Summer Training at
Max Super-Specialty Hospital, Mohali

Assessment of Outreach of Max Super-Specialty Services at Home Care

By
Ruchika

Under the guidance of
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MBA Hospital & Health Management
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Institute of Health Management Research
The IIHMR University, Jaipur
2018

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Dr. Ruchika** has undergone summer training at Max Super Specialty Hospital, Mohali from 2nd April to 2nd June '2018.

The candidate herself completed the project assigned to her during summer training. Her approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health management.

I wish her success in all her future endeavors.

Dr. P R Sodani
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for **Col.(Dr.)Ashok Kaushik** 25.6.18
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CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that Dr. Ruchika, student of IIHMR University, Jaipur, has completed her summer training at Max Super Speciality Hospital, Mohali, from April 2 to June 1, 2018.

She has successfully completed the projects assigned to her during the training period and her approach has been sincere and scientific. I hope this was a good learning experience for her.

Wish her all the success for future endeavors.

Dr. Tanu Goyal
Assistant Medical Superintendent
MAX SUPER SPECIALITY HOSPITAL
PHASE-VI, MOHALI, PUNJAB-160055

Mentor:

Dr. Tanu Goyal

Assistant Medical Superintendent

Max Super Speciality Hospital

Mohali

TO WHOM IT MAY CONCERN

I gladly write this reference letter for Dr. Ruchika for her accomplishments as a Medical Administration Trainee for Max Super Speciality Hospital, Mohali, during the summer training from April 2, 2018. She has worked under my supervision and mentorship for her summer training projects . She is a quick learner and her performance has been praiseworthy. She not only accepts new challenges whole heartedly but is also open to adapt other work styles to cater for the demands of the workplace.

I am delighted to recommend her , as I truly believe that she would be an asset to any organization she would work for in the future. If you need an additional perspective, please do not hesitate to contact the undersigned to discuss her candidacy for your program.

Yours sincerely,

Dr. Tanu Goyal
Assistant Medical Superintendent
MAX SUPER SPECIALITY HOSPITAL
PHASE-VI, MOHALI, PUNJAB-160055

Dr. Tanu Goyal

Assistant Medical Superintendent

Date-24th May'18

ACKNOWLEDGEMENTS

I would like to express my sincere Thanks and gratitude to **Max Super-Specialty Hospital, Mohali** for allowing me to complete my summer internship and project in the facility.

The structure and the content of this project have been deeply influenced by many people for whom I wish to express my gratitude.

I sincerely Thank **Dr. Tanu Goyal (Assistant Medical Superintendent)** and **Mr. Vishal Sharma (Zonal and Regional Marketing Head)** for giving me the opportunity to do my project at **Max Super-Specialty Hospital, Mohali.**

Foremost, I would like to Thank**, Dr. Harpreet Kaur (Quality Department Head)** who were kind enough to spare their valuable time and provided several important suggestions at every stage of my study.

Also, I am sincerely grateful to **Dr. Ashok Kaushik (academic dean)**, **Mr. Hembhargav (placement committee incharge)**, and **Dr. P R Sodani (mentor) IIHMR UNIVERSITY, JAIPUR (Rajasthan)** for his continuous encouragement in completion of this project.

Sincere thanks to all the staff of the department and my colleagues Dr. Shivangi Gupta, Dr. Nivreti Pandit, Miss Ashima Singla for helping me at each and every step of my work. Heartiest gratitude to them for making my stay and work at this place a memorable one.

Last, but not the least, I would like to thank my **PARENTS** because of whom I am here and who are always there whenever I require their help.

Thanks to one and all.

Dr. Ruchika

MBA (HM) 1YEAR.

IIHMR UNIVERSITY, JAIPUR

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1. HOSPITAL PROFILE

Max Super Specialty Hospital, Mohali offers services like medical disciplines of Neurosciences, Cardiac Sciences, Cardiac Care, Orthopedics, Obstetrics and Gynecology among several others. The 200+ bedded healthcare facilities are equipped with MICU, CCU, SICU and Cath Labs. Our Team of experts understands the problems related to health and offer

1.1 LOCATION

Located in Mohali near Civil Hospital, Phase 4, Sector 56A, Sahibzada Ajit Singh Nagar, Punjab 160055.

1.2 MISSION

- Create exceptional standards of Medical & Service Excellence.
- Care provider of FIRST CHOICE.
- Principal Choice for Physicians.
- Ethical Practices.
- Create International Centre of Excellence for select Super Specialities.
- Safety – Patient, Customer, Staff.

1.3 VISION

Deliver premium class healthcare with overall service focus, by creating an institution committed to the highest standards of Medical & Services excellence, patient care, scientific Knowledge, research and medical education.

1.4 VALUES OF MAX HEALTH CARE

- Service Excellence
- Credibility
- Sevabhav

1.5 ACHIEVEMENTS

- MHC received Express Healthcare Awards for Excellence in Healthcare in 2008
- MHC received D L Shah National Award on Economics of Quality by Quality council of India in 2009.

1.6 MEDICAL EXPERTIES

- With over 30 hospital-based consultants; which is a unique feature of the hospital, there is always an experienced specialist available to initiate treatment without delay.
- The various Key Specialties covered are as follows:
  Cardiac Sciences, Neurology, Neurosciences, Orthopedics & Joint Replacement, Oncology, ENT, Pediatrics, Urology, Nephrology & Kidney Transplant, Obstetrics & Gynecology, Internal Medicine, General Surgery, Minimal Access & Bariatric Surgery.

- The various Allied Medical Specialties covered are as follows:
  Anesthesiology, Dental Surgery & Orthodontics, Dermatology, Diabetics/Endocrinology, Dietetics, Emergency and Trauma Care, Endoscopy & Bronchoscopy Labs, Laboratory Medicine, Mental Health & Behavioral Sciences.

1.7 BASIC FACTS ABOUT MAX SUPER SPECIALTY HOSPITAL

- **Bed strength** = 224 beds
- **Bed occupancy rate** = 90%
- **Number of Discharges/month** = 1400
- **Number of OPD patient/day** = 30-350
- **Number of Emergency case** = 15-20 / day
- **Total staff (on roll)** = 787
- **Building of Max Hospital** = 1

1.8 ADVANCED TECHNOLOGIES

- **FFA**

  FFA machine is used in case of Angiography which helps in reading and recording of blood vessels in the retina.

- **CRRT**

- **TRANSCRANIAL DOPPLER**

1.9 DEPARTMENTS OF MAX HOSPITAL

The Department at Max Hospital can be differentiated into:

CLINICAL SERVICES – Those services which are directly related to medical Practice. These include:

a) **Outpatient Department(OPD)**
b) **Inpatient department (IPD)**
c) **OT services**
d) **Cath labs**
e) **Ambulance Services**
f) **Nursing Services**
g) **Laundry Services**
h) **Accident and Emergency Department**
i) **Laboratory Services**
j) **Mortuary services**
k) **Blood bank**

NON-CLINICAL SERVICES- Those services which are related to the administrative and non-medical side of the hospital. These include:

a) **Administrative service (Admission, Registration and Billing)**
b) **Medical Record Department (MRD)**
c) **Information technology.**
d) **Engineering department**
e) **Pharmacy department**

PROJECT 1

- **ASSESSMENT OF OUTREACH OF MAX SUPER-SPECIALTY SERVICES**
- **MAX AT HOME CARE.**

2. ASSESSMENT OF OUTREACH OF MAX SUPER SPECIALTY SERVICES

2.1 INTRODUCTION

Max Super specialty hospital, Mohali, is a unit of Hometrial Estate Pvt. Ltd., which provides several medical services in the domains of Neurology, Cardiology, Oncology, Orthopedics, Obstetrics and Gynecology and many others. The 200+ bedded healthcare facility has MICU, CCU, SICU, and Cath Labs. The team of pioneer doctors understand the medical problems and offer personalized care to the patients.

2.2 RESEARCH QUESTION

- What is the outreach of Max super specialty services among the doctors in Chandigarh, Panchkula, Mohali (Tri-city), Himachal Pradesh, Haryana and Punjab?

