

DISSERTATION

At

CENTRE FOR SIGHT , SAFDARJUNG ENCLAVE PROCESS ANALYSIS OF OPD TO REDUCE WAITING TIME

 \mathbf{BY}

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PG/20/077

Under the guidance of DR. SUKESH BHARDWAJ

PGDM (Hospital & Health Management)

2020-22



International Institute of Health Management Research New Delhi

(Completion of Dissertation from respective organization)

The certificate is awarded to

Name: SHRUTI ARORA

In recognition of having successfully completed her internship in the department of

OPERATIONS

And has successfully completed her project titled:

"PROCESS ANALYSIS OF OPD TO REDUCE WAITING TIME"

Date: 22nd APRIL 2022 - 22nd JUNE 2022

ORGANIZATION - CENTRE FOR SIGHT, SAFDARJUNG ENCLAVE, Delhi, 110029.

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

We wish her all the best for future endeavors.

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This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from and other dissertation, monograph, report or book.

DR. SUKESH BHARDWAJ Assistant Professor& IT Incharge IIHMR Organization Mentor Name

Certificate of Approval

The Summer Internship Project of titled "Centre for Sight, Safdarjung Enclave Process Analysis of OPD to Reduce Waiting Time" at Centre for Sight is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of Post Graduate Diploma in Health and Hospital Management for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the report only for the purpose it is submitted.

Dr. Ashok Agarwal

TO WHOMSOEVER IT MAY CONCERN

This is to certify that SHRUTI ARORA student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at CENTRE FOR SIGHT, SAFDARJUNG ENCLAVE from 25th APRIL to 25th JULY 2022.

The Candidate has successfully carried out the study designated to him/her during internship training and his/her approach to the study has been sincere, scientific and analytical.

The internship is in fulfilment of the course requirements.

I wish her all success in all his/her future endeavors.

Dr. Sumesh Kumar Associate Dean, Academic and Student Affairs IIHMR, New Delhi.

Mentor Or. Sukesh Bhardwaj)
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INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

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This is to certify that the dissertation titled PROCESS ANALYSIS OF OPD TO REDUCE WAITING TIME and submitted by SHRUTI ARORA Enrollment No. PG/20/077 under the supervision of DR. SUKESH BHARDWAJ for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 22nd APRIL 2022 to 22nd JULY 2022. 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.

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Course Specialization (Choose one)	Hospital Management	Health Management	Healthcare IT
Name of Guide/Supervisor	Dr./ Prot .: Suices!	H BHAR PHAS	
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FEEDBACK FORM

Name of the student: SHRUTI ARORA

Name of the organization in which dissertation has been completed: CENTRE FOR SIGHT, SAFDARJUNG ENCLAVE, DELHI.

Area of Dissertation: OPERATION DEPART MENT

100%, PUNCTUAL & DISCIPLINED Attendance:

Objective achieved: To ANALYZE THE WHOLE OPD PROCESS, & REDUCE OVERALL TAT (TURN AROUND TIME) - 100%.

Deliverables: PATIENT JOURNEY TIME RECORDED, ACHIEVE MINIMUM (or per Standards) TAT, PATIENT OVERL SATISFACTION ACRIEVED. Strengths: LEADERSHIP, DEDICATION, OPEN TO NEW TASK,

Suggestion for Improvement:

- LAN BE MORE PUNCTUAL at times . - COULD TACKLE MULTIPLE TASK.

Suggestions for Institute (course curriculum industry, interaction, placement, alumni):

SYMPATHETIC .

- SHOULD PROVID SHORT DURATION DESSECTATION (PROJECT IN BETWEEN ACADEMIC SESSION FOR BETTER PRAKTICAL EXPOSURES

Signature of the Officer In charge /ofganization

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A Mahindra Collaboration

TO WHOM SO EVER IT MAY CONCERN

RESEARCHER NAME: SHRUTI ARORA

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My name is shruti Arora. I'm studying from International Institute of Health Management(IIHMR)Delhi. I have been collecting, data from daily operations report to support my study. The title of my study is "Process analysis of OPD to reduce waiting time." at Centre for sight, Safdarjung from 1st April to 31st May 2022

The information I am collecting is totally confidential , will not be disclose to anyone and will solely used for research purposes. The patient name, contact number, and personal details of patients will be removed from the checklist and only hospital MRD will be used.

I have taken consent to take the relevant data from the respective authority.

Mr. Sandeep Dogra Centre Manager. Centre for sight Managel Safdaria GENTRE FOR SIGHT Saldarjung Enclave

CENTRE FOR SIGHT 8-5/24, Saldarjung Enclave. New Delhi - 110029 Contact No : 9717669394

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ACKNOWLEDGEMENT

Summer training is a golden opportunity for learning and self-development. I consider myself fortunate for having been provided with an opportunity to undergo my summer training at Centre For Sight Eye Institute, Safdarjung Enclave, New Delhi. In this institute I have had the privilege to get to know many people who generously shared their experiences and knowledge with me. I would like to express my sincere gratitude to Mr. Sandeep Dogra sir (CENTRE MANAGER) and Miss. Rajvinder mam in Operations Department for her continuous guidance, which inspite of being busy with her duties, took time to hear and guide me, gave helpful advice and constructive comments throughout the project. Her valuable inputs made this project possible. The administrative staffs of the hospital have been very helpful to me and I would like to express my deep gratitude to all.

