

SHOP WINDOW OF THE HOSPITAL: SERVICE DELIVERY PERCEPTION BY THE PATIENTS – AN EXPERIENCE AT A TEACHING HOSPITAL

Healthcare

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ABSTRACT

Introduction: The outpatient department is the shop window of the hospital and first contact point. The objective is to study work flow and service perception.

Methods: A Pilot study was conducted for one month to identify points of care. Cross sectional study for a period of one year were framed with pre-structured questionnaire having four point Likert scale in domains of front office, billing, consultation, ancillary and facilities. The overall opinion and difference with past experience by review patients was also assessed.

Results and Conclusions : The parameters for which patients opined very good to good were consultation (94.50%), front office and billing (85.21%), ancillary services (78.40%) and facilities (84.40%). 12.50% were dissatisfied with consultation, 14.79% about billing, 21.60% about sample collection and 14.80% about facilities. the overall opinion was very good to good (86.66%).

Recommendations: Regular monitoring and supervision by the administration to reduce delays at all points of care.

KEYWORDS

Work flow, Perception, delays

Back ground

Outpatient department apart from Emergency constitutes Shop window or Peep window of the hospital. The expectations and perceptions are highly uncertain and reflects on the service delivered by the hospital. At every point of care the patient and their attendees face different experiences while interacting with diverse group of employees with different levels of knowledge, skills, attitudes and varied infrastructural facilities. This complex environment of first contact creates the impression on the patient and their family.

Objectives:

1. To study the work flow of patient reporting to the outpatient department at teaching hospital.
2. To measure the satisfaction of OPD patients in the teaching hospital.

Methods:

Study Design and Setting

A pilot study has been conducted over a period of one month to understand the various processes involved starting from the entry to the exit of the patients. The sequences of Point of care (POC) by the patients / attendants have been identified.

The objectives and benefits of the study were explained in verbal and written consent has been obtained. The study protocol was approved by the Institutional Ethical Committee and the permission to conduct the study was granted by the Medical Superintendent.

Exclusion Criteria

Patients who are not willing, cognitively impaired and who have already completed the survey were excluded

Data Collection

The data was collected through trained executive in the OPD at random selection of patient covering all the specialties in the block. The questionnaire was sorted out for defects and then entered Entered, stored in a database, A code sheet prepared and analyzed using excel, percentages and SPSS. Overall opinion and comparison of two periods was made with Bar chart.

Data setting

As a cross – sectional study, patients who were registered in outpatient department of Narayana Medical College Hospital, Nellore, AP, India over a period of one year i.e. July- December 2016 (period I) and January - June 2017(period II). Convenience sampling was done for selection of patients registered in OPDs. Total of 11,815 patients were included in the study. The questionnaire was translated in local language Telugu which was reviewed and approved by the team of experts.

Basing on the point of care, a pre-structured questionnaire was framed with four point liker scale i.e., Very Good, Good, Fair, Poor.15 parameters were categorised into four domains. First domain, Front Office and billing - consists of May I help U, Outpatient registration, wheel chair facility and billing services. Second domain- Consultation - Doctor Consultation. Third domain – Ancillary services - sample collection, radiology, reports and pharmacy. The fourth domain- Facilities -lifts, toilets, drinking water and waiting hall with café.

Are you coming for first time? Indicates the percentage of repeat patients. How do you know and came to the hospital? Analyzes the factors of communication and information about the hospital and referral pattern by various means. Do you recommend this hospital to others - reflects the overall satisfied patient basing on final impression.

Limitations ;

The service delivery in terms of patient satisfaction is only assessed and the subjective bias cannot be completely excluded

Results and Discussion:

The **first period study** (table 1) revealed the following findings (**Table I**)

85.21% felt V.good to good about front office and building.94.50% had good opinion about doctor consultation.78.40% obtained V.good to good about supportive services like lab, radiology, reports collection and pharmacy.84.40% felt good about facilities like lifts, toilets, drinking water, waiting hall with cafe and wheel chair. Overall impression 86.66% about V.good to good about the outpatient services. Out of the review/ repeat patients 84.25% patients felt that there is

improvement in services and facilities when compared with their past experience to the hospital.

On the other side 14.79% felt there is delay in billing for the investigations. 21.60% obtained that problem at sample collection, bar coding and reports collection. 14.80% faced problem at toilets, lifts and wheel chair.

The **second period of study** (table 2) revealed the following findings (**Table II**)

87.95% of the sample opined very good to good about the front office and billing. 96.66% felt very good to good about doctor's consultations. 85.04% expressed very good to good about ancillary services like sample collection, X-rays, reports issue, and pharmacy. 90.05% perceived very good to good of the facilities like waiting hall, lifts, toilet and drinking water facilities. Overall opinion is very good to good by 93.50 % of patients 92.83 % of patients reacted and compared with the previous experience is found to be better. by review patients On the other hand, 5.25% of patients felt fair to poor of front office and billing 2.5% of consultation, 7.75% of ancillary services, 7.92% about facilities and finally 5% felt that the services have to be improved further when compared with previous experience.