- What is the level of awareness about Max@Home (Max at Home) among the people of Chandigarh?

2.3 OBJECTIVES

- To check the outreach of Max super specialty services in Tri-city, Himachal Pradesh, Haryana and Panjab.
- To check the efficiency of the marketing team of Max Super Specialty Hospital, Mohali.
- To assess the awareness level about Max@Home among the people of Chandigarh.

2.4 RESEARCH METHODOLOGY

Location: Chandigarh, Panchkula, Mohali, Himachal Pradesh, Haryana and Panjab

Study subjects: Doctors visited by Marketing team of Max Hospital

2.5 MODE OF DATA COLLECTION

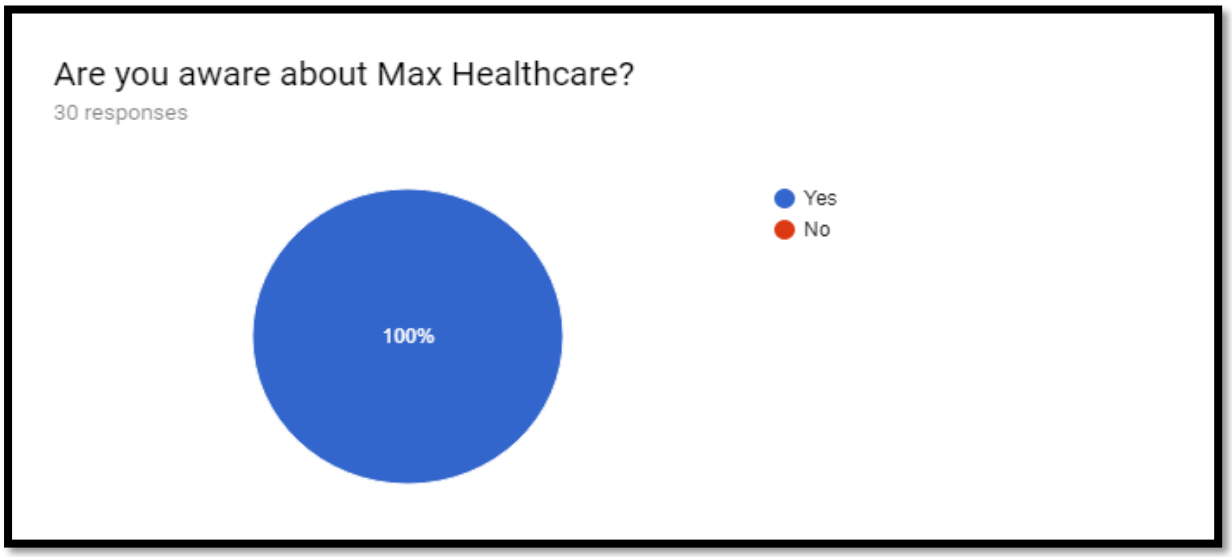
Information regarding the doctors, location and other details were provided by the marketing team of Max super specialty hospital, Mohali.

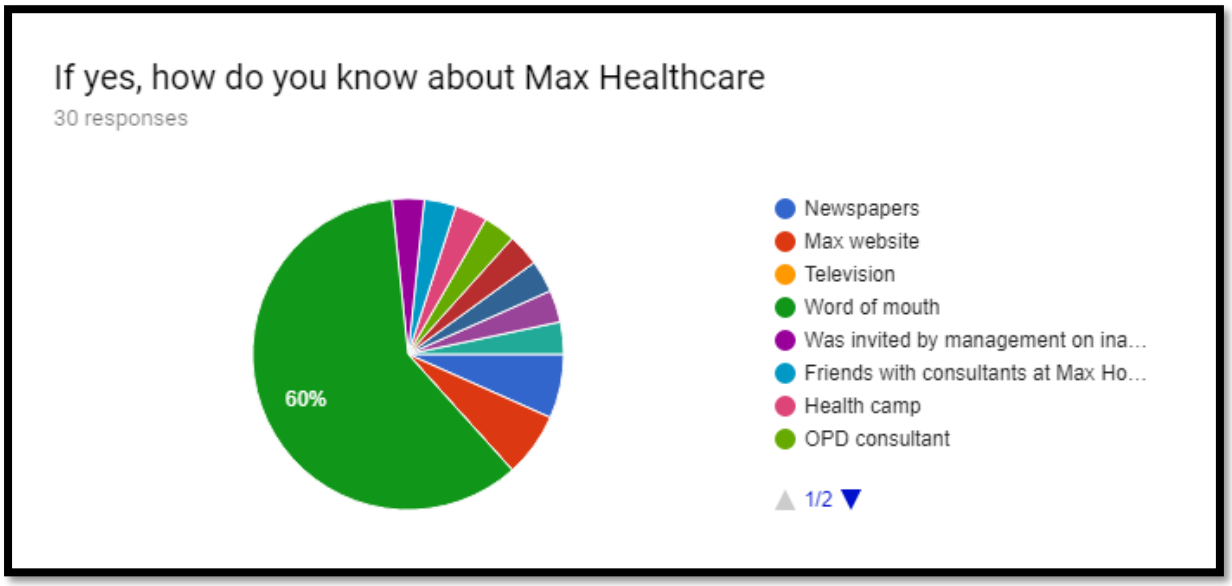
Data collection: The data was collected with the help of a questionnaire from the doctors of Tri-city, Himachal Pradesh, Haryana and Punjab.