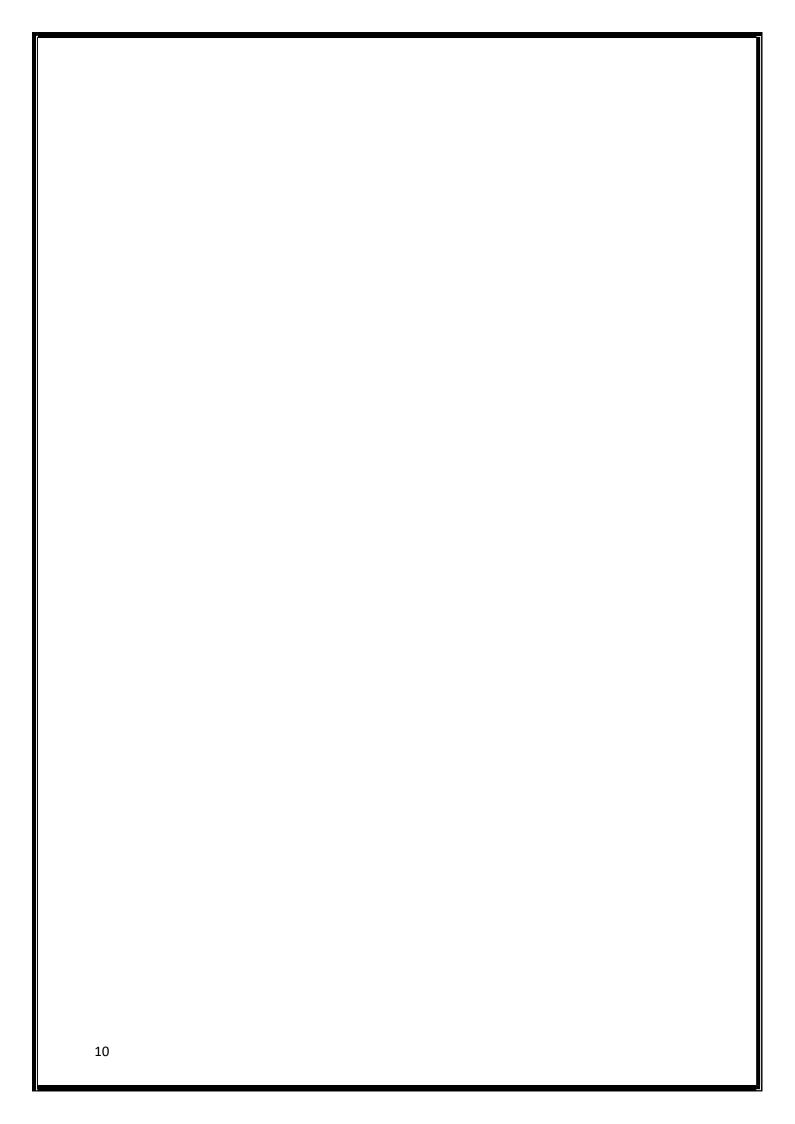
I would also like to thank my Mentor Dr. Sukesh Bhardwaj for guiding me during my whole dissertation period.

SHRUTI ARORA

CERTIFCATE OF APPROVAL		
11		

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ABBREVAIATIONS:

- **CFS-** CENTRE FOR SIGHT
- IOL- INTRA OCULAR LENSES
- NABH- NATIONAL ACCREDIATED BOARD FOR HOSPITAL AND HEALTHCARE PROVIDERS
- OCT- OPTICAL COHERENCE TOMOGRAPHY
- FFA-FUNDUS FLORESCENCE ANGIOGRAPHY
- HVF- HUMPROFY VISUAL FIELD ANALYZER
- **IPD-** INPATIENT DEPARTMENT
- **OPD-** OUTPATIENT DEPARTMENT

PART A- ORGANIZATIONAL LEARNING CENTRE FOR SIGHT, SAFDARJUNG ENCLAVE



INTRODUCTION

Driven by the mission to provide the best eye care to all, Centre for Sight has carefully handpicked a team of more than 150+ doctors from premier institutions across the country. We have pan-India reachability with 50 eye care centres across the country. Our recently opened, state-of-the-art facility: Centre for Sight Eye Institute at Dwarka, Delhi is one of the largest private comprehensive super speciality eye Institute in north India. Centre for Sight is registered in many states under the Nursing Home Act by the Directorate General of Health Services. We are on the panel of many reputed public sector undertakings, corporates, and TPAs. Our eye bank is well established and situated at our Preet Vihar, Delhi centre.

Established in 1996 by Dr. Mahipal S Sachdev, an eminent ophthalmologist, and Padma Shri awardee, Centre for Sight (CFS) is a leading eye care provider in India. Centre for Sight is the pioneer in high-quality vision care for over two decades. Driven by the mission to provide the best eye care to all, it is registered in many states under the Nursing Home Act by the Directorate General of Health Services. It is on the panel of many reputed public sector undertakings, corporates, and TPAs.

