rudimentary understanding of how the two groups differ in their meaning to quality health care.

The dichotomy can be service quality and clinical quality. Service quality is described by the customers whose components are as follows:

Interpersonal Characteristics	**Location**	**Ambience**
a. Respect	a. Waiting time	a. Physical Environment
b. Emotional Support	b. Service hours	b. Food and Furnishing
c. Cultural Appropriateness	c. Appointment delays	

Table 1 Factors of Customer Service Quality in Health Care

The same line of thinking was presented by Parsurman et al. (1994) and Babajus and Mangold (1992). According to them service quality is related to:

1. Attitude of physicians & nurses towards the patients.
2. Cleanliness
3. Quality of food

They were also of the same opinion that patients are in no way able to evaluate clinical health care quality. Clinical quality has these components:

1. Skill level of the provider
2. Consultation time

According to Akgu¨n and et al. (2007) the satisfaction level of patients was negatively related with education while Ana-Caluda (2010) found negative relation between the

two would be greatly unjust if the methods of measurement are not considered here. Three different ways have been used so far which are:

1. Servequal
2. QSP (Quality Service Performance)
3. QPP (Quality by Patient Perspective)

The factors used in QSP and QPP which were used are given in the table given below:

1. Medical Care	2. Waiting Time	3. Treatment by the Doctor
4. Treatment by the Nurse	5. Informatin	6. Participation
7. Environment	8. Accessibility	

According to Nathorst-Boos (2001) while using QPP, all the questions were asked in two stages. These stages were perceived reality and the second was subjective importance. This type of questions had lower return and so it shows that QPP was difficult to work with.

Nathorst-Boos (2001) found that QSP was easy to work with and the results were as good as achieved through QPP. Using QSP, the respondents were asked to show their satisfaction level at 10 point scale. In comparisons to QPP the return was better.

This research paper went for QSP model because of its better result. The variables included had a longer list as they were outdoor patients. Many of the variables were not included as the research is concerned with inpatients and some new ones were incorporated after consulting a group of doctors.

Cronin and Taylor (1992) compared the difference value obtained from expectation and perception with perception of service; the finding was as reliving as it was revealing. They proposed a new model which was using only the perception part and completely dropping the expectation part.

The long list of factors which have been observed while going though QPP and QSP model is the direction setter. As a result, SERVQUAL was transformed into SERVPERF. The methodology of SERVPERF and QSP were same as both of them included questions on perception only unlike the QPP and SERVQUAL which measured both perception and expectations.

There are other models available in researches which have been named as given below: (phi.uhce.ox.ac.uk)

1. QUOTE (Quality Care through Patient Eyes)
2. CEP-Q (Clients Evaluate Practice Locations Questionnaire)
3. HSHQ (Health Care System Hassles Questionnaire)
4. SOSQ (Seattle Out-patient satisfaction Questionnaire)
5. OPEQ (Out-patient Experience Questionnaire)
6. PPE-15 (Picker Patient Experience Questionnaire)

A perception related study was brought for consideration by Andleeb (1998) which used the managerial model or in other words the functional model for determining the quality of health care. Four of the constructs for managerial model (which have been used for this study) are given in the table below:

Communication by Doctor & Nurse	**Experience of Service Provider**	**Quality of Facilities**	**Demeanor of Hospital Staff**
Listening by the doctor and nurses.	Experience of Doctors	**Ward** Cleanliness, Silence, Meeting Time compliance	Courtesy
Asking questions to clarify patient condition	Experience of Nurses	**Testing Facility** Number of facility, Smoothness of Process, Timely completion Cost	Promptness
Replying to queries made by patient		**Pharmacy** Proximity	Interest
Satisfactory explanation		Price	Self-initiator

Table 2 Managerial Model for Health Care Quality (Andleeb)

The hypotheses which are formed are as follows:

H1: Patients agree that communication is proper.
H2: Those providing health care services are experienced.
H3a: Patients agree that the quality of ward or room is good.
H3b: Patients agree that quality of testing facility is good.
H4a: Hospital staff has a positive demeanor.
H4b: On average doctor gives more than 8 minutes to the patient for explaining his or her condition.
H4c: On average doctors make more than 3 visits in 24 hours.
H4d: Nurses come at their appointed time.
H4e: Nurses make themselves available when requested by the patients.

The above mentioned hypotheses directly flow from the managerial model. There are of course omissions keeping in view the inability of the respondent to answer them. Proximity and price are the ones not included in questionnaire. The same hypotheses have been tested for the group comparison as well.

3. Research Methodology

Sampling Design

The inpatients in hospitals of Karachi form the population for this research. The whole population has been divided into three groups which are namely; government, private high and the other private. The table given below shows the sample size planned and collected.