2.6 TOOLS

- Questionnaire
- Creatives of Max Super specialty Hospital, Mohali

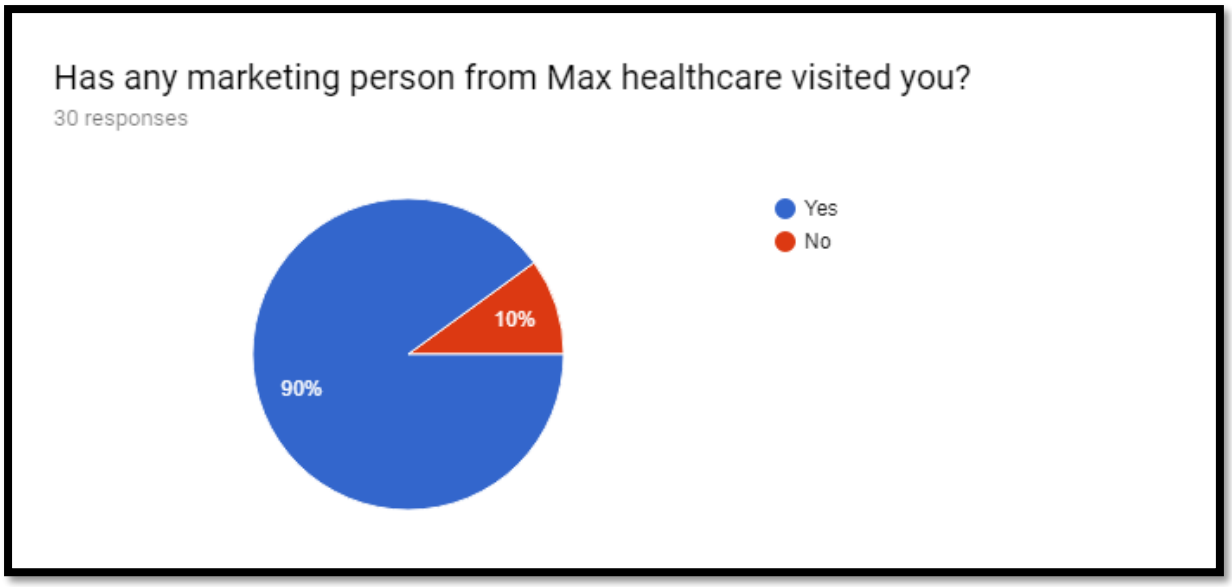
2.7 FINDINGS AND ANALYSIS

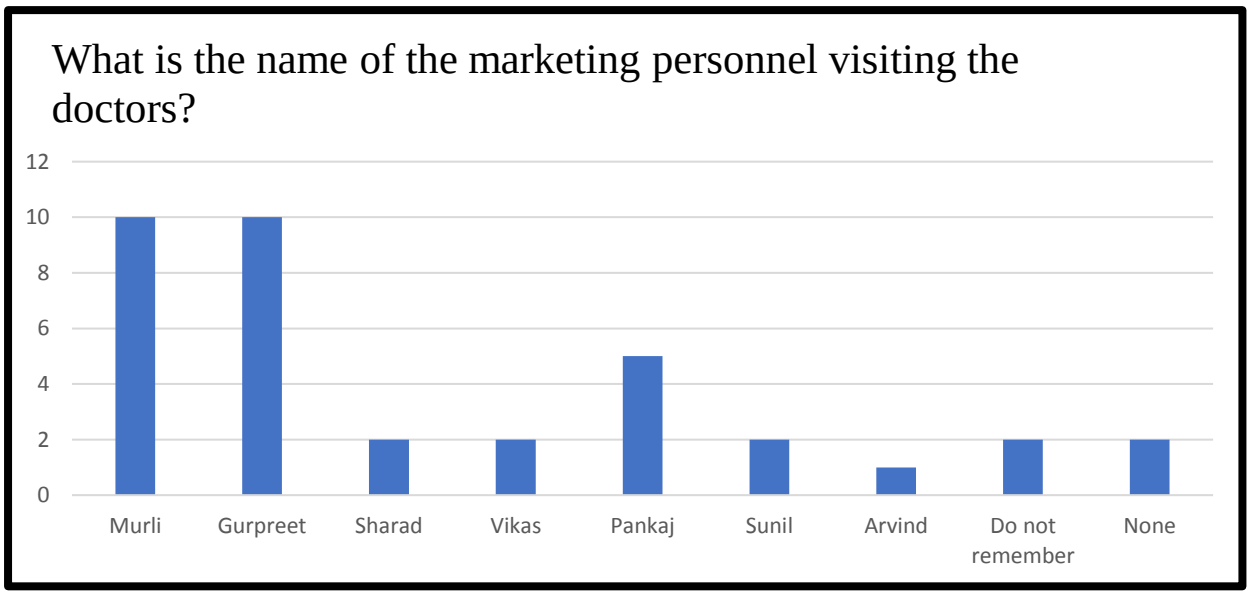




INTERPRETATION

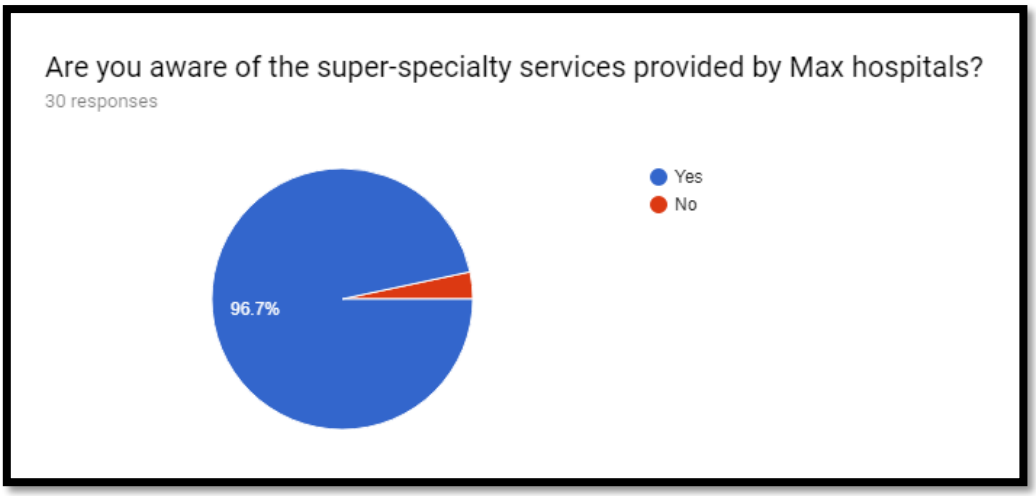
- Almost every doctor in the Tri-city, Himachal Pradesh, Haryana and Punjab was aware about the Max Healthcare either through the word of mouth or through the Max Website.

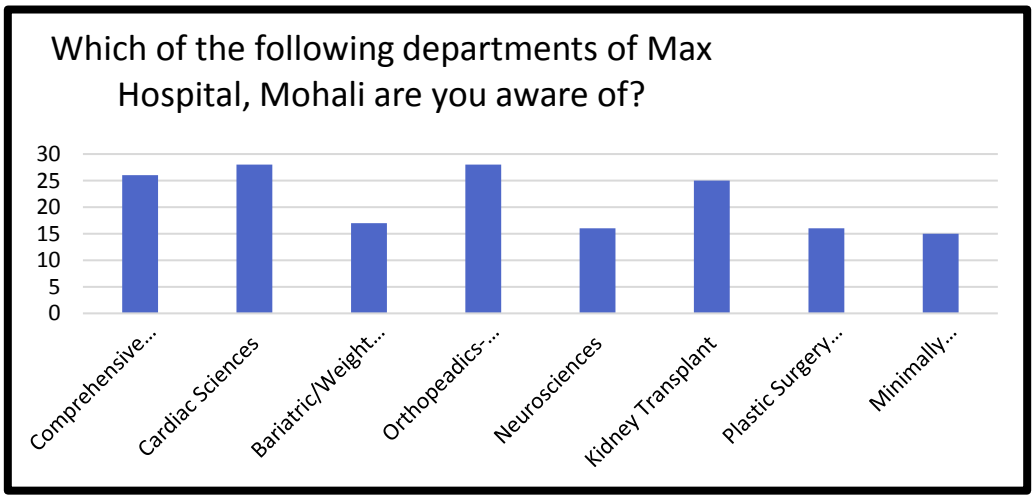




INTERPRETATION

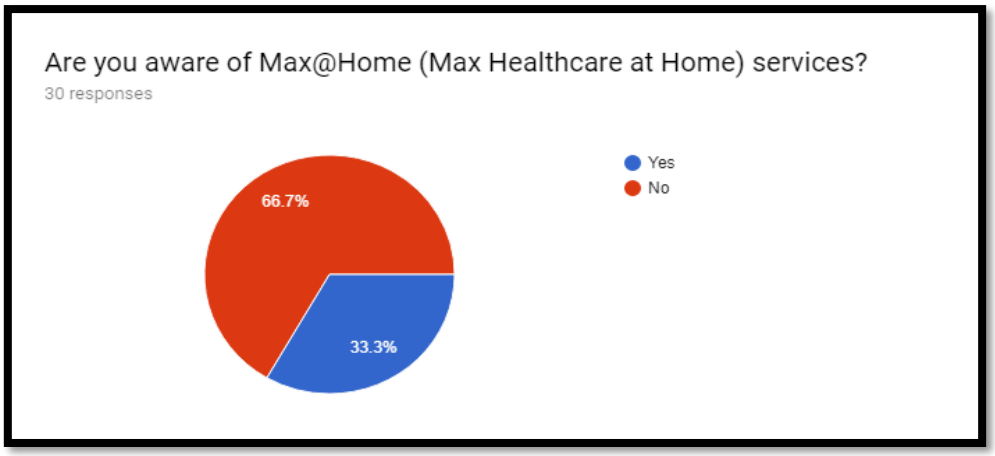
- Mr. Murli Prasad, Mr. Gurpreet Singh and Mr. Pankaj visited majority of the doctors in the region whereas Mr. Sharad and Mr. Vikas covered the rest of the doctors in the tri-city and surrounding region.