Centre for Sight offers the entire range of modern ophthalmic treatments to its patients. It is registered in many states under the Nursing Home Act by the Directorate General of Health Services. Centre for Sight has its eye bank at Preet Vihar, Delhi.

Centre For Sight won the prestigious Frost & Sullivan award as the eyecare provider company of the year 2010 & 2014, an affirmation of its values. It was awarded the prestigious FICCI Healthcare Excellence award for operational excellence in 2012. CFS also won the ET Now Leaders Of Tomorrow award for business Excellence in 2014. It also received the "Best Single Speciality Hospital Chain 2016" at Businessworld's 3rd Healthcare Summit & Awards.

CFS Group of hospitals chairman & MD, Dr. Mahipal S Sachdev, received a lifetime achievement award at Times Health Achiever Delhi NCR 2017. Also, the hospital was awarded the best single specialty hospital in the same conclave. These awards are recognition of our committed efforts to make eye care a super specialty in India.

CHAIRMAN MESSAGE:

In Keeping with our philosophy, "Every Eye Deserves The Best we at Centre for Sight have always strived to offer the very best to ophthalmic patients. We have consistently been at the forefront of delivering specialized eye care services for various disorders of the eye.

At Centre for Sight, we feel a sense of pride in our team of specialists meticulously handpicked from premier institutions across the country. Our ophthalmologists have received several national and international recognition for their achievements in the field of eye care.

Patient-centric values guide Centre for Sight, and we endeavor to provide personalized care to all. From essential diagnostic and therapeutic services to complex operative procedures, all activities are carried out under one roof.

Through dedication, professionalism, and perseverance, Centre for Sight is confident of achieving its goal of bringing quality eye care to people across India.

Prof. Dr Mahipal S Sachdev (Padma Shri Awardee)

Chairman & Medical Director Centre for Sight Group of Eye Hospitals

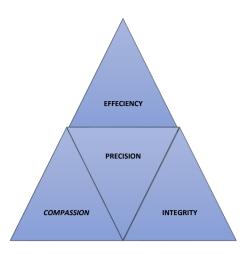
MISSION:

mission to provide the best eye care to all, Centre for Sight has carefully handpicked a team of more than 150+doctors from premier institutions across the country.

VISION:

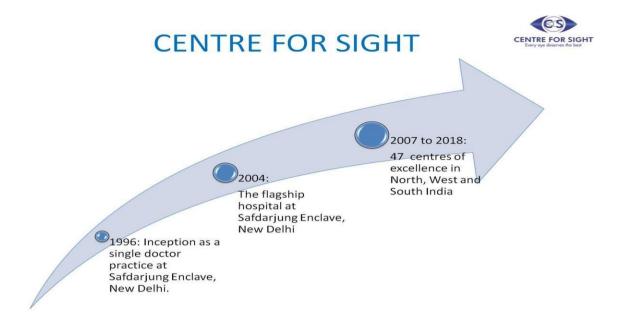
To estblish the most preffered rand of super specialized world class eye care facilities in and around India by 2025.

VALUES:



OUALITY POLICY

- To provide quality of care that exceeds the patient's expectations.
- To adhere to operational protocols of institute, in order to reduce errors and enhance patient safety.
- To comply with all statutory and regulatory requirements.
- To promote on the job training to improve skills and competence of the staff.
- To ensure health and safety of the staff members.



FACILITY LAYOUT AND DEPARTMENTS:

FLOOR	SPECIALITY
Basement	Laboratory investigation room, dr. consultation room
Ground floor	Pharmacy, opticals, Reception, Dr. Consultation rooms, Optom Chamber.
First floor	3Dr. Consultation rooms, 3 optom chambers, reception.
Second floor	Operation theatre
Third floor	LASIK OT, PTO
Basement 2	Paedritic OPD

AWARDS AND ACCREDIATION

- Padmashree awarded to Dr. Mahipal Sachdev in year 2007.
- > Times Healthcare Achiever's Award for Best Single Specialty Hospital in 2017.
- Trusted Hospital Award by Reader's Digest Summit in 2018.
- ➤ Best Eye Care Hospital of North India 2019 & 2020 by "THE WEEK Hansa Research Survey"
- ➤ Best Healthcare Brands by "The Economic Times 2021"

SCOPE OF SERVICES

TABLE 1.

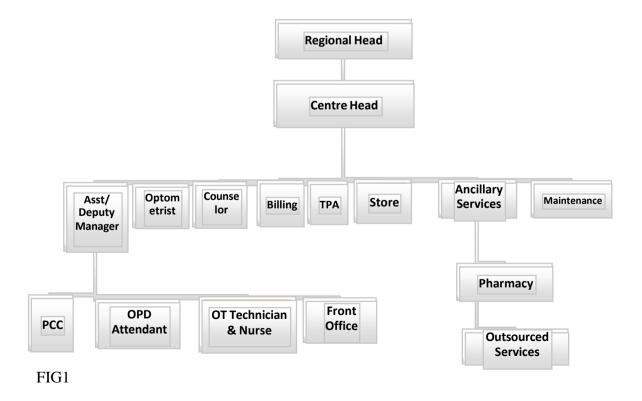
LASIK AND REFRACTIVE SURGERIES	CFS VISION	OCULAPLASTY
GLAUCOMA TREATMENT	CONTURA VISION	NEUROOPHTHALMOLOGY
COMPUTER VISION SYNDROME	Optical	KERATOCONOUS TREATMENT
OCULAR SURFACE AND DYE EYE	ADVANCE RETINA SURGERIES	CORNEA SERVICES

DIAGNOSTIC SERVICES

TABLE 2.

