Study on Patient's Satisfaction with Radiology Diagnostics in Selected Hospitals Under Public Private Partnership (PPP) Model

By

Surendra Konatham

Dissertation submitted for the partial fulfillment of the

MBA Pharmaceutical Management

Academic year, 2016-2018

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IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that **Surendra konatham** student of MBA Pharmaceutical Management from The IIHMR University, Jaipur has undergone internship training at Krsnaa diagnostics.Pvt.Ltd. on topic Patient satisfaction with radiology diagnostics in selected hospitals under public private partnership model(PPP model) from 5th Feb 2018 to 4th May 2018.

He has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific, and analytical.
The Internship is in fulfillment of the course requirements.

I wish him all success in all her future endeavors.

Ashok Kaushik
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LET'S DO GOOD...

The certificate is awarded to

Mr. SURENDRA KONATHAM

In recognition of having successfully completed his
Internship in the department of

OPERATIONS MANAGEMENT

and has successfully completed his Project on

PATIENT SATISFACTION WITH RADIOLOGY DIAGNOSTICS IN SELECTED HOSPITALS UNDER PUBLIC-PRIVATE-PARTNERSHIP (PPP) MODE

From 05-02-2018 to 05-05-2018

At KRSNAA DIAGNOSTICS. Pvt. Ltd.

He comes across as a committed, sincere & diligent person who has a strong drive and zeal for learning

We wish him all the best for future endeavors

Mr. Neeraj Bajpai
(General Manager-HR)

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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Study on patient satisfaction with radiology diagnostics in selected hospitals under public private partnership model(PPP model) submitted by Surendra Konatham under the supervision of Dr. Saurabh kumar for award of MBA Pharmaceutical Management of the University carried out during the period from 5th February 2018 to 4th May 2018 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

K. Surendra

Signature

TABLE OF CONTENTS:

The IIHMR UNIVERSITY, JAIPUR ..... **Error! Bookmark not defined.**

LIST OF FIGURES: 4

ACKNOWLEDGEMENT 5

ABBRIVATIONS: 6

COMPANY PROFILE: 7

INTRODUCTION: 9

REVIEW OF LITERATURE: 10

OBJECTIVE 10

RESEARCH METHODOLOGY: 11

DATA COLLECTION TOOL AND PROCEDURES: 11

RESULTS: 13

DISCUSSION: 24

SUGGESTIONS / RECOMMENDATIONS: 25

CONCLUSION: 27

REFERENCES: 28

ANNEXURE: 29

LIST OF FIGURES:

S. NO.	CONTENT	PAGE NO
1	Radiology staff treat you in a friendly & courteous manner	23
2	Register and tell appointment time as soon as patient arrive	24
3	Give information where to pay and give direction	25
4	Provide appropriate time for radiological examination	26
5	Tell patient right to refuse the examination	27
6	Give report to patient on time.	28
7	Waiting area has minimum facilities	29
8	Waiting Time (MRI)	30
9	Clear signs and indications where to go in the service area.	31
10	Radiology staff support you during and after examination	32
11	Explain the procedure of the examination and clear instruction given about the positioning.	33
12	Competency of radiology staff to answer your question	34
13	Cleanliness of examination coach, sheets and pillows	35
14	Availability of dressing room for both male and female	36

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SURENDRA KONATHAM

ABBRIVATIONS:

KDPL**:** Krsnaa diagnostics private limited.

PPP Model: Public Private Partnership model

MRI: Magnetic resonance imaging

CT: Computed tomography

NABH**:** National accreditation board of hospitals & healthcare providers.

PACS: Picture archiving and communication system

TAT: Turn around time

COMPANY PROFILE:

Krsnaa Diagnostic private limited took root in the early part of 2010 and took shape in 2011 with its first, "state of the art" center in DY Patil Group, under the golden leadership of Mr.Rajendra Mutha.

Krsnaa has been second to none in its quest for excellence in the diagnostics field with protocols such as peer review of radiology and pathology reads by some of the most experienced consultants in the field. The radiology and pathology teams have a strong academic program, having authored various national and international papers, these academic achievements then translate into practical applications, enhancing the overall ability of the team to consistently come up with the right diagnosis, time after time, aided also by the sub specialized radiologists and pathologist.

The biggest public private partnership, Krsnaa Diagnostics offers a pan India World class diagnostic facility. Uniformity in high standards with stringent technical quality norms guided by NABH (National Accreditation Board of Hospital and Healthcare Providers to provide best safety practices in imaging technology and to ensure accurate results always.

After having gained the confidence of stakeholders and patients, krsnaa started its expansion to make services available to other parts of the country by bagging the Asia's first PPP project at Himachal Pradesh in establishing 12 District Hospitals in the state of Himachal Pradesh by installing the state of art 'multi slice CT scanners'

The Company operates from its HEAD OFFICE located at PUNE, presently company is located Pan India , operational in 14 states with 1800 plus locations.

Vision

To offer world class healthcare diagnostics services at affordable rates and at the same time do good with the approach of "Let's Do Good..."

Mission

"To provide quality diagnosis at affordable cost to every human." As diagnosis plays a crucial role in the evidence based treatment, we at Krsnaa offer diagnostic services which are very expensive in the market at a very affordable cost ensuring quality to the level of people who cannot afford these services.

QUALITY POLICY

KDPL is committed towards a common goal of achieving total Patient Care and Confidence by delivering Excellent Diagnostics Services.

This commitment and responsibility is practiced and communicated from higher Management to ground level.

Implementing a system which meets the requirements of Quality Management Standard as well as Human, Legal and Ethical standards are clearly demonstrated.

Ensuring empowerment of people to deliver services, which meet patient's needs and their family's expectations and also provide for continual improvement

Establishing and pursuing Quality Objectives and performance standards.

Reviewing of suitability of Quality policy by conducting regular Audits and Reviews.

WORKING MODEL

The firm works on **Public Private Partnership model,** it believes that providing Quality service to the people at affordable cost is at priority.

