

ORIGINAL ARTICLE

ASSESSING PATIENT SATISFACTION FOR INVESTIGATIVE SERVICES AT PUBLIC HOSPITALS TO IMPROVE QUALITY OF SERVICES

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ABSTRACT

Objective: The main objective of the paper is to assess the satisfaction level of investigative patients at public health facilities of Madhya Pradesh, a State of India.

Methods: Data were collected from investigative patients through structured questionnaires at public health facilities in the sampled eight districts of Madhya Pradesh.

Settings: Data were collected from District Hospitals, Civil Hospitals and Community Health Centers of the eight selected districts of Madhya Pradesh.

Results: A total of 280 investigative patients were included in the study to know their perceptions about the services at the public health facilities. It was found that most of the respondents belong to rural areas (53.9%) and majority (82.1%) lies within the age group of 16-50. 56.4% were male having low level of literacy. 90% of the respondents who availed ultrasonography services and nearly 70% of the investigative patients who have utilized ECG facility found the problem of overcrowding but found the test facility good. However, 67.3% and 76% of the patients reported that the test facility was good who availed the services of laboratory and X-Ray. More than 80% of the total investigative patients reported the behavior of the technicians as good. Nearly 50% of the respondents who availed the services of laboratory and X-ray, reported that privacy and confidentiality was good whereas rest found it satisfactory.

Key Words: Investigative Services, Patient Satisfaction, Quality Of Care, Public Health Facilities

INTRODUCTION

Patient satisfaction is one of the established yardsticks to measure success of the services being provided in the health facilities. But it is difficult to measure the satisfaction and gauge responsiveness of the health systems as not only the clinical but also the non-clinical outcomes of care do influence the customer satisfaction [1]. Satisfaction has been defined as a consumer's emotional feelings about a specific consumption experience [2, 3]. It is judgment that a product or a services feature, or the product or service itself, provide a pleasurable level of

consumption related fulfillment. The main beneficiary of a good health care system is clearly a patient. As a customer of healthcare, the patient is the focus of the health care delivery system.

Patient's perceptions about health care system seem to have been largely ignored by the health care managers in the developing countries. Patient satisfaction depends upon many factors such as: quality of clinical services provided, availability of medicine, behavior of doctors and other health staff, cost of the services, hospital infrastructure, physical comfort, emotional

support and respect for patient preferences [4]. Mismatch between patient expectation and the service received is related to decreased satisfaction [5]. Therefore, assessing patient perspectives gives them a voice, which can make public health services more responsive to people's need and expectations [6, 7].

In the recent past, studies on patient satisfaction gained popularity and usefulness as it provides the chance to health care providers and managers to improve the services in the public health facilities. Patient's feedback is necessary to identify problems that need to be resolved in improving the health services. This type of feedback triggers a real interest that can lead to a change in their culture and in the perception of patients [8].

However, there are recent studies that are conducted in India such as those of Sharma et al., (2011); Sodani (2010) both of which have been conducted among patients' of out patient department.[9,10] Few studies has been carried out in India for measuring satisfaction of patients in "Indoor Patient Department" at public health facility. [11, 12, 13].

Hence our study attempts to highlight the patient satisfaction among the investigative patients who have availed the services such as laboratory, X-Ray, ultra sonography, and ECG services. The aim of our study is to identify the key factors that affect patients' satisfaction among the investigative patients in the non-clinical services.

The purpose of present study is to carry out the evaluation of public health facility by getting feedback from investigative patients. The present paper is based on a comprehensive study conducted at the public health facilities in the State of Madhya Pradesh to measure patient satisfaction in the respondents who have availed services of Outdoor Patient Department, Indoor Patient Department and Diagnostic/Investigative. The main objective of this paper is to share the findings on patient's satisfaction about various components of investigative services. In the study, the investigative services are "An examination, test, study, or procedure performed to identify the condition that is causing symptoms or to determine the status of a condition". Most diagnostic services take place in an outpatient setting, although some may require a hospital admission or overnight stay in a hospital or diagnostic facility.

MATERIALS AND METHODS

The state is divided into eight administrative divisions. To have a representative sample of the state, one district has been identified from each of the division. The identified districts were Vidisha, Morena, Gwalior, Indore, Jabalpur, Sidhi, Sagar, and Ujjain. To select the investigative patients from each district, a sample of investigative patients were drawn from the public health facilities i.e. District Hospital (DH), Civil Hospital (CH) and Community Health Centers (CHC). From each of the selected district, one DH, one CH and one CHC were identified. Table 1 shows the distribution of 280 investigative patients covered from the 24 public health facilities of the state.