A Scan Biometry	Gonioscopy
IOL Master Biometry	Keratoconus Work Up
OCT	Humphrey Field Analyzer
Fundus Fluorescein Angiography	Auto – Refractometry
Fundus Photography	Diplopia Charting
Keratometry	Squint Work Up
Pachymetry	Anterior Segment photography
Corneal Topography/ Sirius (Corneal work up)	Specular Microscopy
Tonometry	Contact lens/soft lens work up

CFSEI-HIERARCHY



MAN-POWER DETAILS

TABLE 3.

CATEGORY OF STAFF	NO'S
CONSULTANT (FULL TIME)	25
VISITING CONSULTANT	0
ANASTHESIA CONSULTANT(VISITING)	2
NURSE	7
SUPPORT STAFF	21
PHARMACIST	4
OPTOMETRIST	20
MANAGERIAL	3
TOTAL	82

OUT-SOURCED SERVICES AT CENTRE FOR SIGHT

- > Security: Tiger Security Services
- **Emergency & Ambulance**: Manipal Hospital & Ayushmaan Hospital, Dwarka, New Delhi
- ➤ Laundry: Amit Laundry & Dry Cleaners

DEPARTMENT WISE OVESERVATIONS (OPERATION)

I have been placed as an operation management trainee at Centre for Sight Eye Institute. In the department I have learnt about the basic of the operations.

- ➤ Learnt about the staff management which include Doctors, Front desk, opd attendants, Counsellors and Optometrist.
- ➤ Block management of Doctors at HMIS system
- > Managing appointments of doctor at daily basis.
- Rescheduling the appointments as per the Doctors on Leave, OT and emergency cases in IPD.
- ➤ Have brief knowledge of the working of Front desk, Floors, Diagnosis, Pharmacy, Counselling department, optometrist and IPD.
- > Daily Operational Report.
- ➤ Work on the MRD audit of the patients.
- Work on the clinical audit of the patients.
- > NABH Accreditation.
- ➤ I have learnt about the admission process and discharge process of the patients.

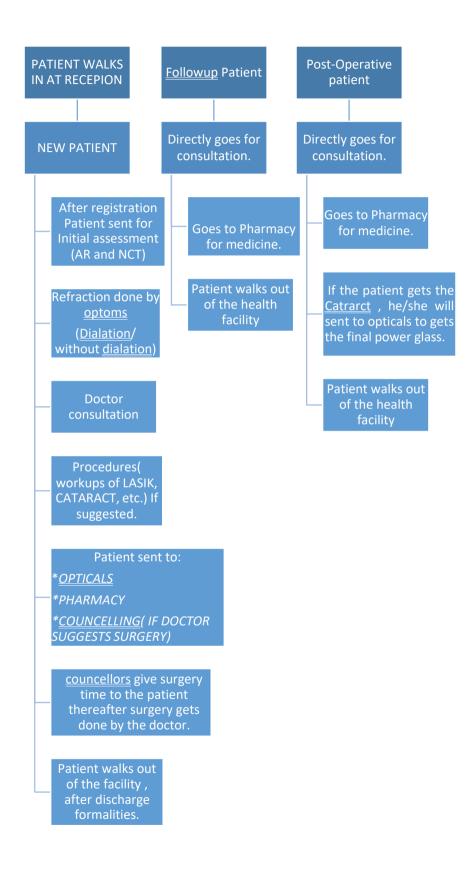
MANAGEMENT TEAM

TABLE 4.

Sno	Name of the Employee	Desgination
1.	Sandeep Dogra	Manager
2.	Rajvender Kaur	Executive
3.	Shruti Arora	Management Trainee

PATIENT FLOW

FIG2



+

TO ANALYZE AND REDUCE THE TAT OF OPD FLOORS

INTRODUCTION

Waiting time is defined is the time taken by a patient from entering into the healthcare facility to the time by which the patient gets the consultation from the clinician or doctor. As the burden of diseases or morbidities are getting escalated, the amount of patient at any healthcare facility are exceedingly too, so it directly hinders the process flow and lead to crowdedness in the waiting area which sometime lead to panic situation inadequate service delivery and all this led to patient dissatisfaction.

As waiting time is the key indicator for any organization of patient satisfaction which directly or indirectly could fluctuate the footfall of the patients, certain reasons which can lead to increase in waiting time are as follows:

- Sometimes there is scarcity of manpower such as shortage of front office staff (which gives appointments), OPD Attendants or optometrist.
- Sometimes staff goes on frequent breaks in working hours.
- There are certain seasonal trends in which patient footfall is automatically increased, for example in eye Centre, there is a seasonal trend in the month of August to March, in which patient footfall is enormously high.