The Pvt. Ltd. Company ties up with various govt and private hospitals as per tender of the govt. The Company agrees on terms and conditions of the govt in providing the facilities at govt hospitals in field of diagnostics esp CT scan, MRI, X-RAY, PATHOLOGY.

Company mostly operates on the model of PACS (picture archiving and communication system),scans from all over the india centers come to the Pune head office in a designated place termed as HUB.From HUB team of dedicated experts which includes senior and experienced radiologists and technicians distribute the scans to doctors at different locations in a systematic way , there is fixed TAT (Turn Around Time) for each center operating.

KDPL is also operating in various models like FRANCHISE model, in various states.

INTRODUCTION:

The dissatisfaction to the medical treatment dates back to the ancient times. Alexander the Great is quoted as saying ' I die with the help of too many physicians'.The emperor Adrian directed the following words to be inscribed on his tomb 'A multitude of physicians have destroyed me'.[1]

Patient satisfaction can be defines as fulfillment or meeting the expectation of person from service or product.

When a patient comes to a Diagnostic center he has a pre-set image of various aspects as per reputation and cost involved. Although the main expectation is to get the scan done and go back, but there are other factors, which affects their satisfaction. Sometimes their rating for a diagnostic center is low based on information they have, but if they find it above their expectation they are satisfied. Similarly if their expectation is very high and they find it below expectation they will not be satisfied. The expectations of patients and their relatives have increased many folds. High expectation from a diagnostic organization is a positive indicator of reputation in the society and is very important for attracting patients, where as low expectation deters patients from taking a timely medical help, thus negatively affecting patient as well as the medical care provider. However a very high and unrealistic expectation may lead to dissatisfaction despite reasonable good standards of medical practice.

Knowledge of expectation and the factors affecting them, combined with knowledge of actual and perceived health care quality, provides the necessary information for designing and implementing programs to satisfy patients.

Human satisfaction is a very complex concept that is affected by a number of factors like life style, past experience, future expectation and the values of individual and society in terms of ethical and economical standings.

Maslow in 1954 gave hierarchy of needs for satisfaction and motivation of individuals. According to him, needs generally have priority in following order:

1. Physiological
2.Safety and security
3.Sense of belonging
4.Esteem
5.Self-Actualisation.

REVIEW OF LITERATURE:

Quality of health services was traditionally based on professional standard practice. However, in the last few decades, patient's perception about health care is mostly accepted as an important indicator for measuring quality of health care and a critical component of performance improvement and clinical effectiveness [1]. It has been defined that patient satisfaction is the extent to which the patients feel that their needs and expectations are being met by the service provider [2] and also defined as the degree of congruence between a patient's expectations of ideal care and their perception of the real care they receive [3] . The health care industry is undergoing a rapid transformation to meet the ever-increasing needs and demands of its patient population. Respect for patient's needs and wishes, is central to any humane health care system [3, 4].

Studying patient satisfaction has become one of the integral part of the healthcare system. Patient satisfaction is a concept that has been receiving increasing attention reflecting an evolving focus in the service -oriented healthcare market (5).Understanding patient satisfaction also helps in developing new strategies.

The measurement of patient satisfaction through surveys has helped organizations to incorporate patients perspectives as a way to create culture where service is deemed as an important strategic goal for healthcare facilities.

Patient satisfaction tended to be regarded as desirable, also critical to radiology services (7).

Radiological services can be defined simply as services which are rendered to a patient visiting the radiology department which can be either routine services those carried out on a day to day basis or some special examinations that are carried out on special cases that require the use of contrast agents(8).

Within hospital system, radiological services play an important role in influencing satisfaction of patient. The procedure related discomforts ranging from regular procedures to unique and emergency procedures pose unique challenges.

Patient care involves all activities that are carried out before, during and after radiological diagnostic procedure to make the condition of patients better have a great role in influencing patient satisfaction. From the observational aspect it was noted that patients mostly react to some factors which create problems in department like delay, neglect, use of harsh words, unnecessary repeats and preferential examinations. Patents arrived in dept are mostly worried and in aggressive mode.(10).

OBJECTIVE:

To investigate patient's satisfaction with radiology diagnostics in selected hospitals under public private partnership model (PPP model).

RESEARCH METHODOLOGY:

STUDY SETTING:

The study was conducted in firm which has undertaken various Diagnostic facilities in Governments. The firm is based on the Public Private Partnership model, the study was conducted in Radiology Department of the KDPL in the Government setups located in areas of ANDHRA PRADESH, ODISHA and TAMILNADU. Out of these 3 states TN & ODISHA having 7 MRI centers and AP is having 4 CT centers. These centers were taken into consideration for the purpose of the study.

STUDY DESIGN:

Institutional based cross sectional study.

STUDY POPULATION:

The study population included all the patients who visited and got MRI Scan services from outsourced department of Govt Hospitals in TN, ODISHA and AP. It includes patients from IPD and OPD and also patients which come from other Hospitals and Clinics.

SAMPLE SIZE: 150

SAMPLING: Purposive sampling.

MEASUREMENT:

Patient satisfaction is defined as the patients' opinion about radiological service delivered in KDPL and it was measured by accessibility of service, courtesy of radiology staff, quality of radiological service, existence of good communication with service provider and desk worker, physical environment and privacy technique. To get mean score, patients response from these variables were summed up and divided by total number of questions (variables) used to measure patient satisfaction

DATA COLLECTION TOOL AND PROCEDURES:

Exit interviews of patients were conducted using a structured questionnaire.

The first part of the questionnaire was the information of the patient's socio-demographic characteristics.

The second part asks patient satisfaction towards radiological services with different variables related to accessibility of service, courtesy of radiology staff, quality of radiological service, existence of good communication with service provider and desk worker, physical environment and privacy considerations.

ETHICAL CONSIDERATIONS:

An informed consent will be taken of all the individuals who are participating in the interview process. All potential participants will be given a chance to ask questions before starting any of the research activities.

Confidentiality of the data provided to the researcher will be maintained and an agreement will be signed by the researcher for the permitted use of the data, and for maintaining the confidentiality of the details.