The descriptive data of the two study periods is found to be statistically significant (**Table III**).

The overall opinion has been analysed for both periods of study i.e. July to Dec 2016 and Jan- June 2017. (**Bar chart I**)

All the domains have been compared to find the difference in experience by the patients or attendees when compared with the past experience. This indicates the opinion by review patients (**Bar chart II**)

The study done by KS prasanna et al in 2009 found that the availability of services and clinical care was found to be satisfactory. The average time required for doctor consultation was 46.5 ± 20.9 min. The cost of investigation was significantly moderate or high in 97% of the respondents.⁵

The majority of patients were satisfied with the patient-physician interaction, technical competency, and administrative efficiency in an Outpatient Clinics study by d subedi et al in 2014.⁶

The study by Mustafa et al in 2015 study revealed the Percent mean score for satisfaction (7 items) was $(84.14 \pm 7.97\%)$ with the medication side effect explanation is (68%), while, the overall patients' satisfaction (5 items) was $89.4 \pm 5.64\%$ and care provision got least satisfaction (83%).⁷

The study in 2014 assessed that JCOs predominantly expressed lower satisfaction judgement with several attributes. Overall satisfaction of services were rated lower by JCOs (2.56) when compared with Officers and ORs (3.10), the difference being statistically significant⁸. Hospitals that increase the value of care and patient satisfaction ensure patients will revisit and also increase revenue by taking appropriate steps. The importance of being customer centric has been recently realized by the Health Care sector worldwide¹⁰

The study in 2011 by Juliat et al., revealed technical competence of provider, convenience and availability of services prescribed drugs were the strongest predictor of general satisfaction.¹²

The study done in Malaysia by Kurubaran et al., in 2014 found satisfaction was low in terms of the "time spent with doctor," "interpersonal manners," and "communication" during consultations. Gender, income level, and purpose of visit to the clinic were important correlates of patient satisfaction.¹³

In a study done at PGIMER Chandigarh, at exit, 52 (86.6 percent) patients were satisfied with the OPD care. The mean total quality score was 80.9 percent of the total scores. It was above 90 percent of the total score for patient convenience facilities and for doctor-patient interaction,¹⁴

1. Are you coming for first time to NMCH?

- **July to Dec 2016.** Yes 2653 (47.91%) No 2884 (52.08%)

- **Jan to June 2017.** Yes 2332 (37.14%) No 3946 (62.85%)

47.91% are first visit patients in the first period of study and 37.14% in the second period of study .52.08% are the review patients in the first period 62.85% in the second period are review patients.

2. Do you recommend NMCH to others?

- **July to Dec 2016** Yes 5349 (96.60%), No 180 (3.40%)
- **Jan to June 2017** Yes 6202 (98.78%), No 75 (1.19%)

96.60% in the first period and 98.78% in the second period are willing to recommend the hospital to others.

3. How do you know and came to NMCH

Jun to Dec 2016	Jan to June 2017
• Doctors referral 6.90%	• Doctors referral 4.0%
• Newspaper/ TV 2.89%	• Newspaper/ TV 4.0%
• Camps 7.66%	• Camps 4.0%
• Friends/ Relatives 51.63%	• Friends/ Relatives 39.74%
• Previous Experience 30.93%	• Previous Experience 45.44%

This domain concludes the referral pattern and how information reaches patients, attenders and community at large so that they are visiting the hospital. The word of mouth by friends and relatives ranging from 39.74% to 51.63% is significant along with previous good experience which they had is ranging from 30.93% to 45.44% It is found that the reputation and experience has been enhanced from 30.93% to 45.44% among the sample of patients.

RECOMMENDATIONS:

An appointment system, considering the idle time of both the parties, must be designed to reduce the long waiting times in the consultation in the departments.

Continuous evaluation of patient satisfaction is to be part and parcel of the general health care delivery by Outpatient clinics.⁶ Management should implement measures to improve the responsiveness of services by ensuring prompt delivery of services. Effort to improve service orientation among doctors through periodical professional development programs at hospital and national level is essential to boost the country's health service satisfaction¹³. Hospitals should encourage good patient-doctor interaction as it has emerged as the key factor associated with patient satisfaction.¹⁴

There is always scope to reduce the waiting time at registration, billing, laboratory, radiology and pharmacy. By further analysing time and motion study.