OUTPATIENT DEPARTMENT

The Out Patient Department (OPD) is the first interaction in the hospital. OPD care in the hospital reflects the quality of the hospital. Long waiting hours will lead to the patient satisfaction and which ultimately affect the hospital. This 3-month study will find out the patient journey analysis. The study is also called the time motion study. The Outpatient Department provides the care and diagnosis that does not require for a patient to overstay at nigh

RATIONALE:

This study will help in describing the key reasons for delay in discharge process of out -patient department which is a major challenge faced by many hospitals which ultimately results in patient dis-satisfaction and decreasing their footfall. Thus, this study will also propose recommendations for the better operations. Six- sigma Methodology would help in reducing the turn- around/ waiting time of patients.

OBJECTIVE

- 1) To analyse the following types of TAT (TURN AROUND TIME) of patient time, which are as follows:
- > TAT 1- [patient check-in time] it is the time when patient check in at the reception till the time, he/she is sent to optometrist chamber for initial assessment. When patient comes at the reception counter, he/she has to register in the software and wait for the turn to go in optometrist chamber, where he/she will undergo AR, NCT and refraction, and then optometrist advice for the dilation if required.
- ➤ TAT 2- [doctor check-in time] it is the time when patient is ready (dilated/ non- dilated) till he/she is sent to doctor's consultation room. When the patient is ready to go for doctor consultation, irrespective of its dilation or not, the time taken for patient to reach in doctor's room is undertaken as TAT2.
- 2)To recommend various interventions to reduce the long waiting hours.

LITREATURE REVIEWS

1. Hospital waiting time: the forgotten premise of healthcare service delivery? | Emerald Insight Study conducted in Malaysian hospital by the help of 2 types of questionnaires were used. Former was used for recording patients waiting time experience and later is used for hospital employees for recording their perspective regarding prolonged waiting time. The study covers huge area being conducted in 13 states of Malaysia and conducted in 21 public hospitals and succeed in analyzing 13,000responsed from the former and 3,000 responses from the later, showing experience of patient and what could be the possible factors behind it. Thus, the

study reveals that mean of patients is more than 2 hrs. of waiting time from check-in to the reception to checkout from dr. consultation, while the dr. consultation is only for about 15 min. and the possible factors may include might be heavy workload, gaps in management and supervision, or could be scanty facilities and the problem must be tackled in a logical manner by applying stimulation techniques.

- 2. The "5S" approach to improve a working environment can reduce waiting time: Findings from hospitals in Northern Tanzania | Emerald Insight Study conducted in Africa Another randomized control trial, study conducted at Africa where 16 hospitals were taken under consideration for a whole year and then difference in difference analysis revealed that adopting 5S approach of lean management has really decline the prolonged waiting time at health facilities, if work process is done in a proper manner, then it would certainly reduce the waiting thus, improving patient satisfaction
- 3. Outpatient waiting time in health services and teaching hospitals: a case study in Iran PubMed (nih.gov) another study conducted in west of Iran Medical universities revealed, that patient took max waiting time among the ophthalmology clinic of same kind and this waiting time shall be reduced by adopting certain models, for instance electronic visit systems via internet, a process model, six sigma model, queuing theory model and FIFO model that could possibly reduce the prolonged waiting time. This study was conducted in 2011 in both educational as well as healthcare hospitals in which 160 patients was studied and data was analyzed by using SPSS software.
- 4. Patient waiting time in the outpatient clinic at a central surgical hospital of Vietnam: Implications for resource allocation PMC (nih.gov) it is another cross-sectional study conducted in the outpatient clinic at Viet Duc Hospital, Northern Vietnam where around 1lakh 30 thousand patients were taken into consideration which shows longer waiting for insurance and morning patients and in order to reduce that human resource staff should empathizes with the patients and administrative process should be more simplified.
- 5. <u>Determinants of patient waiting time in General Outpatient Department of a Territory Health Institution in North Western Nigeria, MO Oche, H Adamu-</u> This is a descriptive cross-sectional study which was carried out at the Nigeria. The study is being done on 100 patients. A structured questionnaire was used and convenience sampling method has been taken. The data collected and entered and then analyzed using Statical Package for Social Sciences.

RESEARCH METHODS

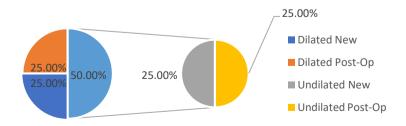
- **a. STUDY DESIGN-** Descriptive analytical study.
- **b. DEPARTMENT** Out patient area of Centre for sight and waiting area of Centre for Sight.
- **c. INCLUSION-** Walk-in patients and advance appointment patients.
- **d. EXCLUSION-** Follow-up patient.
- **e. DURATION OF STUDY-** 3 months, the study was conducted during the period of April 22 to July 22, 2022.
- f. SAMPLE SIZE: 200
- g. SAMPLING TECHNIQUE: Random sampling.
- **h. KEY INDICATORS:** Following are the key indicators which are taken into consideration:
 - i. Patient check-in time at reception.
 - ii. Patient check-in time at optometrist room.
 - iii. Patient check-in time at doctor's room.
- i. DATA SOURCE- Collection of primary data through HMIS of Centre for sight by Kare Xpert software.
- **j. DATA TOOL-**MS Excel.