ANALYSIS:

The collected data was entered into excel sheet and analysis was done using MS EXCEL.

RESULTS:

The data collected from the patient satisfaction survey was analysed and the following interpretations or findings were made out of the collected data:

1. Radiology staff treats in friendly and courteous manner.

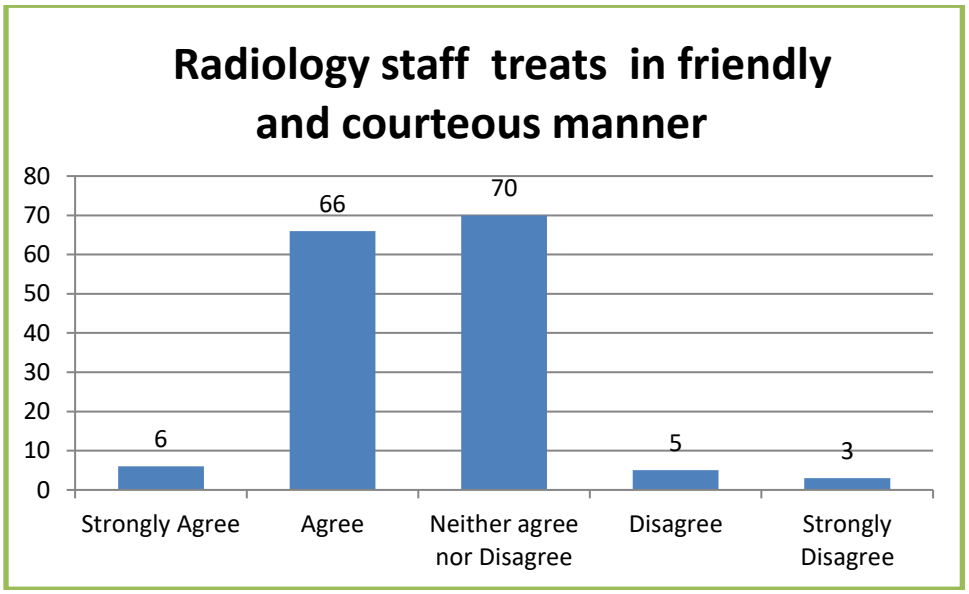

Figure.1 Radiology staff treats in friendly and courteous manner.

Among the respondents it is observed that 47% of respondents neither agree nor disagree that radiology staff treats them in a friendly & courteous manner.
44% respondents agreed that radiology staff treats them in a friendly & courteous manner.
4% respondents strongly agreed that radiology staff treats them in a friendly manner.

2. Register and tell about appointment time as soon as patient arrives.

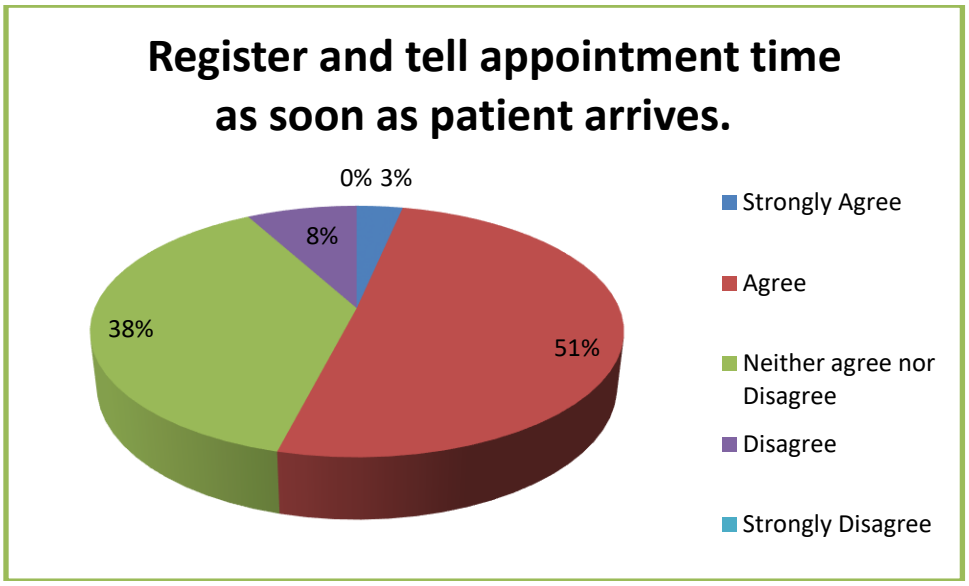

Figure.2 Register and tell about appointment time as soon as patient arrives.

Among the respondents it is observed that 51% of respondents agreed that registration & telling appointment time as soon as patient arrives.

38% respondents neither agree nor disagree that registration & telling appointment time as soon as patient arrives.

8% respondents strongly agreed that registration & telling appointment time as soon as patient arrives.

3. Giving information where to pay and direction.

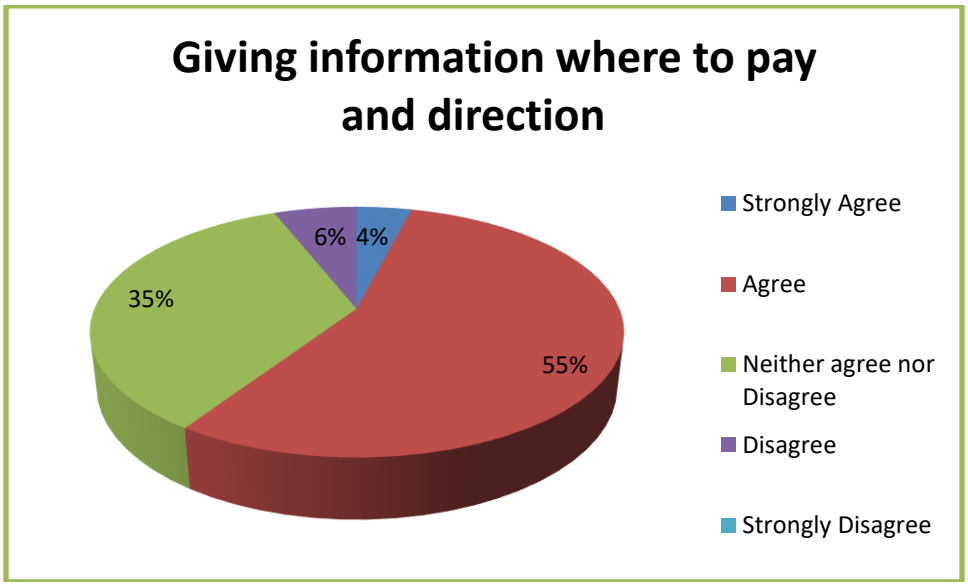

Figure.3 Giving information where to pay and direction.

