Original Research Article

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Assessment of patient satisfaction in a tertiary and secondary hospitals of east Godavari district: a comparative study

Pidakala Mary Moses^{1*}, G. Krishna Babu², K. V. S. Prasad³, Jhansi Nadipena²

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*Correspondence:

Dr. Pidakala Mary Moses,

E-mail: marymoses.p@gmail.com

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ABSTRACT

Background: Satisfaction is an important element in the evaluation of services rendered by a hospital. Patient satisfaction is as important as other clinical health measures and is a primary means of measuring the effectiveness of health care delivery. It refers to the patient's state of being adequately rewarded. Patient satisfaction is a measure of success of the services being provided by the hospitals. Objective of the study was to assess the satisfaction levels of the people utilizing various services provided in secondary and tertiary health care delivery settings.

Methods: Observational hospital based comparative study conducted among Inpatients aged 18 yrs and above from different wards who are discharged during the study period and are willing to participate in the study at Secondary and tertiary health care centres of East Godavari District during May 2015 to April 2016. Sample size was calculated using n-master version 2.0. Sample size calculation was based on assumption that the prevalence of patient satisfaction as 50% with mean difference of satisfaction of 15%, confidence interval of 95%, α - error of 5%, power 90%, with effect size 0.3, sample size estimated was 234 in each setting resulting in a cumulative sample size of 702.

Results: It was found that 64.52% of inpatients of District Hospital, Rajahmundry, have expressed neutrality or dissatisfaction regarding overall admission services as compared to 49.14% in Government General Hospital, Kakinada and 14.52% in Area Hospital, Rampachodavaram.

Conclusions: The overall patient satisfaction was observed to be around 80% for all the three hospitals.

Keywords: Dissatisfaction, Health care services, Patient satisfaction, Quality of care

INTRODUCTION

Satisfaction is an important element in the evaluation of services rendered by a hospital. Patient satisfaction is as important as other clinical health measures and is a primary means of measuring the effectiveness of health care delivery. It refers to the patient's state of being adequately rewarded. Patient satisfaction is a measure of success of the services being provided by the hospitals.

Health services should be organized to meet the needs of entire populations and not to selected groups. It should cover the full range of preventive, curative and rehabilitation services. The best way to provide health care to the vast majority of underserved rural people and urban poor is to develop effective primary health care services supported by an appropriate referral system. The aspirations of the people should be satisfied by giving them equal rights to available health care services. Patients are increasingly unhappy with the services

¹Department of Community Medicine, Mamata Academy of Medical Sciences, Bachupally, Hyderabad, Telangana, India

²Department of Community Medicine, Rangaraya Medical College, Kakinada, Andhra Pradesh, India

³Department of Community Medicine, Guntur Medical College, Guntur, Andhra Pradesh, India

provided by the government health sector and more often than not show their displeasure by manhandling physicians and other hospital staff and destroying the hospital property in frustration and anger.

There has been a history of conducting patient satisfaction surveys in 25 area hospitals of the state in 1999. Patient satisfaction surveys have never been conducted in this district so far. Against this background an effort is made to assess and compare patient satisfaction among one teaching hospital, one district hospital and one area hospital based on their geographical location.

Overall aim of the study is to find out and compare the patient satisfaction levels of the healthcare service delivery in selected secondary and tertiary government hospitals of East Godavari District to explore the possibilities of improving quality of service delivery and patient satisfaction.

Objective of the study was to assess the satisfaction levels of the people utilizing various services provided in secondary and tertiary health care delivery settings.

METHODS

Study setting at Government General Hospital (GGH), Kakinada (KKD), District Hospital (DH), Rajahmundry (RJY), Area Hospital (AH), Rampachodavaram (RCVM). Study period was one year i.e. from May 2015 to April 2016. Study design was observational hospital-based study.

Inclusion criteria

Inpatients 18 yrs of age and above from different wards of selected hospitals, who are discharged during the study period, who are willing to participate in the study were included.

Exclusion criteria

Tertiary hospitals attached to private medical colleges, severely ill patients, patient attendants were excluded.

Sample frame

Sample frame for this study is all adult inpatients (>18 yrs) in the departments of medicine, surgery, OBG and orthopedics of the above-mentioned hospitals of East Godavari District.