RESULTS

In this study, there are 2 types of patients taken into consideration, first, being the new one which arrives for the very first time at any branch of the centre all over India, and second type of patient is post operative patients which arrives at the centre after 1 week or 3 months for doctor consultation. Furthermore, patient is bifurcated into dilated and undiluted patients.

That is, the number of patients which are taken into accounts are 50(25%) patients are dilated new, 50 are non-dilated new, 50 are dilated post operative, 50 are non- dilated postop.

VARIOUS TYPES OF PATIENTS.



TYPE OF PATIE	NT	AVERAGE TIME TAKEN FOR FIRST CALL	Average of Overall waiting time
	for dilated patients.	19.5 min	73 min
NEW	for non-dilated patients	17.5 min	53 min
	for dilated patients.	26 min	93 min
Post-Op	for non-dilated patients	20 min	42 min

It has been inferring from the above table that average time taken for new dilated patient (patient coming for the very first time and his/her pupil has to be dilated i.e., TAT 1) And overall, TAT (total time taken by the patient in healthcare facility) is 73 min for dilated patients and 53 mins for non-dilated.

Another inference from the table is that average time taken for post operated patients including 1 week and 3months who needs to be dilated is 26min for dilated patients and overall, TAT for the same patient is 42 min and average of overall wating time is 93 min and 42 mins, for dilated and non-dilated patients respectively.

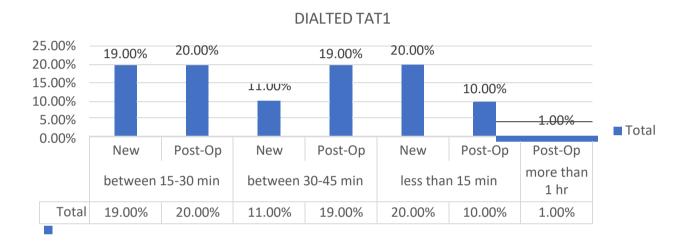
TYPE OF PATIENT		max of time taken for first call
	for dilated patients.	39 min
NEW	for non-dilated patients	53 min
	for dilated patients.	22 min
Post-Op	for non-dilated patients	59 min

Now, this chart depicts the outliers of the data showing Max TAT 1 (max time taken by the patient including registration, payment and initial check-up) for new patient which is 39 min and 53min for dilated and non-dilated patient respectively. And max time taken under this category for post operative patients are 22 min and 59min for dilated and non-dilated patients, respectively.

TYPE OF PATIENT		Max Over all waiting time
	for dilated patients.	1 hr 27 min/ 87min
NEW	for non-dilated patients	1hr 28 min/88 min
Post-Op	for dilated patients.	3 hr 15 min/195min

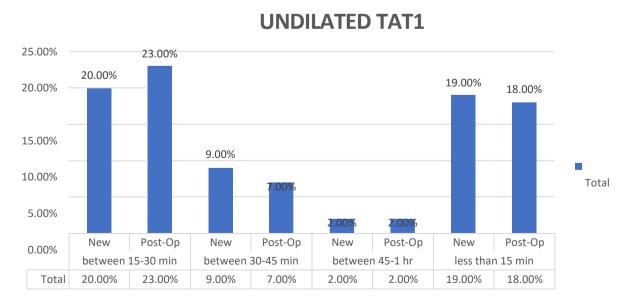


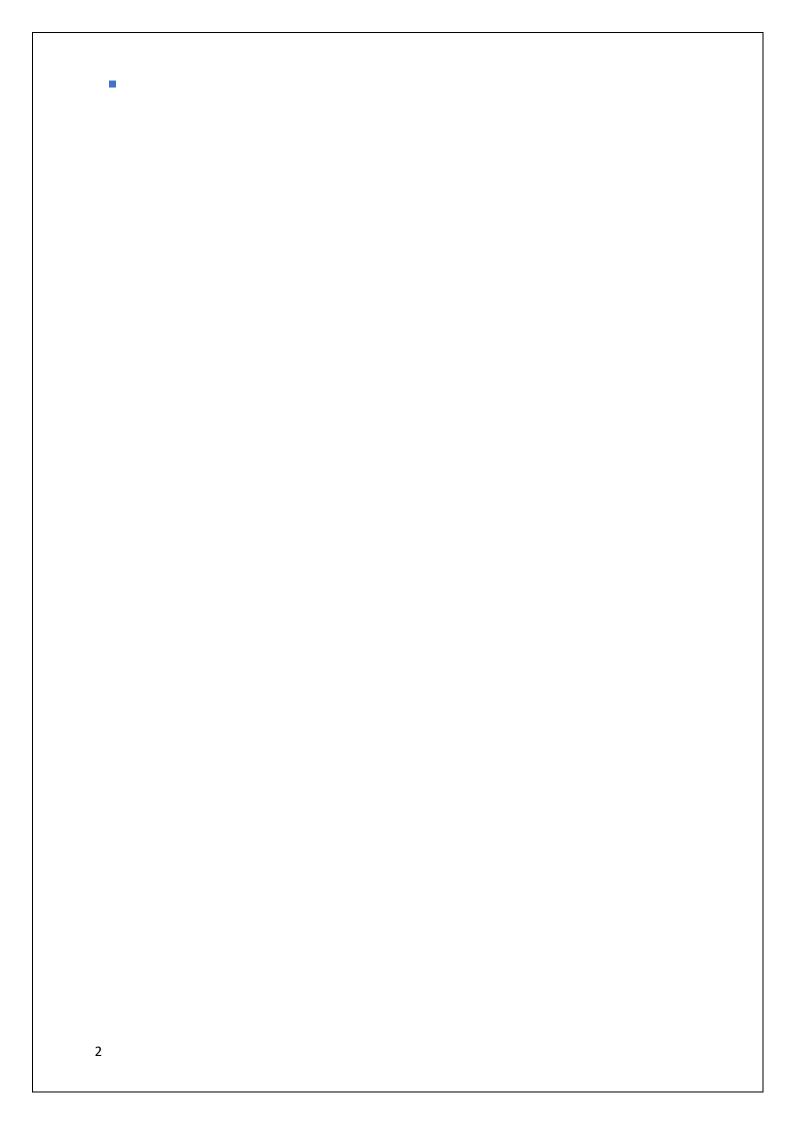
Now, the chart on the right side depicts a very typical scenario that needs to be altered which is average max time taken by the patient for getting overall services (including initial check-up, dilation and doctor consultation till the handover of prescription) for new patient is 87 min and 88 min for dilated and non-dilated patient respectively. And max time taken by the post-op patients under the same category is 195 mins and 77 min, for dilated and non-dilated patients, respectively.