Among the respondents it is observed that 55% of respondents agreed that staff is giving proper information where to pay and direction for further process.
35% respondents neither agreed nor disagreed that staff is giving proper information where to pay and direction for further process.
6% respondents strongly agreed that staff is giving proper information where to pay and direction for further process.

4. Providing appropriate time for radiological examination.

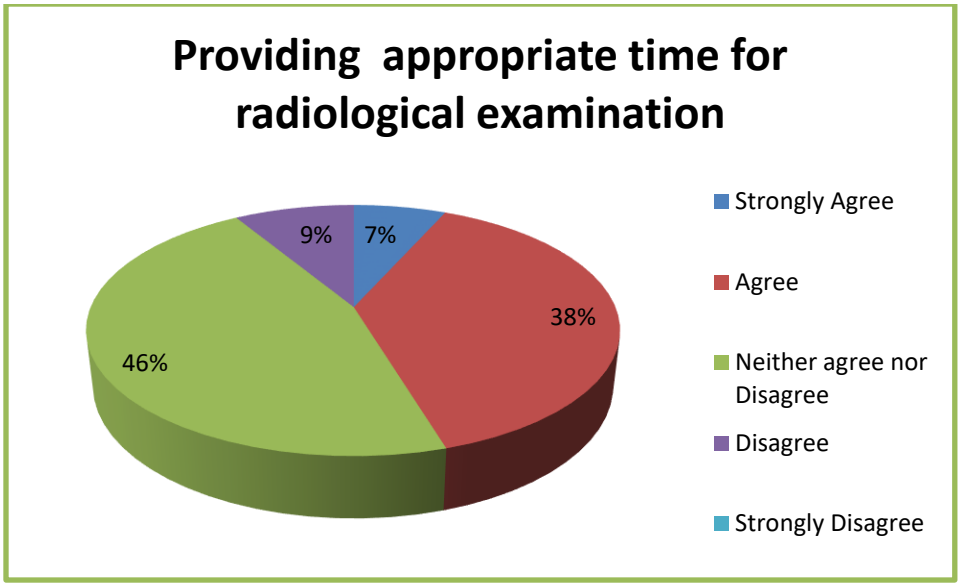

Figure.4 Providing appropriate time for radiological examination.

Among the respondents it is observed that 46% of respondents neither agreed nor disagree that staff is providing appropriate time for radiological examination.
38% respondents agreed that staff is providing appropriate time for radiological examination.
9% respondents strongly disagreed that staff is providing appropriate time for radiological examination.

5. Tell patient's rights to refuse their examination.

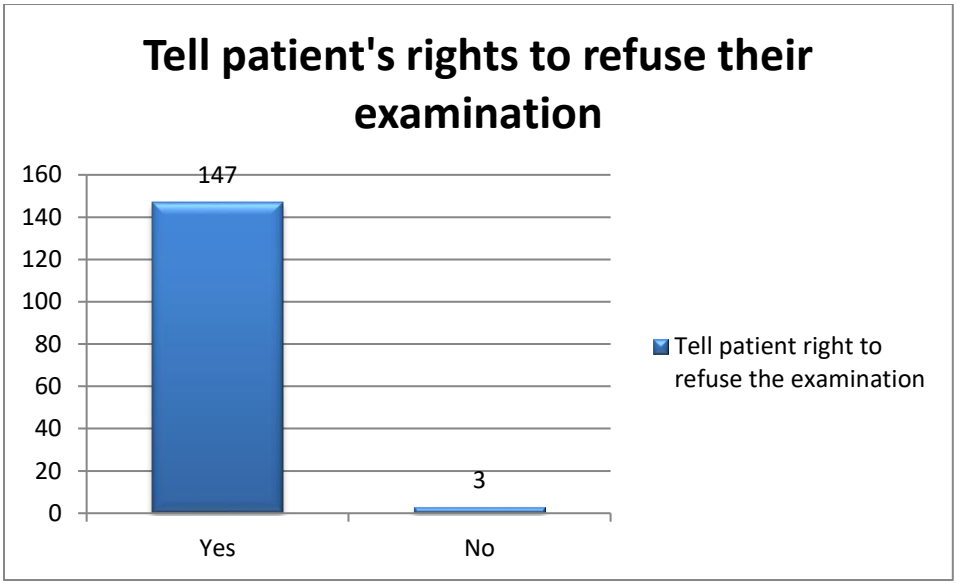

Figure.5 Tell patient's rights to refuse their examination.

Among the respondents it is observed that 98% of respondents agree that staff is conveying that its their right to refuse the examination.