Sample size

Sample size was calculated using n-master version 2.0. Sample size calculation was based on assumption that the prevalence of patient satisfaction as 50% with mean difference of satisfaction of 15%, confidence interval of 95%, α - error of 5%, power 90%, with effect size 0.3,

sample size estimated was 234 in each setting resulting in a cumulative sample size of 702.

Sampling

In each setting the sample of 234 is divided among various disciplines/departments like Medicine, OBG, Surgery and Orthopedics equally.

Study tools

Stydy tools was predesigned, semi structured questionnaire.

Study variables

Age, sex, education, income (SES), occupation, religion, duration of hospital stays, physical environment, patient satisfaction, accessibility of health care services, variables pertaining to service providers like physician care, nursing care, laboratory services etc.

Data collection

Data collection was done by interview technique using Predesigned, semi structured questionnaire. The interview was conducted after explaining to them the purpose of the study, taking their verbal consent and at a venue chosen by the study participant after establishing enough rapport. Five-point Likert scale was used to measure the level of patient satisfaction (1- completely satisfied, 2- somewhat satisfied, 3- neutral, 4- somewhat dissatisfied, 5- completely dissatisfied).

Satisfaction includes 1 and 2 categories, 3, 4 and 5 categories are included in dissatisfaction. Neutrality usually suggests the unwillingness of the subjects to give a verdict. When a person is happy with the services given, he will not hesitate to give a positive response and hence neutral response 3 is included along with categories 4 and 5. This would enable us to err on the positive side for better implementation of the services.

RESULTS

In the present study 69.23% of patients in Rampachodavaram are in the age group of 18-38 yrs as compared to 51.29% in Rajahmundry and 49.14% in Kakinada. 45.72% of inpatients in Kakinada are illiterates as compared to 39.74% in Rampachodavaram 38.46 % and in Rajahmundry.

Unemployed and home makers comprise 28.62% in Rampachodavaram as compared to 23.07% in Rajahmundry and 26.48% in Kakinada.

Class IV and V SES comprise 76.49% in Kakinada as compared to 82.48% in Rajahmundry 68.18% in Rampachodavaram (Table 1).

Table 1: Socio demographic profile of study subjects of GGH Kakinada, district hospital Rajahmundry and area hospital Rampachodavaram.

Vaniables		Kakinada (n=234)*	Rajahmundry (n=234)*	Rampa (n=234)*
Variables		N (%)	N (%)	N (%)
Age (in years)	18-28	93 (39.74)	107 (45.73)	119 (50.85)
	29-38	22 (9.40)	13 (5.56)	43 (18.38)
	39-48	45 (19.23)	49 (20.94)	20 (8.55)
	49-58	32 (13.68)	31 (13.25)	26 (11.11)
	More than 58	42 (17.95)	34 (14.53)	26 (11.11)
Gender	Males	121 (52)	98 (42)	75 (32)
	Females	113 (48)	136 (58)	159 (68)
Education	Illiterate	107 (45.72)	90 (38.46)	93 (39.74)
	Primary	31 (13.24)	21 (8.97)	36 (15.38)
	Mid school	21(8.97)	44 (18.80)	40 (17.09)
	High school	43 (18.37)	35 (14.95)	37 (15.81)
	Intermediate	20 (8.54)	15 (6.41)	14 (5.98)
	Degree	12 (5.12)	29 (12.39)	14 (5.98)
Occupation	Unemployed	19 (8.11)	17 (7.26)	20 (8.54)
	Home maker	43 (18.37)	37 (15.81)	47 (20.08)
	Unskilled	93 (39.74)	101 (43.16)	117 (50)
	Semi-skilled	64 (27.35)	63 (26.92)	44 (18.80)
	Skilled	10 (4.27)	12 (8.54)	06 (2.56)
	Clerical	3 (1.28)	2 (0.85)	0
	Semi professional	2 (0.85)	2 (0.85)	0
Socio economic status	Class I	0	0	0
	Class II	10 (4.27)	8 (3.42)	15 (6.41)
	Class III	45 (19.23)	33 (14.10)	59 (25.21)
	Class IV	120 (51.28)	129 (55.13)	126 (53.85)
	Class v	59 (25.21)	64 (27.35)	34 (14.53)
Religion	Hindu	180 (76.92)	154(65.81)	198 (84.62)
	Muslim	19 (8.12)	29 (12.39)	12 (5.13)
	Christian	35 (14.96)	51 (21.79)	24 (10.26)

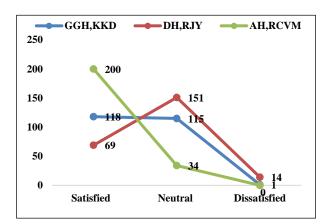


Figure 1: Comparison of overall satisfaction of admission services in three study hospitals (n=234+234+234).