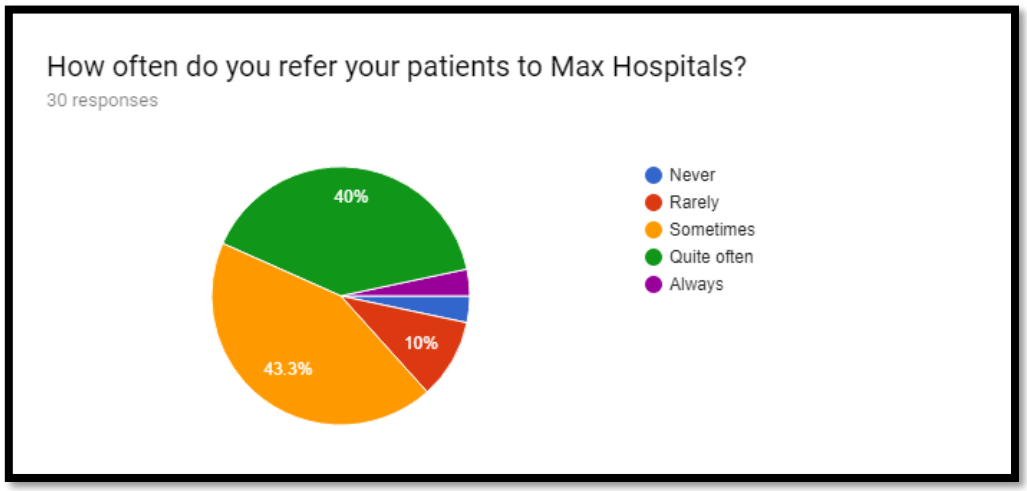




INTERPRETATION

- 96% of the doctors visited knew about all the super specialty services provided by Max Hospital, Mohali.
- Services that were more famous among the doctor were Cardiac sciences, Orthopedics, Cancer care and Kidney transplant.
- Consultants had comparatively less knowledge about procedures such as Laparoscopic surgeries, Bariatric surgeries and Cosmetic surgeries.





INTERPRETATION

- Only 33.3% of doctors were aware of Max@Home (Max at Home) services, whereas 66.7% doctors were completely unaware of Max@Home services.

- There needs to be a good marketing for Max@Home services to raise the awareness level among the consultants.

- 40% of doctors frequently refer their patients to Max Hospital, Mohali whereas almost 45% of doctors occasionally refer their patients to Max Hospital.

- 10% of the doctors rarely referred their patients to Max Hospital, Mohali.

2.8 SUGGESTIONS AND RECOMMENDATIONS

- Interaction with city clinicians and holistic involvement of general physicians will definitely bring dividends and laurels to this excellent healthcare institute.
- Hospitals works with doctors; medical and paramedical staff's dedication and this hospital is the pioneer in the health sector.
- There should be a Max Satellite Clinic in the Tricity.
- More health camps and CMEs should be organized in the city.
- There should be more of direct interaction between the consultants of hospital and the general practitioners in the city.
- There should be a reduction in the treatment cost.
- Feedback system to the primary physicians should be strengthened.

3. MAX@HOME

3.1 INTRODUCTION

- Max Healthcare, a leading name in the healthcare industry, brings its medical expertise and hospital-quality healthcare in the comfort of home through **Max@Home**.
- With a special purpose to help people lead a life with independence and dignity, **Max@Home** deliver their services with **compassion, excellence and reliability**.
- To help recover faster and lead a comfortable life, Max@Home provides nursing care attendants, physiotherapists and doctors for home visits.
- They also arrange for home sample collection and facilitate medical equipment on rent.

3.2 SERVICES PROVIDED BY Max@Home

- **Free sample collection**
- **Free medicine delivery**
- **Nursing care**
- **Patient care attendants**
- **Physiotherapy**
- **Doctor visits**

3.3 SALIENT FEATURES

- Reliable and convenient home collection service through trained staff
- Delivery of authentic medicines at your doorstep
- Quality care through trained nurses with a connect to the treating doctor
- Trained non-medical assistance for complete care at home
- Highly specialized physiotherapists with regular updates to the treating doctor
- Extensively experienced doctors, specializing in adult and geriatric care

MARKETING PLANNING FOR MAX@HOME

I. MARKETING OBJECTIVE

- To increase the awareness level of Max@Home among doctors of the tri-city.
- To provide holistic healthcare to the population of Tri-city at the comfort of their home.
- To help patients recover faster and lead a comfortable life.
- To provide emotional and physical care to the old and disabled patients.
- To help the working youth to take care of their parents or grandparents through Max@Home services.

MARKET RESEARCH

Research Design: Descriptive study

Research Approach: Quantitative

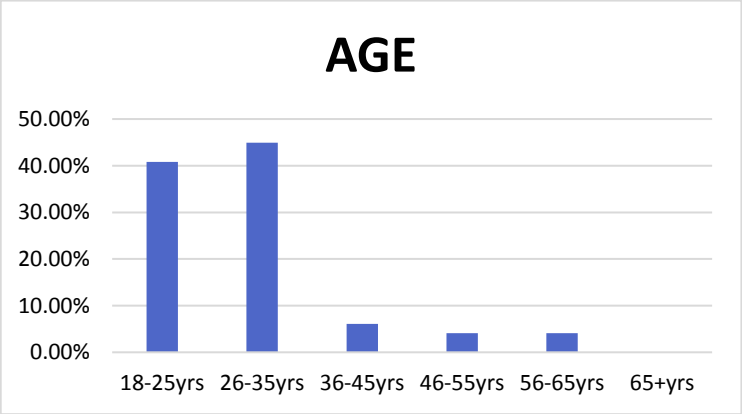
Sampling technique: Random Sampling

Sample size: 50

Tool: Questionnaire

ANALYSIS

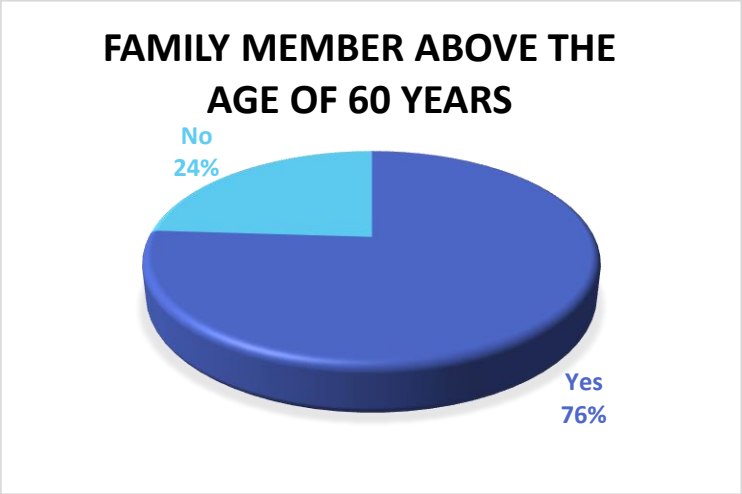
Figure 1.



INTERPRETATION

Figure 1 shows that majority of the respondents were in the age group ranging between 18 to 35 years.

Figure 2.

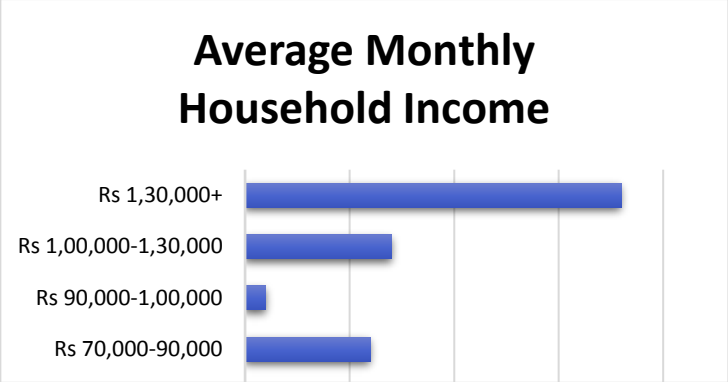


INTERPRETATION

Figure 2 depicts that 76% of respondents had an elderly family member.

Elderly members generally need extra care, the young generation of the family may opt for Home Healthcare Services for taking care of their elder.

Figure 3.