6. Getting reports on time.

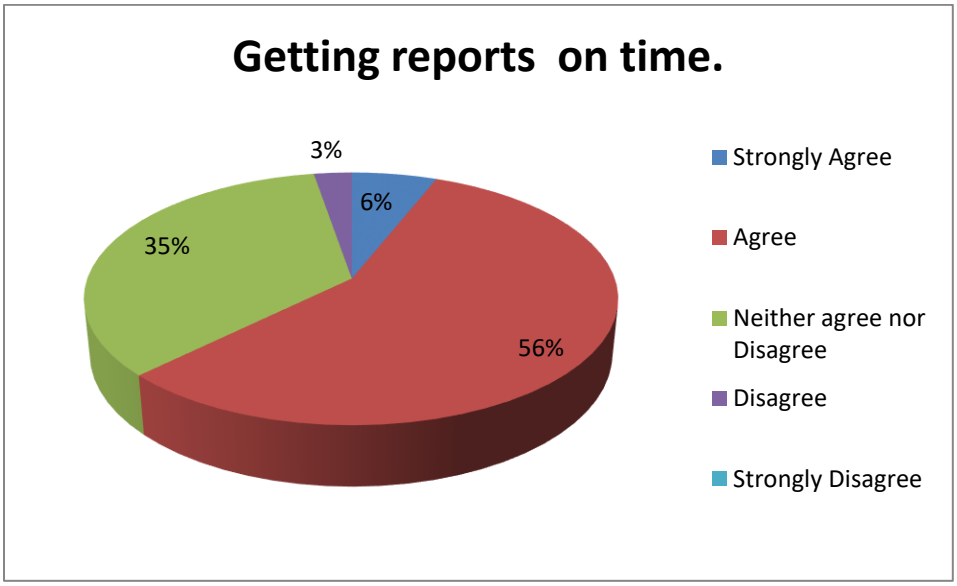

Figure.6: Getting reports on time.

Among the respondents it is observed that 56% of respondents agree that they are getting reports on time.

35% of respondents neither agree nor disagree that they are getting reports on time.

7. Waiting area has minimum facilities.

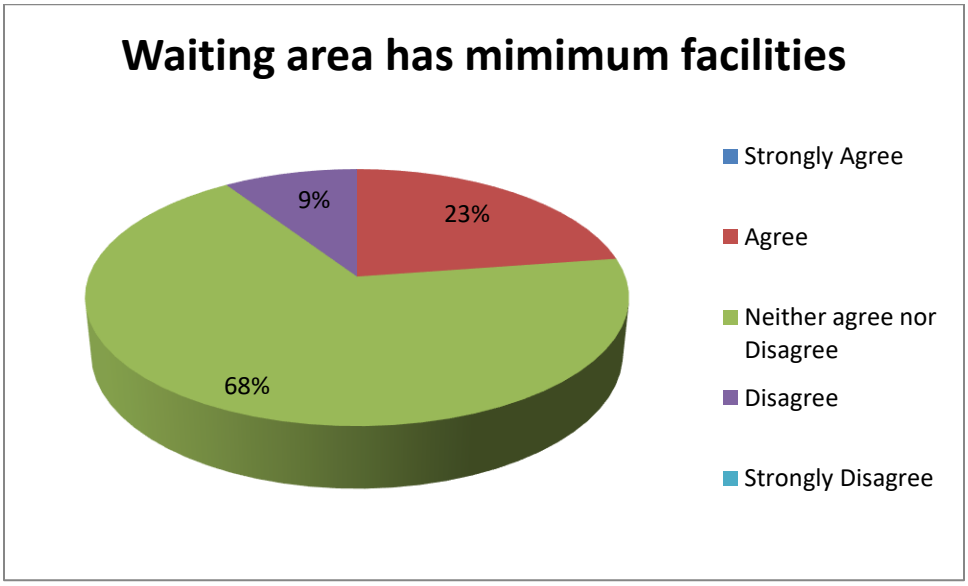

Figure.7 waiting area has minimum facilities.

Among the respondents it is observed that 68% of respondents neither agree nor disagree that waiting area has minimum facilities.

23% of respondents agree that waiting area has minimum facilities.

8. Waiting time for MRI.

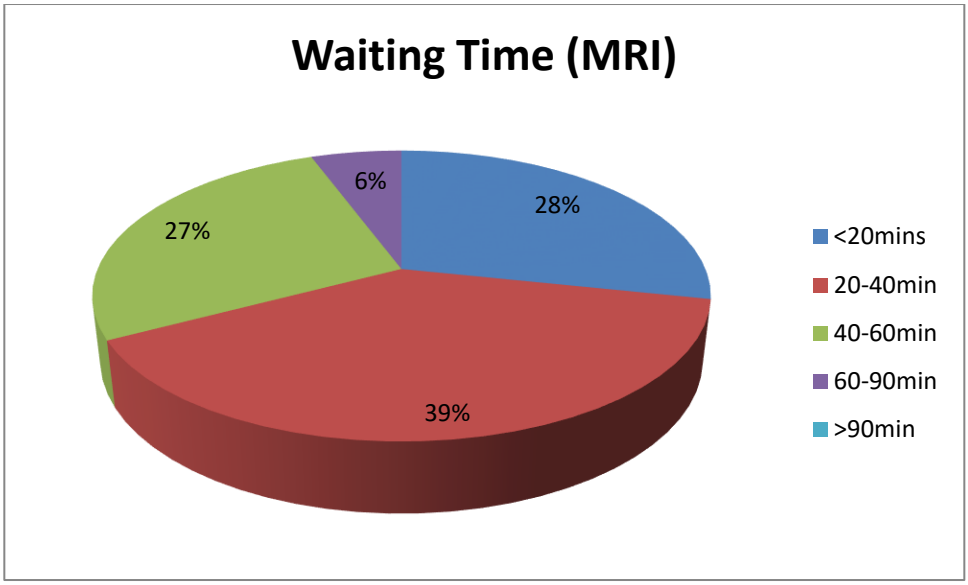

Figure 8: Waiting time for MRI.

Among the respondents it is observed that waiting time is 20-40 mins for 39% of respondents

Waiting time is between 40-60 mins for 27% of respondents.