It was found that 64.52% of inpatients of DH, RJY have expressed neutrality/ Dissatisfaction regarding overall admission services as compared to 49.14% in GGH, KKD and 14.52% in AH, RCVM (Figure 2).

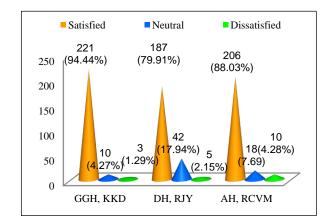


Figure 2: Comparison of overall satisfaction of physical facilities in the three study hospitals (n=234+234+234).

17.94% of inpatients of DH, RJY have expressed neutrality regarding overall satisfaction regarding physical facilities as compared to 7.69% in AH, RCVM and 4.27% in GGH, KKD (Figure 3).

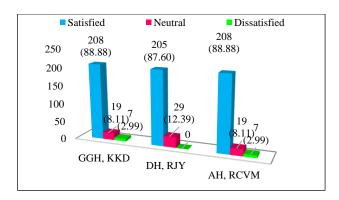


Figure 3: Comparison of overall satisfaction of physician services of three hospitals (n=234+234+234).

It was found that regarding overall satisfaction of physician services in patients of both GGH, KKD and AH, RCVM have expressed similar satisfaction levels i.e. almost (88%) (Figure 3).

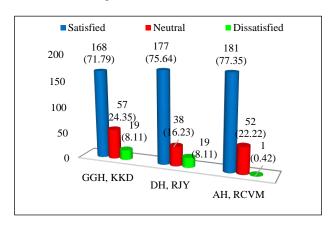


Figure 4: Comparison of overall satisfaction of nursing services of the three study hospitals (n=234+234+234).

Around 1/4th (24.35%) of inpatients of GGH, KKD have shown neutrality about overall satisfaction of nursing services as compared to 22.22% in AH, RCVM and 16.23% in DH, RJY (Figure 4).

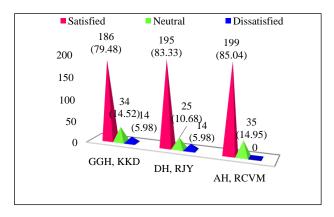


Figure 5: Comparison of overall satisfaction of diagnostic services in the three study hospitals (n=234+234+234).

15-20% of the patients are unhappy with the diagnostic services provided in the three study hospitals (Figure 5).

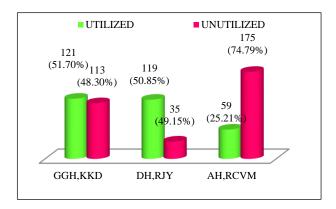


Figure 6: Utilization of radiology services in the three study hospitals (n=234+234+234).

Only 1/4th (25.21%) of inpatients of AH, RCVM have used utilized radiology services as compared to 50% in GGH, KKD and DH, RJY (Figure 16).

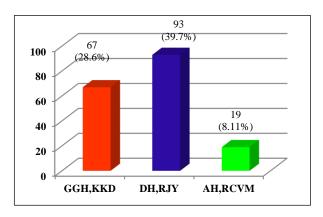


Figure 7: Utilization of transport facility by the patients in all the study hospitals (n=234+234+234).

39.7% of patients have utilized transport facility at DH, RJY as compared to 28.6% at GGH, KKD and 8.11% at AH, RCVM (Figure 7).

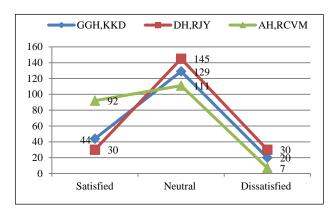


Figure 8: Comparison of overall satisfaction of dietary services in the three study hospitals (n=193+205+210).

It was found that only14.63% of inpatients DH, RJY were satisfied with overall dietary services as compared to 22.79% GGH, KKD and 43.80% in AH, RCVM (Figure 8).