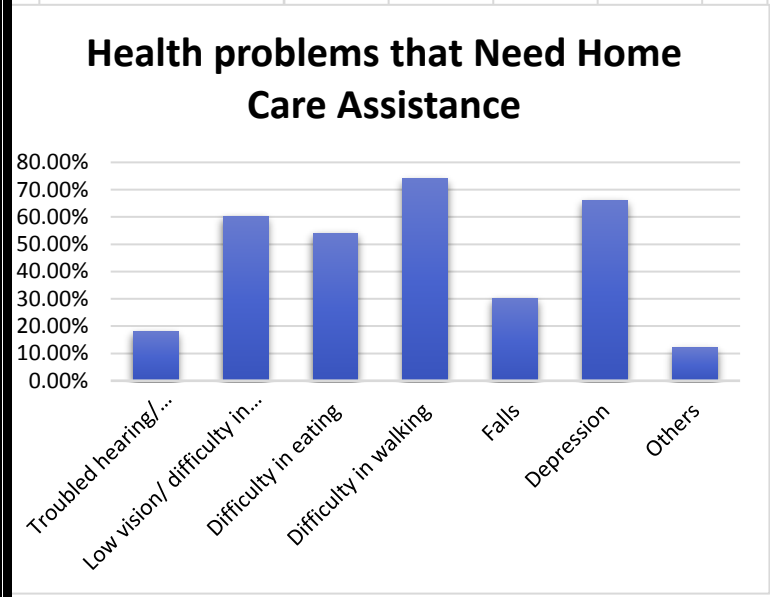


INTERPRETATION

Figure 3 depicts the average monthly household income of the respondents.

It shows that most of the respondents have the average income more than Rs. 50,000.

It can be deduced that the respondents can afford the Home Healthcare Services.

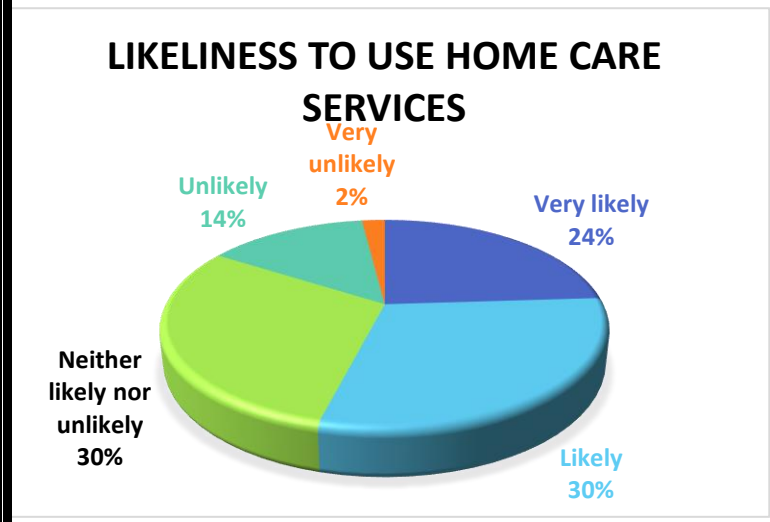


INTERPRETATION

Figure 4 shows different health problems that need Home Healthcare according to the awareness level of the respondents.

About 70% of the respondents said that patients with difficulty in walking, low vision and depression needs Home Healthcare. Whereas 30% respondents said that patients with difficulty in eating, falls, and other diseases such as epilepsy, cardiac problems, arthritis needs Home Care.

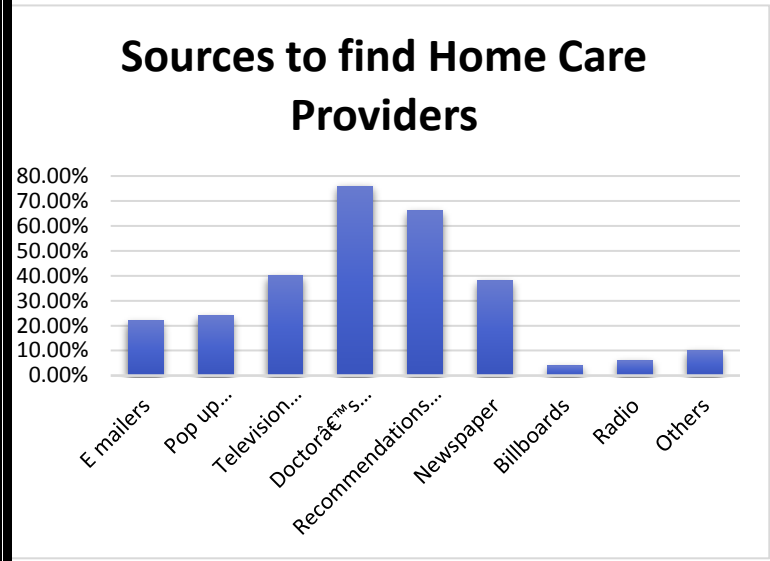
Figure 5.



INTERPRETATION

Figure 5 represents the likeliness of the respondents to opt for Home Care services for their family members. More than 50% respondents were likely and very likely to use Home care services for their elders in the coming years. 30% of respondents were unsure about using Home Care Services.

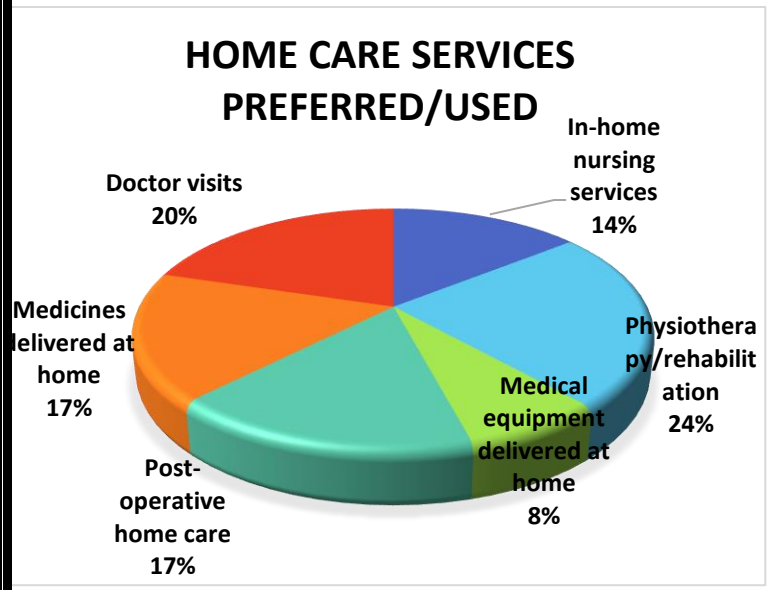
Figure 6.



INTERPRETATION

Figure 6 tells about the sources preferred to find out the Home Care providers. Almost 80% of the respondents prefer doctor's recommendation and recommendations by their friends and family members. Less than 40% of the respondents use television, newspapers and other sources to find Home Care providers.

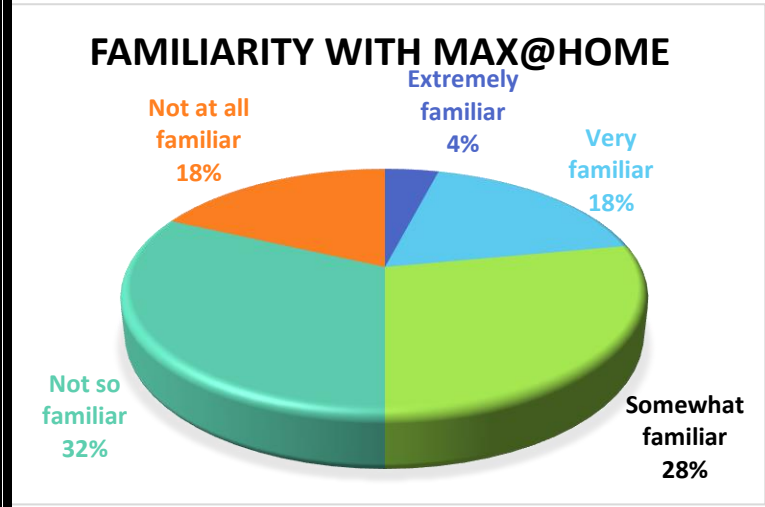
Figure 7.



INTERPRETATION

Figure 7 shows the Home Care services preferred or used by the respondents. Doctor visit, and physiotherapy services were preferred/used by around 25% of the respondents. Whereas the one third of the respondents preferred/used post-operative Home care, delivery of medicine and in-home nursing services.