The above histogram shows that 20% and 10% of the patients who needs to be dilated took less than 15 min of waiting time for new patient and post op patient, respectively.

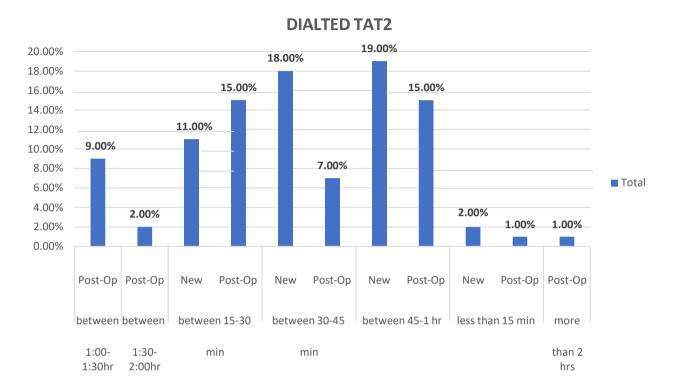
2nd inference, taken from the chart is 19% and 20 % of the patients of the same category took 15-30 mins. Similarly, it is 11% and 19% for 30-45min. and finally 1% of post op patient took more than 1 hr. (EVENLY DISTRIBUTED AMONG ALL THE CATEGORIES)



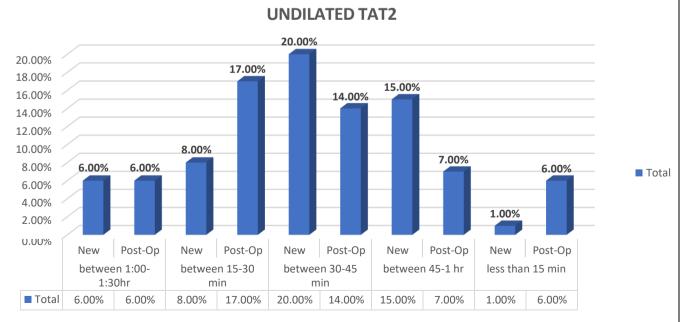


The above histogram shows that 18% of the patients whose pupil don't needs to be dilated took less than 15 min of waiting time for new patient and post op patient, respectively.

2nd inference, taken from the chart is 20% and 23% of the patients of the same category took 15-30 mins. Similarly, it is 9% and 7% for 30-45min. and finally 2% each of post op patient took 45-1hr.(MAJORITY OF THE PAITENTS LIES BETWEEN 0 TO 30 MINUTES.



The above histogram shows that 2% and 1% of the patients took less than 15 min to reach to doctor's room who needs to be dilated. Similarly, 11% and 15% of the patient took 15-30mins, 18% and 7% of the patients took between 30-45 min and 19% and 15% of the patients took 45-1 hr, 9% and 2% patients for 1hr to 1:30hr and cumulatively 3% of the patients took more than 1hr 30 min. (MAJORITY OF THE PATIENTS SPREAD GRADUALLY AMONG 15-1 HR)