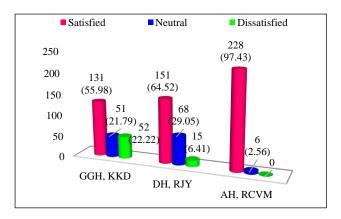


Figure 9: Comparison of overall satisfaction of discharge services in three hospitals (n=234+234+234).

The satisfaction levels at the time of discharge were 55.98% in GGH, KKD as compared to 64.52% at DH, RJY and 97.43% at AH, RCVM (Figure 9).

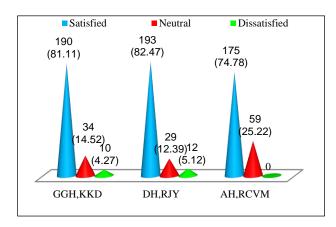


Figure 10: Comparison of overall satisfaction of hospital services in the three study hospitals (n=234+234+234).

25.21% either dissatisfied or unable to give an opinion on the overall services provided by the AH, RCVM as compared to 18.79% in GGH, KKD and 17.51% in DH, RJY (Figure 10).

DISCUSSION

In the present study 69.23% of patients in RCVM are in the age group of 18-38 yrs as compared to 51.29% in RJY and 49.14% in KKD. Singh et al reported that 57% of patients were below 40 yrs of age.² Ghose et al, reported that 60.5% were between 21 to 40 yrs.³

It was found that 64.52% of inpatients of DH, RJY have expressed neutrality or dissatisfaction regarding overall admission services as compared to 49.14% in GGH, KKD and 14.52% in AH, RCVM. Mishra et al, reported that

18% people were dissatisfied with the services at admission counter.⁴

17.94% of inpatients of DH, RJY have expressed neutrality regarding overall satisfaction regarding physical facilities as compared to 7.69% in AH, RCVM and 4.27% in GGH, KKD. Qadri et al observed that 25.1% were dissatisfied.⁵

It was found that regarding overall satisfaction of physician services in patients of both GGH, KKD and AH, RCVM have expressed similar satisfaction levels i.e. almost (88%).

Around 1/4th (24.35%) of inpatients of GGH, KKD have shown neutrality about overall satisfaction of nursing services as compared to 22.22% in AH, RCVM and 16.23% in DH, RJY. Mishra et al revealed that on a whole 90% people were satisfied with the nursing services.⁴

15-20% of the patients are unhappy with the diagnostic services provided in the three study hospitals. Gogoi et al observed that 8.6% were unhappy. Chattopadhyay et al, found that 38.8% were unsatisfied. Sharma et al revealed that 80% were unsatisfied.

Only 1/4th (25.21%) of inpatients of AH, RCVM have used utilized radiology services as compared to 50% in GGH, KKD and DH, RJY. 39.7% of patients have utilized transport facility at DH, RJY as compared to 28.6% at GGH, KKD and 8.11% at AH, RCVM.

It was found that only14.63% of inpatients DH, RJY were satisfied with overall dietary services as compared to 22.79% GGH, KKD and 43.80% in AH, RCVM. In contrary a study by Param Hans Mishra et al 78% people were satisfied with the quality of food served in the hospital.⁴ Singh et al reported that 88.8% were satisfied.² Ghose et al found that 78.9% were satisfied.³

The overall satisfaction/dissatisfaction of the three study hospitals may not be a true representation as is seen in the following tables. This is specially true for AH, RCVM. People have a tendency to say a positive reply when asked in general. The satisfaction levels at the time of discharge were 55.98% in GGH, KKD as compared to 64.52% at DH, RJY and 97.43% at AH, RCVM.

The impression at the time of discharge determines the patient's mindset to recess the hospital services those who are dissatisfied and those who are neutral were more likely to avoid revisits.

25.21% either dissatisfied or unable to give an opinion on the overall services provided by the AH, RCVM as compared to 18.79% in GGH, KKD and 17.51% in DH, RJY. Bilkish et al reported that overall satisfaction was found to be 50.89%. Mahapatra et al conducted a survey in 25 District or Area Hospitals managed by the Andhra

Pradesh Vaidya Vidhana Parishad (APVVP) found that overall level of patient satisfaction in APVVP was about 65%. 10

Comparison of the three hospitals suggests that levels of dissatisfaction were high at DH, RJY and GGH, KKD as compared to AH, RCVM. This does not get reflected in overall satisfaction/ dissatisfaction levels. In AH, RCVM - the reason for high level of dissatisfaction is because of high neutral responses given by the participants.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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