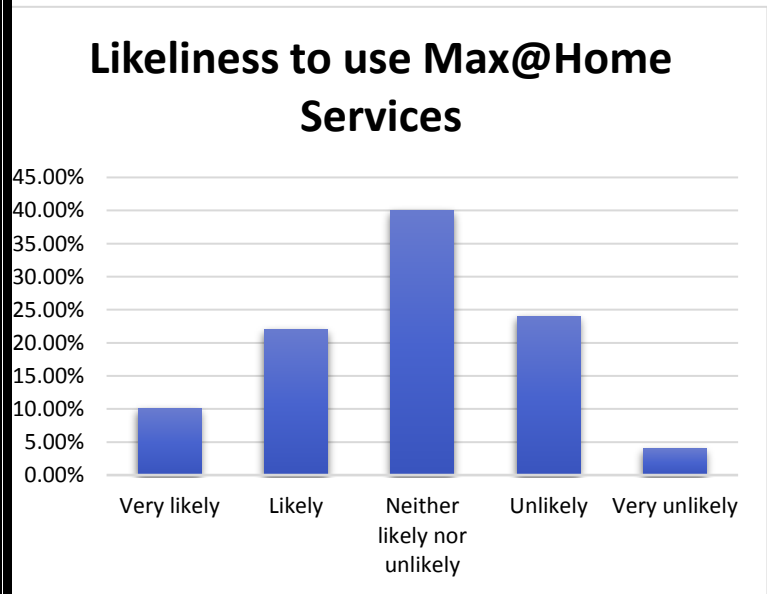
Figure 8.



INTERPRETATION

Figure 8. depicts the familiarity of the respondents with Max @ Home. Only one third of the respondents were very familiar whereas two third of the respondents were somewhat familiar or not familiar at all with Max@Home.

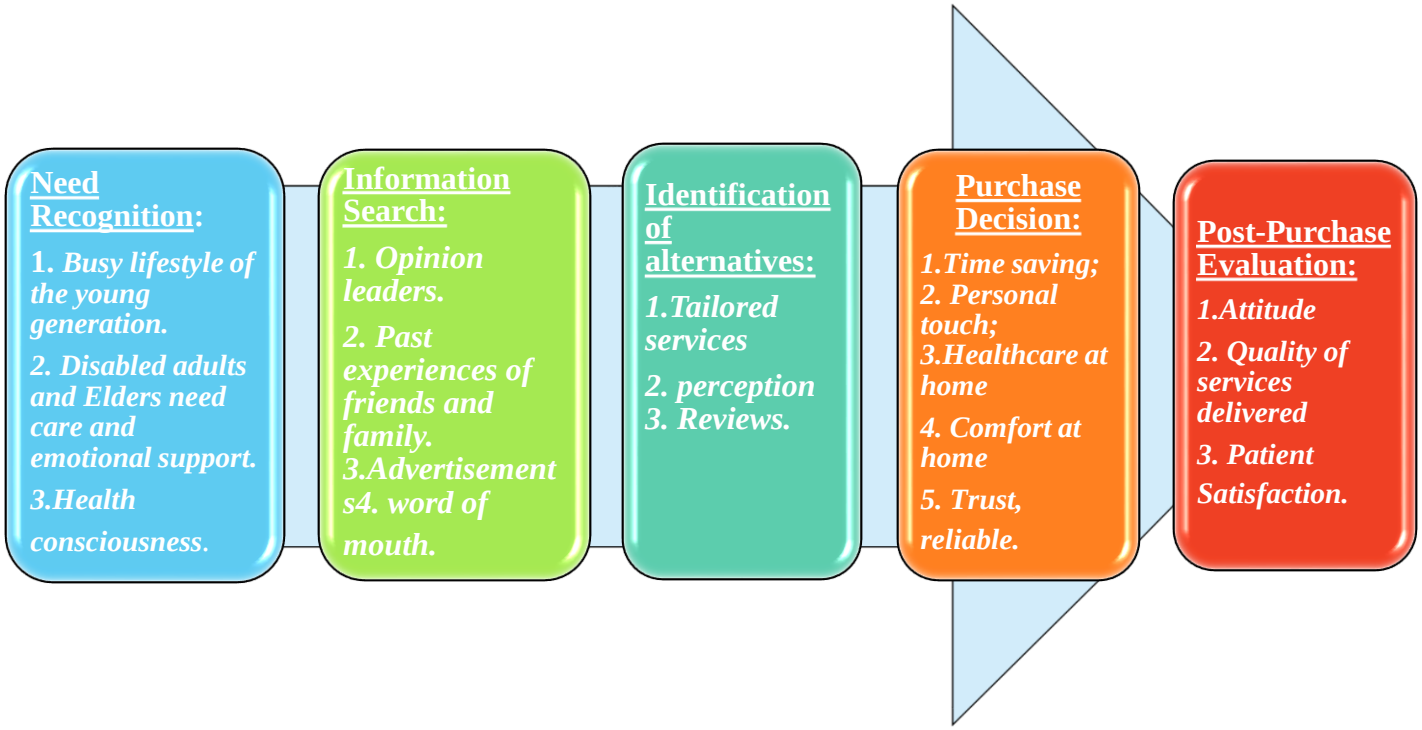
Figure 9.



INTERPRETATION

Figure 9 shows the likeliness of the respondents to use Max@Home Services in future. Around 25% of respondents were likely to use Max@Home services, 40% were unsure and 30% were unlikely to use Max@Home services.

II. CONSUMER BEHAVIOUR



III. SCANNING THE ENVIRONMENT

External Environment

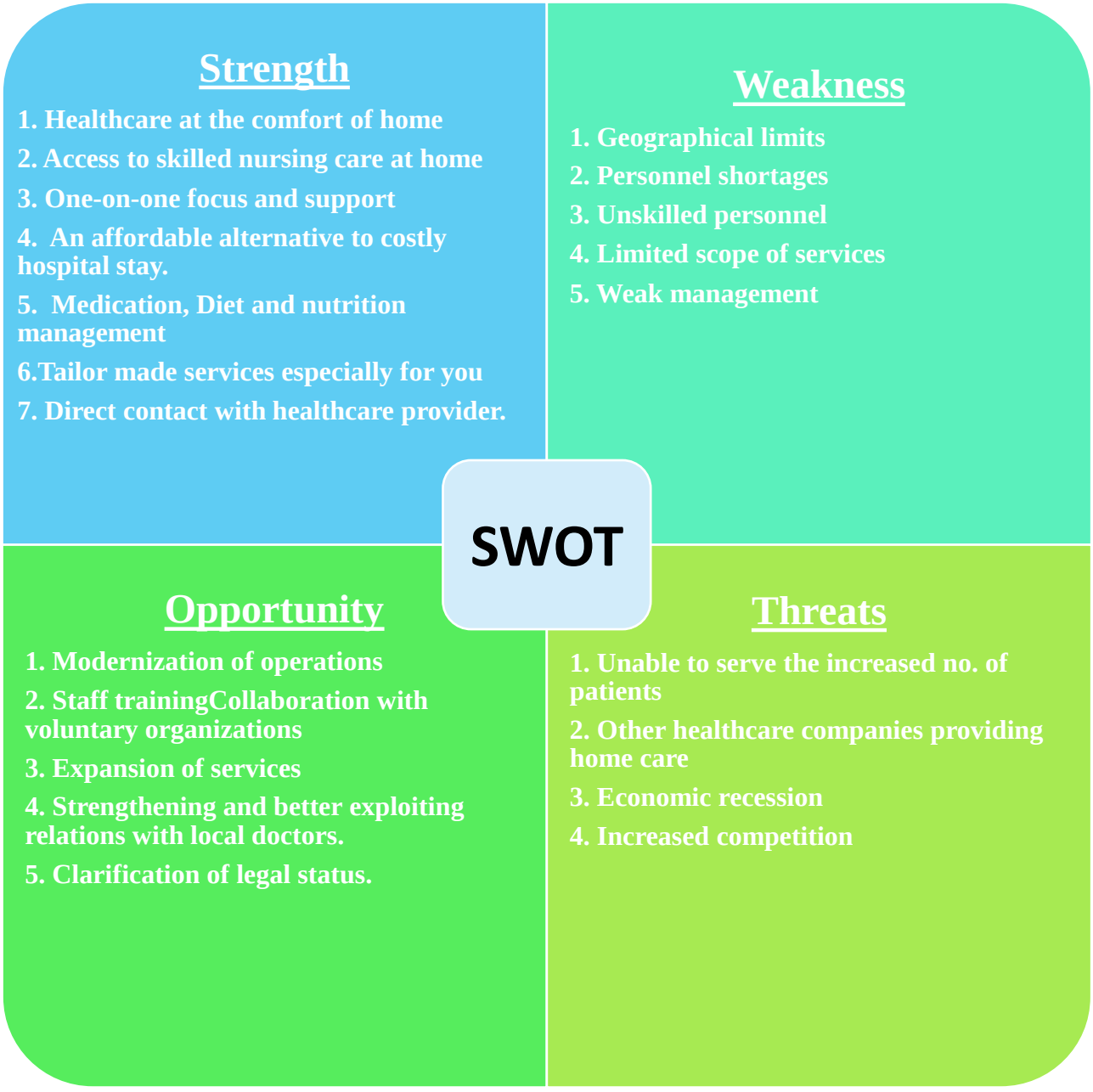
- **Economic:** Consumer's spending pattern plays an important role. People are ready to spend money to avail all the services that are provided at their doorstep.