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Table I : Data for a Period of six months July to Dec 2016 : General hospital OPD

JUL- DEC 2016 (AVERAGE DATA) n =5537				
QUESTIONS	V.GOOD	GOOD	FAIR	POOR
FRONT OFFICE & BILLING				
May I help u	33.10	55.15	9.43	2.32
OP Registration	33.58	60.68	4.87	0.87
Wheel chair	33.91	44.99	10.52	10.58
Billing	20.25	62.45	9.45	7.85
Average	30.21	55.81	8.56	5.40
CONSULTATION				
Doctor	44.67	49.50	3.90	1.93
ANCILLARY SERVICES				
Sample collection	20.85	60.45	14.69	4.05
X rays	18.65	58.25	15.50	7.60
Reports collection	18.35	55.17	19.25	7.43
Pharmacy	19.75	58.66	14.35	7.24
Average	19.40	58.13	15.94	6.58

FACILITIES				
Lift facility	31.05	56.74	10.15	2.06
Toilet facility	22.16	58.94	10.65	8.25
Drinking water	22.80	60.05	8.05	9.10
Waiting hall	21.62	65.76	8.78	3.84
Average	24.40	60.37	9.40	5.81
OVERALL OPINION	20.50	66.16	7.84	5.50
Diff between past and present	18.25	66.24	10.40	5.11

Table II : Data for a Period of six months January to July 2017 : General hospital OPD

JAN- JUN 2017 (AVERAGE DATA) n =6278					
QUESTIONS	V.GOOD	GOOD	FAIR	POOR	NA
FRONT OFFICE & BILLING					
May I help u	41.50	54.17	4.00	0	0.33
OP Registration	34.33	62.33	3.33	0	0
Wheel chair	23.83	51.17	5.50	0.17	18.67
Billing	22.17	62.33	7.50	0.83	7.00
Average	30.45	57.50	5.08	0.25	6.50
CONSULTATION					
Doctor	45.33	51.33	2.00	0.00	1.17
ANCILLARY SERVICES					
Sample collection	20.67	63.83	6.83	0.17	8.50
X rays	20.67	60.50	7.67	0.33	10.83
Reports collection	21.67	63.33	8.00	0.50	7.17
Pharmacy	23.00	66.50	7.50	0.33	2.17
Average	21.50	63.54	7.50	0.33	7.16
FACILITIES					
Lift facility	29.50	62.67	6.17	0.33	1.50
Toilet facility	23.17	63.83	9.50	1.33	2.33
Drinking water	23.83	65.67	7.67	0.83	2.00
Waiting hall	23.83	68.17	6.17	0	2.00
Average	25.08	65.05	7.37	0.62	1.95
OVERALL OPINION	24.33	69.17	5.00	0	1.33
Diff between past and present	25.33	67.50	4.67	0	2.17

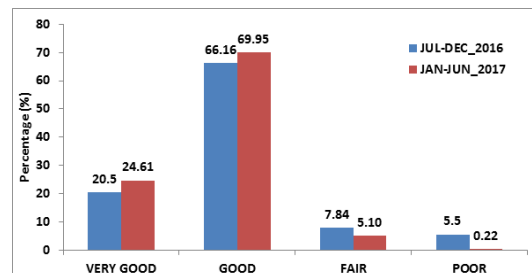
Table III: Descriptive data of the responses

Domain Description	Jul - Dec (2016) No. of patients Sample (n=5537)	Jan - Jun (2017) No. of patients Sample (n=6278)	Chi-sq	P Value (between the descriptive)	Chi-sq	P Value (between the domains)
May I help u	5478	8175	0	< 0.0001	0	< 0.0001
OP Registration	5557	8190	0	< 0.0001		
Wheel chair	4351	6675	32.05	< 0.0001		
Billing	4982	7629	11.21	0.01		
Doctor	5495	8108	17.96	< 0.0001	17.96	< 0.0001
Sample collection	4851	7718	0	< 0.0001	0	< 0.0001
X rays	4625	7333	0	< 0.0001		
Reports collection	4897	7607	0	< 0.0001		
Pharmacy	5234	8019	0	< 0.0001		
Lift facility	5402	8102	0	< 0.0001	0	< 0.0001
Toilet facility	5284	8037	0	< 0.0001		
Drinking water	5337	8039	0	< 0.0001		
Waiting hall	5323	8064	0	< 0.0001		
OVERALL	5324	8102	25.07	< 0.0001	25.07	< 0.0001
Diff between past & present	5249	8016	0	< 0.0001	0	< 0.0001

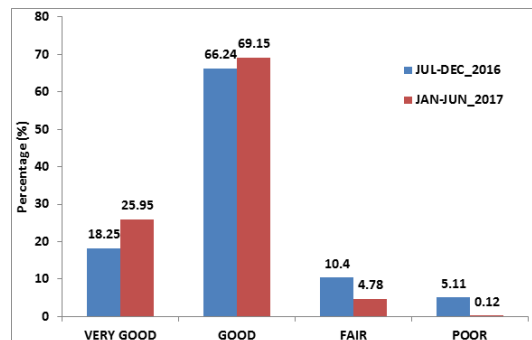
The data analysis showed statistical significance i.e p value < 0.0001 for all domains except billing (Front office, Doctor consultation,

Ancillary services and facilities). The overall opinion and the experience by review patients is also statistically significant with chi square value 25.07, 0 and their p value is < 0.0001.

**Bar Chart I
Overall opinion**



**Bar chart II
Difference between past and present Experience**



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