9. Clear sings and indications where to go in service area.

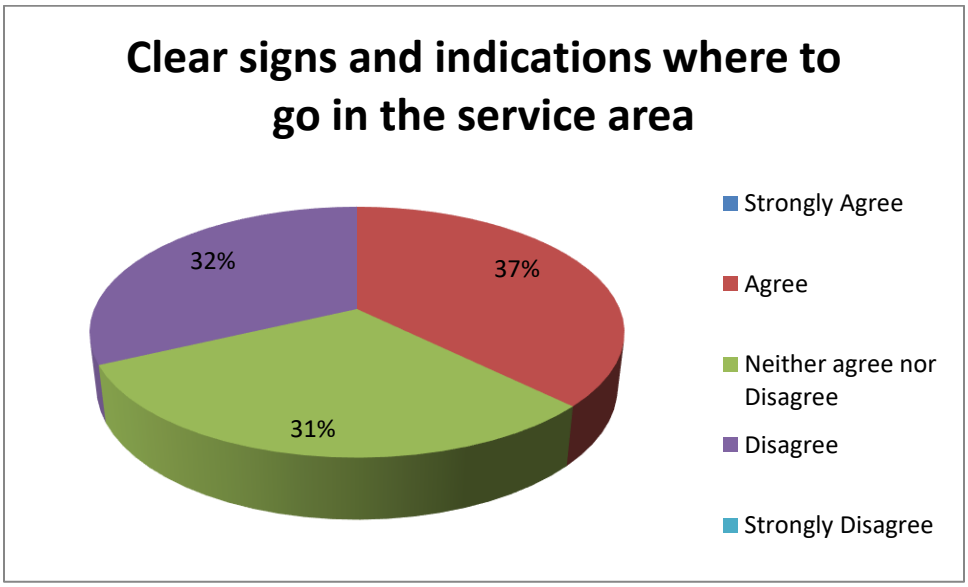

Figure 9: Clear sings and indications where to go in service area.

Among the respondents it is observed that 37% of respondents agree that there are clear signs and indications where to go to service area.

32% of respondents disagree that there are clear signs and indications where to go to service area.

10. Radiology staff support you during and after examination.

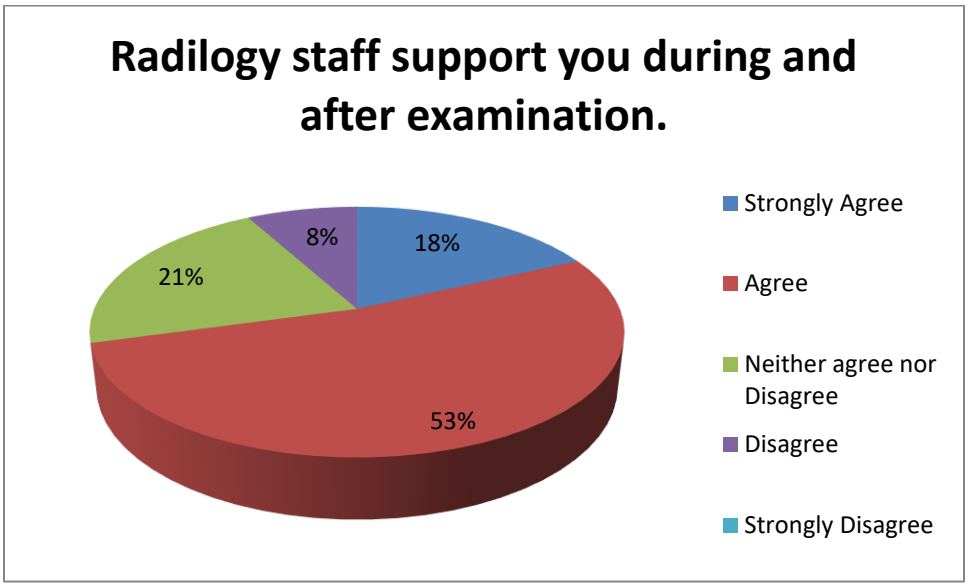

Figure 10: Radiology staff support you during and after examination.

Among the respondents it is observed that 53% of respondents agree that staff is supporting them during and after examination.

21% of respondents neither agree nor disagree that staff is supporting them during & after examination.

11. Explain the procedure of the exam and clear instruction given about the positioning.

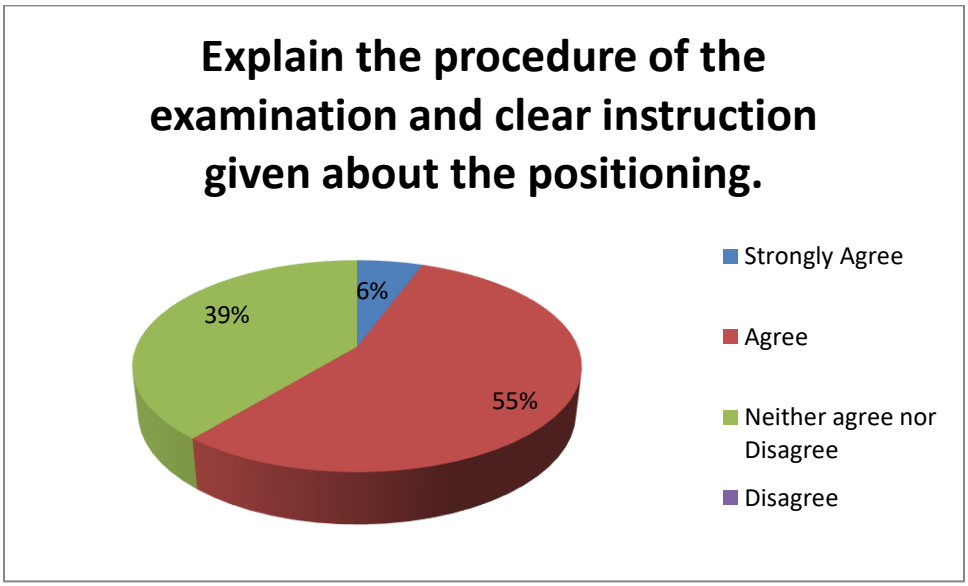

Figure 11: Explain the procedure of the exam and clear instruction given about the positioning.

Among the respondents it is observed that 55% of respondents agree that the procedure of the examination & clear instruction given about the positioning is explained by staff.

39% neither agree nor disagree about the procedure of the examination & clear instruction given about the positioning is explained by staff.