- **Socio-culture:** Cultural shift towards homecare, consumers focus more on healthcare these days. Patients seek medical treatment at the comfort of their home.

- **Demography:** The young population remains busy with their studies or work so they hardly get time to take care of their parents and grandparents.

- **Legal:** Medico-legal aspects

Internal Environment



IV. SEGMENTATION, TARGET AND POSITIONING

- **Segmenting:** Young, Adult, Elderly
- **Target:** Working young and adults
- **Position:** Diversity of services, Comfort of home

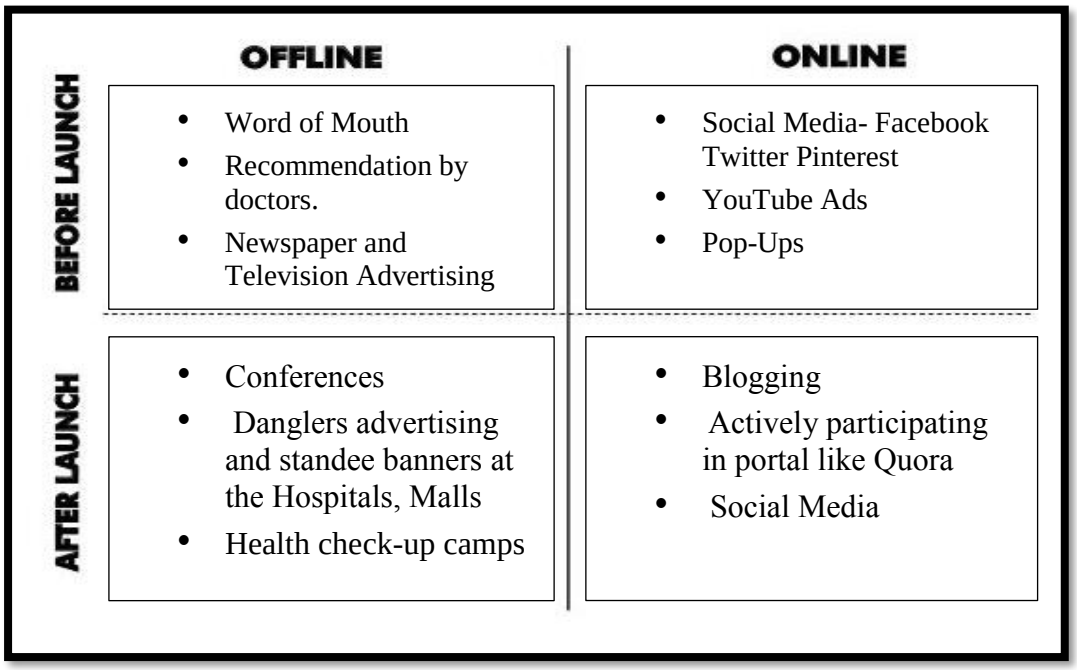
V. 7 PS OF HEALTHCARE MARKETING

People: The patients, clients, customers, healthcare providers, staff, management, consultants.

Product: All the services that are being provided in the Max@Home.

Price: Affordable services, special offers

Promotion:



Place: Business to Customer

Process: A Strong Feedback system

Physical evidence: Superior health services, brand name of Max Healthcare

PROJECT 2

MEDICATION RECONCILIATION

4. MEDICATION RECONCILIATION AT ADMISSION AND DISCHARGE

4.1 INTRODUCTION

Medication reconciliation is the process of accurately listing of all the medications that a patient has been taking — including drug name, dosage, frequency, and route — and comparing that list against the health provider's admission, transfer, and/or discharge notes, with the goal of providing correct medications to the patient at all transfer points within the hospital. It emphasizes on mentioning medicines and keeping a record of current and precise list of those that the patient has received during all the healthcare interventions. As part of that process, the accuracy of the list is checked, confirmed and corrected, if needed, at specified times. A reconciliation record usually encompasses the **generic name of the medicine, it's dose, frequency, and route of administration, as well as known allergies to medication.**

4.2. DEFINITION

According to the Joint Commission, "Medication reconciliation is defined as the process of comparing a patient's medication orders to all of the medications that the patient has been taking. This reconciliation is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions. It should be done at every transition of care in which new medications are ordered or existing orders are rewritten."

4.3. GOALS OF MEDICATION RECONCILIATION

- ✓ The main objective of medication reconciliation is to prevent adverse drug reactions at all levels of care (admission, transfer and discharge), for all patients.
- ✓ The aim is to **eliminate:**
  - ✓ An **undocumented intentional error** that occurs when the physician deliberately makes changes or omits a medicine that the patient was taking before coming to the facility, but this is neither clearly noted in the patient's medical record nor explained to them.
  - ✓ An **unintentional discrepancy** occurs when the doctor unknowingly makes changes in the list of medicines that the patient was taking before coming to the hospital.

4.4. RATIONALE

- ✓ In a single day, a patient is subjected to the risk of medication error at least once. To avoid medication error, it is necessary to implement the process of medication reconciliation. Slightest change in dosage, frequency, etc. of the medicine may have adverse effects on the health of the patient.
- ✓ There are different doctors in different departments of the hospital, if the patient is transferred from one department to another, the doctor at the receiving end should know current medication that the patient has been taking before being shifted. This process should be followed during admission, transfers and discharge of the patient.

4.5 OBJECTIVES

- ✓ To check the doctors' compliance on medication reconciliation process on the parameters such as, dose, frequency, route, usage of abbreviation.
- ✓ To evaluate the patient record system for doctor's notes on medication reconciliation.
- ✓ To assess the monthly compliance of doctors on medication reconciliation over a period of 2 months.
- ✓ To examine the frequency and type of reconciliation omissions at emergency admission and discharge of the patient.

4.6 RESEARCH QUESTION

What is the compliance of doctors on medication reconciliation during emergency admissions and discharge of the patients?

4.7 RESEARCH DESIGN: Observational study design

4.8. STUDY AREA: Max Super Specialty Hospital, SAS Nagar, Mohali

4.9. DURATION OF THE STUDY: 2 months (2nd April to 1st June)

4.10. TYPE OF DATA COLLECTION

Primary Data: Data was collected from the Computerized Patient Record System (CPRS) for emergency admissions and discharges.