Table 1: Distribution of Investigative Patients according to the type of Public Health Facilities

Sample Unit	DH	CH	CHC	Total
No. of Facilities	8	8	8	24
No. of investigative patients	170	69	41	280

DH - District Hospital, CH - Civil Hospital, CHC - Community Health Center

To carry out the proper scientific study, a set of well structured questionnaire containing closed ended questions were developed. The questionnaire was pre tested. The finalized questionnaire was translated into Hindi, the state language for administering purposes. The questionnaire covered the information related to the patient's socio-economic characteristics and perception towards laboratory, X-Ray, ultra sonography and ECG services. The data were collected with the help of trained field investigators during the months of September and October 2007. The state government facilitated data collection from the various facilities.

RESULTS AND DISCUSSIONS

Background Characteristics of the Investigative Patients

The characteristics details include the information on sex, age groups, place of residence and education level of the investigative patients in the hospital. It can be observed from table 2 that out of 280 investigative patients, 158 (56.4%) patients were

male and rest 122 (43.6%) were female. The interviewed patients were further divided into different four age groups i.e. 0-15 years, 16-30 years, 31-50 years and 50 years and above. Findings depict that number of investigative patients belonging to the age group of 0-15 years were 8 (2.9%) and 118 (42.1%) belongs to the age group of 16-30 years. However, number of investigative patients belongs to the age group of 31-50 years and 50 and above were 112 (40.0%) and 42 (15.0%) respectively. Data shows that 151 (53.9%) patients were from rural areas while rest 129 (46.1%) were from urban areas. It can be observed that the proportion of rural and urban areas is almost equal in the case of District Hospital and Civil Hospital. However, the proportion of patients belongs to rural areas were high at community health centers. The main reason of this is because the CHC is situated in the rural areas. Findings shows that the education level of the patients were very low and 86 (30.7%) were illiterate; 42 (15.0%) were primary passed and 44 (15.7%) were middle passed.

Table 2: Sex, Age and Education Level of the Investigative Patients at Public Health Facilities

Indicators	DH N=170	CH N=69	CHC N=41	Total N=280 (%)
Sex				
Male	97	40	21	158 (56.4)
Female	73	29	20	122 (43.6)
Age Group (in years)				
0-15	5	1	2	8 (2.9)
16-30	70	28	20	118 (42.1)
31-50	72	27	13	112 (40.0)
≥50	23	13	6	42 (15.0)
Place of Residence				
Urban	86	35	8	129 (46.1)
Rural	84	34	33	151 (53.9)
Education Level				
Illiterate	51	25	10	86 (30.7)
Primary	26	10	6	42 (15.0)
Middle	23	11	10	44 (15.7)
Secondary	30	7	6	43 (15.4)
Higher	40	16	9	65 (23.2)
Secondary				

DH - District Hospital, CH - Civil Hospital, CHC - Community Health Center

From rest of them 43 (15.4%) were secondary passed and 65 (23.2%) were higher secondary and above passed. The place of residence and poor socio-economic background was the main

reason of lower level of literacy among the investigative patients.

Laboratory Services

Data were collected on overall perception of investigative patients regarding the laboratory services including problem of overcrowding, test facility, behaviour of lab technicians, and maintaining privacy and confidentiality. Out of 280 investigative patients only 162 have availed laboratory services.

Regarding the problem of overcrowding in the laboratory, 98 (60.5%) of the respondents said that there was no over-crowding. Data were also collected to know the perception of patients about the test facilities at public health facilities. Findings shows that 109 (67.3%) patients reported that the test facility was good and rest 53 (32.7%) reported it satisfactory. 144 (88.9%) patients found the behavior of lab technician good and rest 18 (11.1%) reported it satisfactory. Findings on privacy and confidentiality at laboratory shows that most of the patients (50.6%) reported it good and 71 (43.8%) said it satisfactory. However, rest 9 (5.6%) considered it poor.

Table 3: Perception of the Investigative Patients Regarding the Laboratory Services at Public Health Facilities

Variables	DH N=82	CH N=41	CHC N=39	Total (%) n=162
Problem of Over-crowding				
Yes	44	13	7	64 (39.5)
No	38	28	32	98 (60.5)
Test Facility				
Good	54	28	27	109 (67.3)
Satisfactory	28	13	12	53 (32.7)
Behaviour of Lab Technician				
Good	70	37	37	144 (88.9)
Satisfactory	12	4	2	18 (11.1)
Maintaining Privacy and Confidentiality				
Good	40	23	19	82 (50.6)
Satisfactory	37	15	19	71 (43.8)
Poor	5	3	1	9 (5.6)

DH - District Hospital, CH - Civil Hospital, CHC - Community Health Center

X-Ray Services

Table 4 explains the perception of patients regarding the X-Ray services in the public hospitals. Out of 280 patients who have used the

investigative services only 100 have used the X-ray services in the hospital. Out of these 100 investigative patients, almost half of them (51.0%) reported the problem of overcrowding. Regarding the test facilities, 76 respondents (76.0%) considered it good and the remaining 24 % said it satisfactory. 92 respondents out of 100, reported that they like the behavior of radiographer and rest 8 % said it satisfactory. Regarding maintaining privacy and confidentiality, 55 found it good while rest 45 respondents reported it satisfactory.