Hospital Type	Sample Size Sought	Sample Collected
Private High	100	97
Private	100	98
Public	100	95
Total	**300**	**290**

Table 3 Sample Sizes

The sampling technique used was quota sampling. The patients getting treatment in the hospitals were approached. After explaining the purpose of the research their consent to become the participants of the study was sought. In case, any one agreed, the data was collected from the respondent. The educated respondents filled the form themselves in case they were not severely ill while the illiterate were helped by the interviewers.

Research Instrument

Hypotheses are the investigative question Cooper and Schindler (2005) which are required to be transformed into measurement questionnaire. Questionnaire design is not something which can take place in isolation. Data is collected through questionnaire which is used to analyze the hypotheses. The questionnaire was designed on QSP (Quality Service and Performance). The reason for its selection is the result produced and validated by the QPP (Quality from Patient Perspective). It is also easy to work with. The ease to work with was well established by Nathorst-Boss (2001) as he found that the return rate for QSP when compared with QPP was higher while both the models were using the same constructs. This further strengthens the case for use of QSP.

The QSP model discussed in the literature review was for a general patient. There would be modification to the constructs employed by QSP model. Another change which has been made to the QSP was the use of likert scale. Five point likert scale was used to collect data where data was required regarding the attitude component of the patient.

The questionnaire was checked for inter-item consistency. The value of Cronbach's alpha was 0.934 which is far higher than the cutoff of 0.75. The face validity of the questionnaire was checked subjectively by presenting it to a panel of five doctors who recommended some changes which were incorporated.

Data Analysis

The table given below summarizes the analytical procedures and other relevant information.

	Overall Analysis	Groups' Comparison
Data Type	Quantitative	Quantitative
Number of Populations	1	3
Names of the groups	Inpatients	Inpatients of (Government, Private High, Private)
Sample Size	295	95, 97, & 98
Distribution	Approximately Normal	Approximately Normal
Sample Statistic	Mean, Standard Deviation and Error	Group Mean, Group Standard Deviation & Group Percentage
Type of Test	t-test for one population	1-way ANOVA
Inferential Statistic	t-value , Significance value	F value, Significance value

Table 4 Data Analysis Plan

The summary of hypotheses is given below.

#	H No.	Hypothesis	P-Value	Significance
1	1A	Doctors communicate well.	0.000	Highly Significant
2	1B	Nurses communicate well.	0.000	Highly Significant
3	2A	Doctors providing treatment are experienced.	0.000	Highly Significant
4	2B	Nurses providing treatment are experienced.	0.000	Highly Significant
5	3A	Patients agree that the quality of ward or room is good.	0.000	Highly Significant
6	3A1	Ward or room is clean.	0.000	Highly Significant
7	3A2	There is no smell in the ward or room.	0.000	Highly Significant
8	3A3	Walking is easy in room or ward.	0.000	Highly Significant
9	3A4	Physical quality is good.	1	Highly Significant
10	3A5	Silence is maintained in the ward or room.	0.000	Highly Significant
11	3A6	Meeting timing is followed.	0.000	Highly Significant
12	3B1	Patients agree that tests are provided on time.	0.000	Highly Significant
13	3B2	Patients agree that testing process is smooth.	0.000	Highly Significant
14	4	Hospital staff has a positive demeanor.	0.000	Highly Significant
15	4A1	Hospital staff is courteous.	0.000	Highly Significant
16	4A2	Hospital staff is prompt.	0.000	Highly Significant
17	4A3	Hospital staff is interested in the well-being of the patient.	0.000	Highly Significant
18	4A4	Hospital staff is self-initiator.	0.000	Highly Significant
19	4B	On average doctors make more than three visits in 24 hours.	1	Not significant
20	4C	On average doctor's talk time is more than 25 minutes.	0.940	Not Significant
21	4D	Nurses come on time.	0.000	Highly Significant
22	4E	Nurses make themselves available when requested (are responsive)	0.000	Highly Significant

Table 5 Results of Hypotheses Tests

The overall analysis proves to be not quite forthcoming. There is an imminent need of looking into data at the group level as it is apparent that the performance of one group may hide the underperformance of the other groups. Nonetheless, the findings are summarized as follow:

The staff is experienced and communicating well as the tests are significant at 0.000 significance level. Patients concur that the overall quality of ward or room is commendable. The only problem is related to the physical quality which is in fact related to the washroom cleanliness and the presence of soap and towel in the washroom. This hypothesis did not prove to be significant. The real reason will be revealed when the groups' comparison would show that only one of 95 patients visiting government hospitals rated them to be proper.

Testing process was tested for two of its attributes. They were timeliness and smoothness of the process. Both of the hypotheses turned out to be significant showing that patients do not have any problem with the testing process or they are satisfied with it.