12. Competency of radiology staff to answer your question.

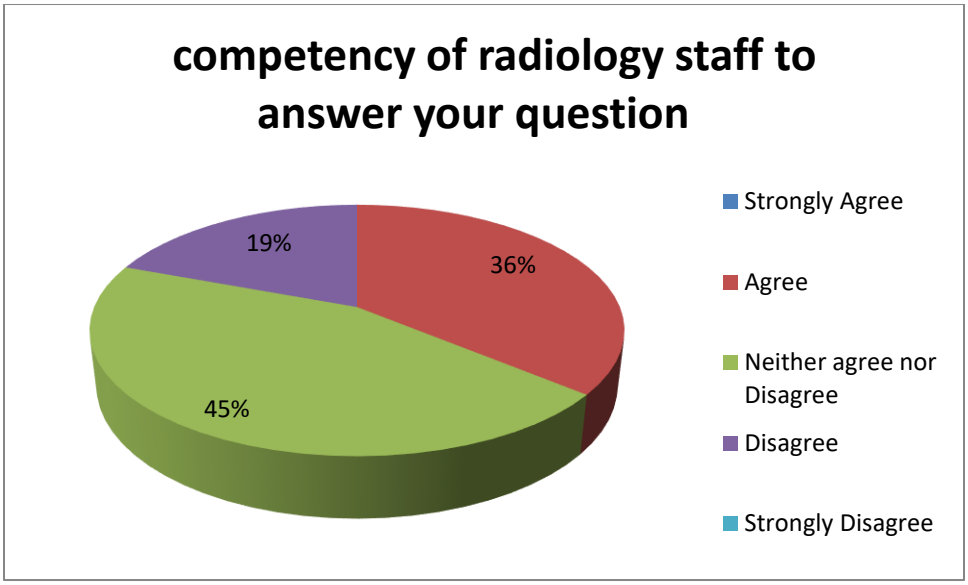

Figure 12: Competency of radiology staff to answer your question.

Among the respondents it is observed that 45% of respondents neither agree nor disagree that competency of radiology staff to answer their questions.

36% agree that competency of radiology staff to answer their questions.

13. Cleanliness of examination coach, sheets & pillows.

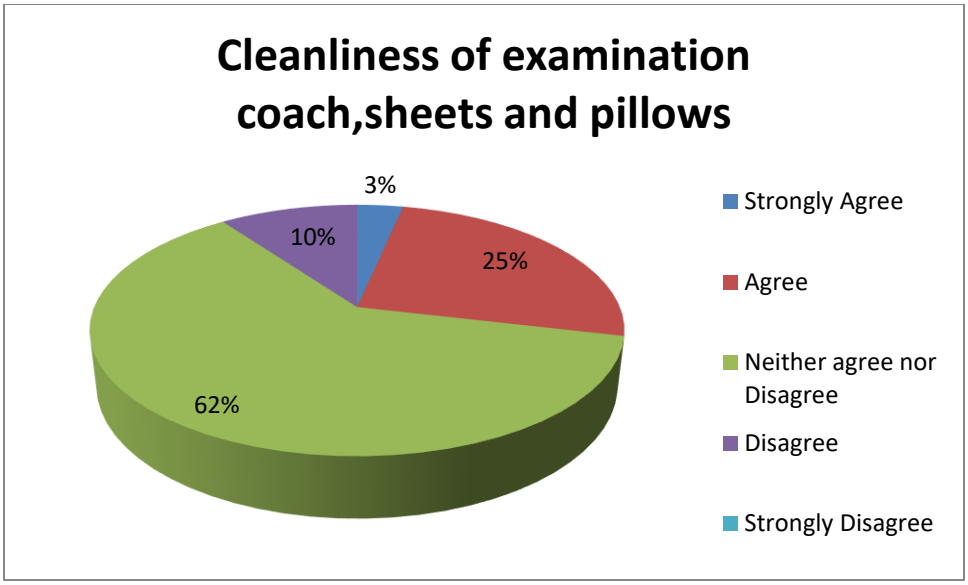

Figure 13: Cleanliness of examination coach, sheets & pillows.

Among the respondents it is observed that 62% of respondents neither agree nor disagree that cleanliness of examination coach, sheets & pillows.

25% of respondents agree that cleanliness of examination coach, sheets & pillows.

14. Availability of dressing room for both male and female.

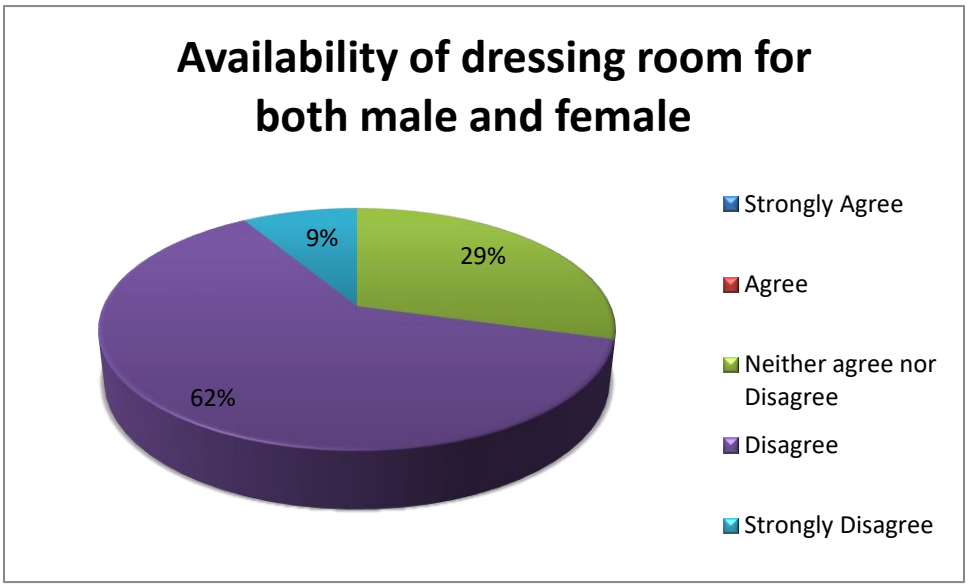

Figure 14: Availability of dressing room for both male and female.