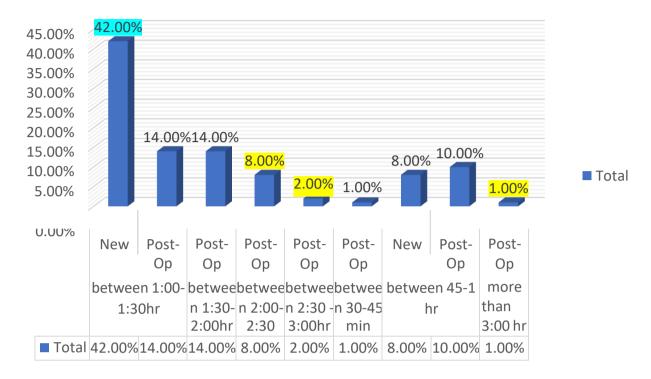


The above histogram shows that 1% and 6% of the patients took less than 15 min to reach to

doctor's room who needs to be dilated. Similarly, 8% and 17% of the patient took 15-30mins , 20% and 14% of the patients took between 30-45 min and 15% and 7% of the patients took 45-1 hr. , 6% of both type of patients took 1hr to 1:30hr. (SIMILLARLY , MAJORITY OF THE PATIENTS SPREAD GRADUALLY AMONG 15-1 HR AMONG UNDILATED

TAT2).

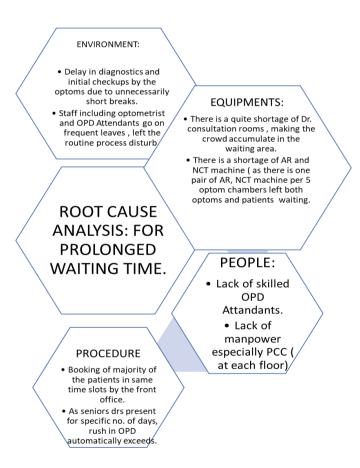
Overall time taken by the patient



- This chart shows some data which needs to be taken account of . Majority of the overall time taken by the patient is between 1 to 1:30 hr. which is quite high for consultation of merely 15 min.
- ➤ 11% of the post –op patient spends more than 2 hrs. which should be immediately focused upon and certain measurable interventions should be adopted.

OBSERVATION-

- Max Overall time taken by the patient is longest in post operated dilated patient being more than 3 hr. is quite shocking.
- The study population consist of 200 patients which is filtered from 325 samples taken from 'daily operations report'. Each patient was tracked at each check point and time was noted very timely and accurately.
- It is quite alarming that the max. time taken for first call in optometrist room took around 45 minutes for each category except post- operated dilated patients.
- The highlight of the study was interestingly the results shows the post operative patients took more time than the new patients in both cases dilated and non-dilated being more than 1 hr. for both.



RECOMMENDATIONS:

- ✓ Certain queuing models should be adopted such as FIFO, appointment model (15min leverage should be given to the appointment patient as compared to walking patient), etc.
 - There must be proper time scheduled for leaves of the staff especially PCC and OPD attendants
 - \circ An evening time slot should be allocated for all the post –op patients , as to avoid mixing it with new patients .
- ✓ The shorts breaks need to be managed in a certain way to avoid piling up of patients.
 - Miscommunication needs to avoided among the patients, octenyl doctors needs to go to OT for the surgeries, and patients is unaware, so proper message should be sent to the patients and accordingly appointments should be given
- ✓ In case of overcrowding, there are quite a lot of chances that patient files are lost, so to minimize this proper handling of files should be there.
 - o Shifting of doctors could be done, under the same specialty to avoid waiting for specific doctor.

LIMITATIONS:

- ➤ Patients those who are considered for the study are taken from Monday to Saturday, not involving patients coming on Sunday.
- > Follow-up patients are not taking into consideration.
- ➤ Day care centre.

CONCLUSION:

Based on the study, it has been concluded that there is an immediate need of implementation of certain interventions

- * appropriate skilled man power needs to hired as majority of the patient irrespectively of their dilation status has to wait between 30-1hr for merely 10-12 mins of doctor consultations.
- Proper scheduling should be there so that patient don't need to wait when doctor is performing surgical procedures.
- designating a particular time slot given to post –op patients preferable in evening.
- ❖ At last be adopting recommendations, there could be possible improvement might be seen in the prolonged waiting time.

REFERENCES

- 1. <u>Hospital waiting time: the forgotten premise of healthcare service delivery? | Emerald Insight</u>
- 2. The "5S" approach to improve a working environment can reduce waiting time: Findings from hospitals in Northern Tanzania | Emerald Insight
- 3. Waiting time in the emergency department in selected hospitals of Iran University of Medical Sciences in 2007. (cabdirect.org)
- 4. International Journal of Advance Research and Innovation (psu.edu)
- 5. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8042814/

ANNEXURE -I

PATIENT CO-ORDINATION SLIP

HYPERSENTITIV DIABETIC VULNERABLE OTHERS

E

UHID DOCTORS NAME

PATIENT NAME PAYER NAME

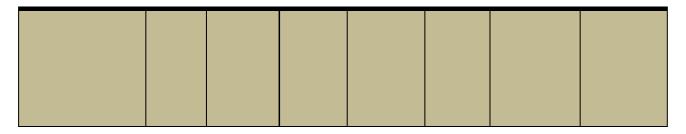
AMOUNT PURPOSE

AGE/GENDER

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			CYCLOPENTOLAT
			E HOMATROPINE
			OTHERS_

DATE/SIGN	EXAMINE BY CONSULTANT(HH:M M)	COUNSELLING OTHER PROCEDURE (HH:MM)	PRESCRIPTIO N HANDED OVER/CHECK OUT (HH:MM)	

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