The fourth hypothesis which was related to the demeanor of the hospital staff also proved to be significant. The test showed that respondents agreed to the statements which showed that the hospital staff had a positive demeanor. The four dimensions of demeanor were courtesy, promptness, being interested in the well being and being self initiator were all proved to be significant.

When the same concepts were compared with standards, it was found that the story is somewhat different. Numbers of visits made by doctors were found to be statistically significant when tested for less than 3 visits. In the same vein, the average talking time was also found to be less than 25 minutes.

The other two important hypotheses related to the interest in the well-being of the patient and responsiveness of the staff; were both found to be statistically significant.

The group comparison was done to know whether the hospitals differ in their performance.

Groups Comparison:

The summary of group comparison is given below.

#	H	Hypothesis	P-Value	Significance
1	1A	Doctors' communication quality is not same for the groups.	0.000	Highly Significant
2	1B	Nurses' communication quality is not same for the groups.	0.028	Highly Significant
3	2A	Doctors providing treatment are not equally experienced in groups.	0.011	Highly Significant
4	2B	Nurses providing treatment are not equally experienced in groups.	0.144	Not Significant
5	3A	Patients agree that the quality of ward or room is good.	0.000	Highly Significant
6	3A1	Wards or rooms are not equally clean in these groups.	0.000	Highly Significant
7	3A2	Wards or rooms are not equally smell less in these groups.	0.000	Highly Significant
8	3A3	Wards or rooms are not equally spacious in these groups.	0.003	Highly Significant
9	3A4	Physical quality is not equally good in these groups	0.000	Highly Significant
10	3A5	Silence is not equally maintained in these groups.	0.000	Highly Significant
11	3A6	Meeting timing is not followed equally well in these groups.	0.000	Highly Significant
12	3A	Overall quality is not equally good in these groups.	0.000	Highly significant
13	3B1	Smoothness of testing process is not same among the groups.	0.000	Highly Significant
15	3B2	Timeliness of testing process is not same among the groups.	0.000	Highly Significant
16	4	Hospital staff does not have same level of demeanor in theg roups.	0.072	Significant
17	4A1	Hospital staff is not equally courteous in all these groups.	0.001	Highly Significant
18	4A2	Hospital staff is not equally prompt in all these groups.	0.143	Not significant
19	4A3	The level of interest in the well-being of the patients is different.	0.365	Not significant
20	4A4	Hospital staff is not equally good as self-initiators in groups.	0.243	Not significant
21	4B	Doctors' frequency of visits is not same in these groups of hospitals.	0.688	Not significant
22	4C	Timeg iven by doctors is not same in theseg roups of hospitals.	0.000	Highly significant
23	4D	Nurses do not follow time equally strictly in these hospitals.	0.108	Not significant
24	4E	Responsiveness level is different among groups.	0.001	Highly Significant

Table 6 Results for Group Comparison

One-way ANOVA was used to perform multiple group comparison. But for the sake of understanding relevant percentages have also been calculated. The hypotheses are being discussed here one by one.

The first hypothesis is related to the communication quality of doctors and nurses. Both of them were found to be statistically significant. The calculated percentages show that 16% of the respondents considered that the doctors in public sector hospitals did not communicate well. When this value is compared with the data achieved for the communication quality of the nurses, it is seen that 42% of the respondents were of the view that the nurses did not communicate well. This score is even worse for the second private hospitals where the value is 45%. There is a need for improvement in the communication of nurses in private and public hospitals.

The experience level of the staff was found to be significantly different in the three categories. The problem with the doctor is not so severe when compared with the nurses. 40% of the sample interviewed at government hospitals was of the opinion that nurses are not experienced. It shows that there is a need to improve staff quality at government hospitals.

Quality of facility was studied for two of the facilities which are namely ward and room, and laboratory facilities. The result of analysis is being explained here.

4.1 Quality of ward and room

This construct was broken into three different constructs which were ambience quality, physical quality and conformance quality. At the end all of them have been combined into another construct named total quality. The analysis is as follows:

The three dimensions of ambience quality namely; cleanliness, smell and spaciousness were found to be significant for the group differences. Two of the dimensions namely cleanliness and smell are more critical as about 40% and 50% of the respondents do not consider them to be of good quality in government hospitals and the private hospitals respectively. Private high has good performance on the basis of these variables.

Physical quality which is made of cleanliness of washroom and availability of soap and towel in the washroom shows very dismal results. Of course, the groups are found to differ. The hypothesis is significant at 0.000 significance level. The picture becomes clear when the percentages are viewed. In the government hospitals, only 1% respondents consider that the physical quality was good while in the private hospitals this percentage was only 20%. This shows that government hospitals and private hospitals must improve the physical quality so the customers feel satisfied. The group private high performs well on this variable.