Table 4: Perception of the Investigative Patients Regarding the X-Ray Services at Public Health Facilities

Variables	DH N=72	CH N=27	CHC N=1	Total (%)
Problem of Overcrowding				
Yes	41	10	0	51 (51.0)
No	31	17	1	49 (49.0)
Test facility				
Good	53	22	1	76 (76.0)
Satisfactory	19	5	0	24 (24.0)
Behaviour of Radiographer				
Good	66	25	1	92 (92.0)
Satisfactory	6	2	0	8 (8.0)
Maintaining privacy and confidentiality				
Good	38	16	1	55 (55.0)
Satisfactory	34	11	0	45 (45.0)

DH - District Hospital, CH - Civil Hospital, CHC - Community Health Center

Ultra Sonography Services

Table 5 shows the perception of patients regarding ultra sonography services. It can be observed from the table that only 10 patients used ultra sonography services out of 280 investigative patients. It is because the ultra sonography facility was only available in the District Hospital (DH).

Majority of the patients who have used the ultra sonography services only 9 (90.0%) said that there is a problem of overcrowding. Regarding the test facility, data depict that 90% respondents who have used the ultra sonography service found the test facility good and rest found it satisfactory. Regarding the behavior of ultra sonography technician 80.0% respondents reported that the behavior was good and remaining 20.0% said it satisfactory. Half of the respondents reported that the

privacy and confidentiality was good while rest found it satisfactory.

Table 5: Perception of the Patients Regarding the Ultra sonography Services at Public Health Facilities

Variables	DH (%)
Problem of Overcrowding	
Yes	9 (90.0)
No	1 (10.0)
Total	10 (100.0)
Test facility	
Good	9 (90.0)
Satisfactory	1 (10.0)
Total	10 (100.0)
Behaviour of Ultrasonography Technician	
Good	8 (80.0)
Satisfactory	2 (20.0)
Total	10 (100.0)
Maintaining Privacy and Confidentiality	
Good	5 (50.0)
Satisfactory	5 (50.0)
Total	10 (100.0)

DH - District Hospital, CH - Civil Hospital, CHC - Community Health Center

ECG Services

ECG services were not available in all the health facilities. It was available only in district hospitals and civil hospitals. Out of 280 interviewed investigative patients, only 16 (15 in DH and 1 in CH) have used the ECG facility from these hospitals. 11 (68.8%) patients out of 16 who have availed the ECG facility reported that test facility was good but found the problem of overcrowding. Regarding the behaviour of the ECG Technicians, 13 (81.2%) respondents found the behavior good and the remaining 3 (18.8%) reported it satisfactory. Findings on maintaining privacy and confidentiality in ECG services, half of the respondents found it good while rest reported it satisfactory.

Table 6: Perception of the Patients Regarding the ECG Services at Public Health Facilities

Variables	DH	CH	Total (%)
Problem of Overcrowding			
Yes	11	0	11 (68.8)
No	4	1	5 (31.2)
Total	15	1	16 (100.0)
Test facility			

Good	10	1	11 (68.8)
Satisfactory	5	0	5 (31.2)
Total	15	1	16 (100.0)

Behaviour of ECG Technician

Good	12	1	13 (81.2)
Satisfactory	3	0	3 (18.8)
Total	15	1	16 (100.0)

Maintaining Privacy and Confidentiality

Good	8	0	8 (50.0)
Satisfactory	7	1	8 (50.0)
Total	15	1	16 (100.0)

DH - District Hospital, CH - Civil Hospital,
CHC - Community Health Center

CONCLUSION

The study findings suggest that the following measures may be taken by the policy makers and hospital administrators to increase the patient satisfaction at the public health facilities: 1). Efforts should be made to reduce the patient load at the higher level facilities by made services available at lower level public health facility; 2). Efforts are also needed to strengthen the infrastructure and human resources at the public health facilities. The findings of the present study can be utilized to improve the investigative services at public health facilities of the state resulting in the more satisfaction of the patients availing such facility.

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