Among the respondents it is observed that 62% of respondents disagree that there is availability of dressing room for both male & female.

44% of respondents neither agree nor disagree that there is availability of dressing room for both male & female.

DISCUSSION:

The level of satisfaction of the patient mainly depends on the mission and vision of the company which is very well infused into the staff till the bottom level'

Major area which is considered while understanding the patient satisfaction in MRI scan services was Quality of the Radiological service, out of the sample size selected maximum patients were very positive about the quality of the radiological service delivered to them at KDPL.

So we can conclude that KDPL is excellent in providing the quality services at an affordable price.

Major area focused on the interaction between the patient and the service provider, maximum patients were satisfied with the communication with the service provider.

Further there are certain barriers which add to the decrease in the satisfaction level, the education level of the patients influences it as the most of the population in the sample size in mostly undergraduate or senior secondary level. All this comes as a barrier to achieve the highest level of the patient satisfaction.

KDPL gives its maximum possible to the service delivery at the end point to the journey of the patient more comfortable.

Another area which was chosen to access the patient satisfaction in MRI scan services of KDPL was the Communication and process which patient encountered with the desk worker or reception, the reception at each center contributes a lot to the satisfaction of the patient , a set of well behaved, well groomed and well equipped with knowledge people are enough to increase the patient satisfaction. Total of 115 patients were satisfied out of 150 patients with desk worker.

The patients are mostly dealt for the most of the time by the reception staff. Further the level of satisfaction also depends on the some latent factors like earlier experience of the patient with some other service provider, literacy level of the patient and attendants, condition of the patient and psychological state of the patient, the geographical location of the center.

KDPL has focuses on continues improvements of the loopholes though some latent factors could not be covered up.

Another major area that was covered in assessing the patient satisfaction was the Comfort of the patient with the Physical environment of the center.

Again as the center is present in the Govt setups and is providing the state of art infrastructure so the patient satisfaction in regard to this is more than 80%, despite the facilities like television are not at most of the centers but still the patient satisfaction with regard to Physical environment is up to mark.

This benchmark can be reached if some limitations are walked over and Facilities like TV are made available at centers, which is already present at many centers. Other than this other facilities like newspapers, info Brochures etc are kept at centers to engage the patients.

Last major area which was covered to understand the patient satisfaction was the privacy concerns of the patients.

Around 76% of the patients are satisfied with the privacy concerns , the drop in the satisfaction is due to some inbuilt factors of the infrastructure as the modality exists in govt sector so at certain places the space provided to KDPL is not enough to cater to the facilities like restrooms for patients so conjoint use of hospital rest rooms is being done, KDPL assures that facility is well maintained but providing KDPL level infrastructure in govt rest rooms goes out of way.

SUGGESTIONS / RECOMMENDATIONS:

1. Proper training to staff regarding the communication pattern and knowledge upgradtion of the technical staff.

2. Implementation of the documentation process with complete compliance at the center level

3. Use of the data collected at the center level for the promotion of the company, it is possible only when the ground staff is well aware of the importance of the data collection.

4. Up gradation of the equipment at few centers.

5. Clear cut description of the roles and responsibilities so that everyone gives his/her 100% in performing job.

6. Monitoring the quality of work produced and frequent checks to ensure the quality work, like frequent checks for documentation and other protocols.

9. Apply set protocols to all centers to smoothen out the process of monitoring and delegating staff.

10. Focus on the marketing segment, many unexplored sectors in the area exist which needs to be taken care of to increase the business.

11. Basic training about maintaining the stock level at the center and assist with near by centers whenever there is some short fall of stock.

12. Daily documentation of the stock used and its reconciliation with the real stock.

13. Focus on the main encounter points of the patients which can add plus point to the service delivery.

14. Train the reception staff to understand the patient point of view and be maximum possible compassionate with them.

15. Timely and scheduled sessions of the fire drill should be conducted.

16. Train the technical staff as well as reception staff to counsel the patient so that patient understands the details of the scan he is to undergo and raises no questions and concerns in his mind.

CONCLUSION:

Studying patient satisfaction with radiological service is very important given the fact that patients are usually unfamiliar with the complexities of radiological examination and the sophistication of equipment involved in the procedure. In this study, it was found that the majority of the respondents were satisfied with the radiological services. Patients were satisfied with access to radiological service, courtesy of radiological service, quality of radiological service, also with service provider and also with desk workers; but, there was some dissatisfaction with the physical environment and the privacy concerns, which are not completely into the part of the KDPL, still improvements can be made in the said areas. Respondents level of education, occupational status were found to influence patient satisfaction towards radiological service. Hence, concerted effort is needed to constantly improve on patient satisfaction to better radiology returns arising from improved patient patronage. Greater attention needs to be given to the interplay between patients' socio-demographic factors and time taken to enter into examination room. Furthermore, periodical study focusing on patients' satisfaction in the department should be implemented to keep up with the change of the phenomena.

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ANNEXURE:

SOCIO DEMOGRAPHIC DATA

1. Name:

2.Age: 3. UID: 4. SEX:

5.Marital status: a) SINGLE b)MARRIED c) DIVORCED d)WIDOWED

6.Occupation: 7:Monthly income:

SATISFACTION LEVEL

VARIABLE	Strongly Agree	Agree	Neither agree nor Disagree	Disagree	Strongly Disagree
1.Radiology staff treat in friendly and courteous manner.					
2.Register and tell appointment time as soon as patient arrive.					
3.Give information where to pay and give direction.					
4.Provide appropriate time for radiological examination					
4.Tell patient right to refuse the examination.					
5.Give report to patient on time.					
6.Waiting area has minimum facilities.					
7.Waiting Time (MRI)	<20mins	20-40min	40-60min	60-90min	>90min
8.Clear signs and indications where to go in the service area.					
9.Radilogy staff support you during and after examination.					
10.Explain the procedure of the examination and clear instruction given about the positioning.					
11.competency of radiology staff to answer your question.					
12.Cleanliness of examination coach,sheets and pillows.					
13.Availability of dressing room for both male and female.					