Maintaining silence and complying with the meeting time are two of the factors which have been coalesced into compliance quality. The hypothesis of group difference has been found to be highly significant. 50% of the respondents from government and same percentage of respondent from private hospital feel that these hospitals do not ensure silence in the ward or room. As far as the compliance of timing is concerned, the values do not show any improvement. 67% of government and 50% of the private hospital opine that the respective hospitals comply with the meeting timing.

At the end all the constructs related to ward or room quality were summated into total quality. The three groups of hospitals were found to be different when tested for total quality. The comparison becomes more understandable when it is seen in terms of percentage. 48% of the respondents from government hospitals consider the total quality to be good while this value is even less for private hospitals as it moves down to 38%.

Quality of testing facility was found to be significantly different for the groups. Both the hypotheses (i.e. smoothness of the process and timeliness of test results) were found to be different at 0.1% significance level. The related percentage clarifies the meaning

more. 41% of the patients from government hospitals consider that the tests are provided on time while for the private hospitals this percentage is 59%. Testing process is not smooth in the government hospitals as only 52% of the patients regard it to be smooth. The government hospitals need to improve smoothness of the process and timeliness of results provision.

The last hypotheses were related to the demeanor of the hospital staff. Out of the four dimensions (i.e. courtesy, self-initiator, promptness and interest; only courtesy is found to be statistically significant when compared for group differences. When all the dimensions are added into demeanor; it is found to be significantly different for the groups at 10% significance level. These statistics may be difficult to digest therefore the table given below is needed for clarification.

Variable	Government	Private High	Private
Courtesy	46	74	57
Self-initiator	41	55	50
Promptness	58	61	67
Interest	57	70	58
Demeanor	58	76	69

Table 7 Performance in Percentages

The table clearly shows that government and private hospitals both perform miserable on the scale of courtesy. All the three groups dismally perform for self-initiation and promptness. Private high perform relatively better when it comes to taking interest in the well being of the patients. Despite this the test for group difference does not show any statistical significance among the groups.

At the end the groups were compared for doctors' frequency of visits, doctors' talk time, nurses' compliance in following the schedule and the level of responsiveness of nurses. Two of them (doctors' talk time and responsiveness) were found to be statistically significant for the groups. The table given below will help in comparing the group for their performances.

Variable	Government		Private High		Private	
Doctors talk time (Minutes)	14		26.5		26	
Frequency of visits (Avg Number)	2.13		2.25		2.25	
Timing compliance (%, Avg)	47	3.36	66	3.70	50	3.50
Responsiveness (%, Avg)	53	3.34	78	3.87	44	3.38

Table 8 Comparison of Hospitals

The table clearly shows the difference between the talk-time of the doctors. Doctors in government hospitals give on average the least time. The frequency of visits does not appear to be very much different. Timing compliance when viewed in terms of percentage shows there is a need for improvement. Less than 50% respondents opine that nurses do their work on time. Responsiveness is also low for both the mentioned groups.

5. Conclusion

At the end, it is apparent that the group of comparison is more helpful. The area for improvement for private and government hospitals are given in the table given below.

private and government hospitals are given in the table given below.

	Improvement Required (Yes or No)		
Areas	**Government**	**Private High**	**Private**
Doctors' communication	No	No	No
Nurses' communication	Yes	No	Yes
Experience of Doctors	No	No	No
Experience of Nurses	Yes	No	Yes
Cleanliness	Yes	No	Yes
Smelly	Yes	No	Yes
Spaciousness	No	No	No
Physical Quality	Yes	No	Yes
Silence	Yes	Yes	Yes
Meeting Time Compliance	Yes	No	No
Smoothness of testing process	Yes	No	No
Timeliness of testing process	Yes	No	Yes
Demeanor	Yes	No	Yes
Courtesy	Yes	No	Yes
Promptness	Yes	Yes	Yes
Interest	Yes	No	Yes
Self-initiation	Yes	Yes	Yes
Doctors' frequency of visits	Yes	Yes	Yes
Time given by doctors	Yes	No	No
Time Compliance by Nurses	Yes	Yes	Yes
Responsiveness of the Staff	Yes	No	Yes

Table 9 Areas for Improvement in Hospitals

Table 9 shows that government hospitals need improvement in all areas except space and doctors' communication and experience. Private hospitals perform better in a few more areas, as they are doing well in time compliance, smooth testing process and time given by doctors. Relating these finding with the managerial model for health care quality; government and private hospitals need to focus on communication of nurses, quality of ward, demeanor of hospital staff. Government hospitals additionally need to improve the quality testing facility.

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