4.11. SAMPLE SIZE

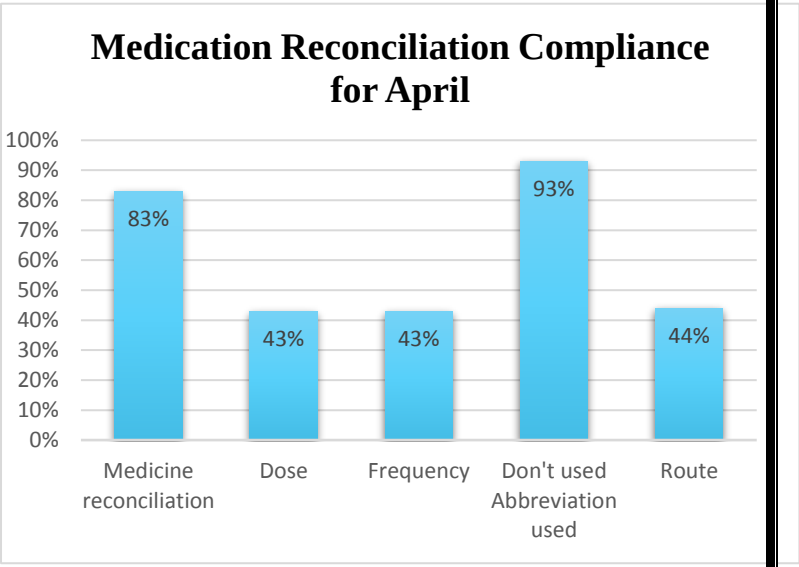
- All the admissions in emergency department (444 Patients)
- All the discharges (675 Patients)

4.12. ANALYSIS

EMERGENCY ADMISSIONS

MEDICATION RECONCILIATION FOR THE MONTH OF APRIL

S. No.	PARAMETERS	Compliances	Non-Compliances	Total Patients	%age compliance
1	Medicine reconciliation	203	41	244	83.20
2	Dose	105	139	244	43.03
3	Frequency	105	139	244	43.03
4	Don't used Abbreviation used	225	19	244	92.21
5	Route	108	136	244	44.26



INTERPRETATION

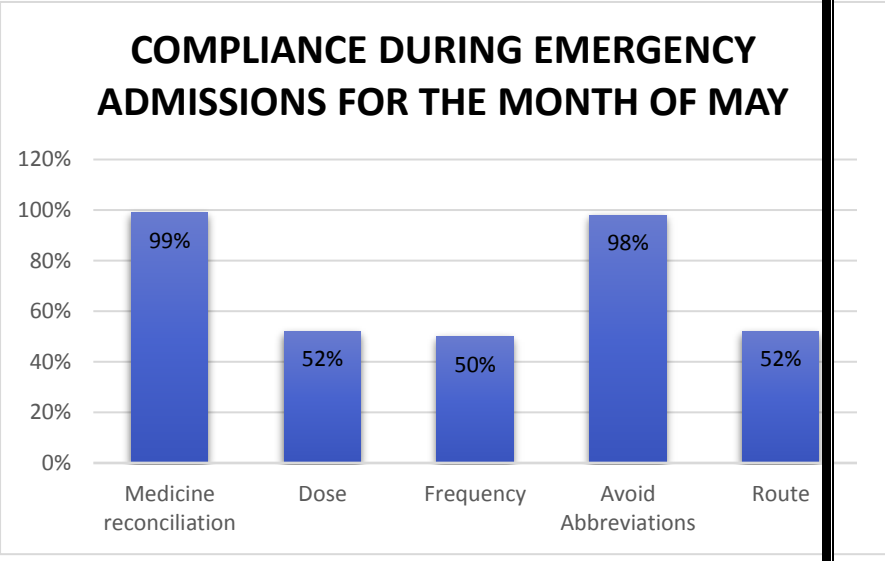
- In the month of April, the doctors' compliance for medication reconciliation was 83% but there were errors in dosage, frequency and routes of administration of medicines.
- It was seen that doctors missed out writing doses and frequencies of the medicines and used abbreviations in the notes.
- Doctors did medication reconciliation but did not list out the medicines in the CPRS.
- Some doctors just wrote the name of the medicine but did not mention the route of taking that medicine.
- The compliance for mentioning doses, frequency, and route was less than 50%.

INTERVENTION: Interacting and guiding the doctors in emergency department about the importance and correct documentation of the medicines in the CPRS during medication reconciliation. The target was to achieve at least 50% compliance in every parameter of medication reconciliation.

MEDICATION RECONCILIATION FOR THE MONTH OF MAY

S. No.	PARAMETERS	Compliances	Non-Compliances	Total Patients	%age compliance
1	Medicine reconciliation	198	2	200	99.00
2	Dose	104	96	200	52.00
3	Frequency	101	99	200	50.50
4	Don't used Abbreviation used	197	3	200	98.50
5	Route	104	96	200	52.00

INTERPRETATION

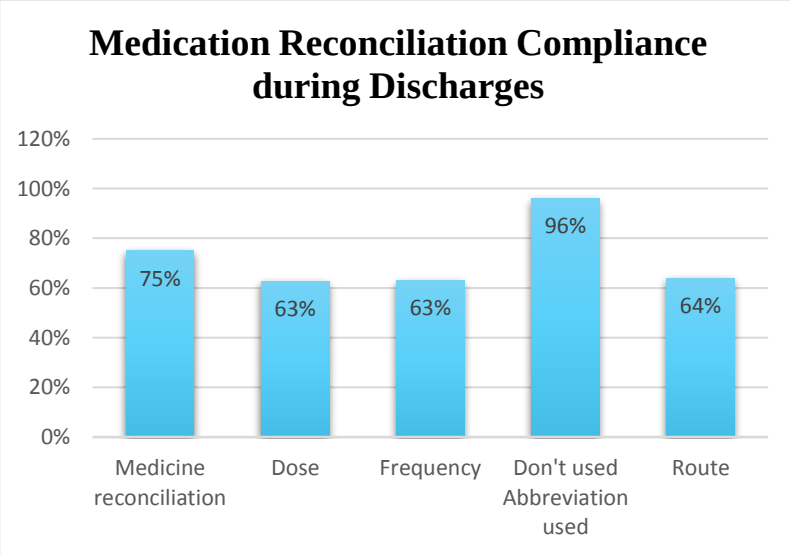


- After intervention, the compliance for medication reconciliation in the emergency department during admissions improved to 99%.
- The doctors' compliance for doses, frequency and routes also improved from 43% in the month of April to 52% in the month of May.
- The target of achieving at least 50% doctors' compliance for correct documentation of medication reconciliation in the CPRS was achieved as compliance for all the parameters was above 50% in the month of May.

DISCHARGES

MEDICATION RECONCILIATION AT DISCHARGE OF THE PATIENTS

S. No.	PARAMETERS	Compliances	Non-Compliances	Total Patients	%age compliance
1	Medicine reconciliation	501	174	675	74.22
2	Dose	423	252	675	62.67
3	Frequency	423	252	675	62.67
4	Don't used Abbreviation used	650	26	675	96.30
5	Route	430	245	675	63.70



INTERPRETATION

- The compliance for Medication Reconciliation during all the discharges from the hospital was also evaluated.
- The compliance for medication reconciliation during discharges was around 75%.
- The doctors did not write the names, dosage, frequency and routes of the antibiotics and analgesics that were being given to the patients during their stay in the hospital.
- The compliance for the different parameters of medication reconciliation such as dose, frequency, route was around 60% during discharges.

4.13. LIMITATIONS

- In some cases, doctors did not write the medication notes.
- In some cases, wrong identification numbers were mentioned in the emergency register due to which some patients' records were missed out.
- The time period of 2 months was less to assess compliance of all the departments for medication reconciliation.

4.14. RECOMMENDATIONS

- Decrease the work load on the doctors.
- Train the junior doctors and interns to write complete notes in the CPRS.
- Senior consultants should have an intern who can write down the notes in CPRS for them.
- The HR should recruit more of pharmacists who can keep record of the patient's medications.
- Best possible medical history should be taken from every patients.
- There is a great scope of improvement in the compliance of medication reconciliation. The doctors need to be oriented to the importance of best possible medical history and medication reconciliation.
- There should be a compulsory column of medication reconciliation in the CPRS, this will ensure that doctors prepare the list of current medication and transfer it to the CPRS.
- Every department should be given small targets to achieve for compliance of medication reconciliation.

4.15. REFERENCES

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