

**Summer Training at
Artemis Health Institute, Gurgaon
(April - June, 2013)**

MEDICAL TOURISM AT ARTEMIS HEALTH INSTITUTE

**By
Monalisa Singh**

**Under the guidance of
Dr. Susmit Jain**

**Post Graduate Diploma in Hospital and Health Management
2012-2014**



**Institute of Health Management Research,
Jaipur
2013**

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CERTIFICATE

This is to certify that Dr. Monalisa Singh, student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from Institute of Health Management and Research, Jaipur Batch 17th has undergone summer training in Artemis Health Institute, Gurgaon from April 8th to June 8th 2013.

The candidate has successfully carried out the study assigned to her during summer training and her approach to study has been sincere, scientific and analytical.

I wish her success in all her future endeavors.



Dr. Susmit Jain
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Dr. Ashok Kaushik
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Dated: 6th June 2013

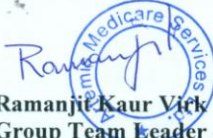
TO WHOM IT MAY CONCERN

This is to certify that Dr. Monalisa Singh from Institute of Health Management Research, Jaipur has successfully completed her Internship in Medical Services and International Marketing at Artemis Health Institute, Gurgaon from 8th April 2013 till 6th June 2013.

During her training, she was found to be sincere and hardworking.

We wish her success in future.

For Artemis Health Institute,


Ramanjit Kaur Vick
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ABBREVIATIONS

3D: Three dimensional

Apr: April

CBC: Complete blood count

CGHS: Central Government Health Scheme

CME: Continuing medical education

CSSD: Central Sterile Supply Department

CTVS: Cardiothoracic and Vascular Surgery

DWIBS: Diffusion-weighted whole-body imaging with background body signal suppression

EHC: Executive health check-up

ER: Emergency room

Feb: February

Hb: Haemoglobin

HCF: Health care facilitators

HIS: Hospital information system

ICU: Intensive care unit

IPD: Inpatient department

IT: Information technology

JCI: Joint commission international

KFT: Kidney function test

LDR: Labor and delivery room

LFT: Liver function test

Mar: March

MD: Doctor of Medicine

MICU: Medical intensive care unit

MNC: Multinational company

MRD: Medical records department

MRI: Magnetic resonance imaging

NABH: National Accreditation Board for Hospitals & Healthcare Providers

NABL: National Accreditation Board for Testing and Calibration Laboratories

NICU: Neonatal intensive care unit

No. : Number

OPD: Outpatient department

OT: Operation theatre

PCS: Patient Care Services

PET: Positron emission tomography

PICC: Peripherally inserted central catheter

PICU: Pediatric intensive care unit

SSI: Surgical site infections

TPA: Third Party Administrator

TPQ: Third party queries

TTI: Transfusion transmitted infection

UTI: Urinary tract infection

VAP: Ventilator-associated pneumonia

WHO: World health organization

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1.0 INTRODUCTION

1.1 Organization Profile: Studied hospital located at Gurgaon is a JCI (Joint commission international) Accredited, NABH Accredited, NBL accredited 300-bed tertiary care super-specialty flagship hospital established by Artemis Health Sciences (AHS) - a healthcare venture launched by the promoters of the Apollo Tires Group. Artemis aims at creating an integrated world-class healthcare system by leveraging the best medical practices backed by cutting-edge technology. The super-specialties chosen by Artemis as its area of focus include Cardiovascular (Heart), Oncology (Cancer), Orthopedics & Joint Replacements, Neurosciences and Bariatric & Minimally Invasive Surgery in addition to host of other specialties.

With highly advanced medical infrastructure, broad knowledge base, medical expertise and extensive integration, Artemis Health Institute makes an ideal partner for international patients seeking a more affordable treatment away from their homes. The hospital offers globally benchmarked healthcare services administered by surgeons and physicians trained in international medical practices. For the benefit of its patients, the Institute also runs specialised programmes like Artemis Restore, Well Woman Programmes, and specialised clinics like Breast Clinic, Pain Clinic, Artemis Heart Club, Asthma Care Clinic, Skin Clinic, Knee & Shoulder Clinic, Ayurveda Clinic and Epilepsy Clinic amongst others.

This state-of-the-art, multi-specialty, tertiary care hospital is designed and constructed in strict accordance with International guideline and spread across a total area of 8.9 acres (when completely built. The institution is equipped with the latest technology in preventive, diagnostic and therapeutic imaging, along with the highest levels of in-patient monitoring, and a paperless and film-less Hospital Information System.

This hospital already has many firsts to its credit, being the **first installation in India** to offer

- Intelligent critical patient monitoring system with clinical decision support application backed by portal imaging technology
- Film-less and paperless environment (seamless integration with the Hospital Information System)

- Functional MRI Scanning using Non-Contrast Imaging for Cancers (DWIBS)
- 3 dimensional dynamic road mapping for reconstructive imaging
- Fertility Preservation Services for Cancer Patients.

KEY DIFFERENTIATORS

- Film-less and paperless environment (seamless integration with the Hospital Information System)
- The real time Image Guided Radiation Therapy (IGRT) is one of its kinds in North India. Allows for radiation to be delivered exactly where required, with minimal impact on healthy cells
- An Endovascular Suite equipped with the latest in 3D rotational imaging to perform neuro-interventional, cardiac catheterisation or peripheral endovascular procedures with precision
- An in-house bio-repository and a 24-hour blood bank with the facility to conduct Individual Donor NAT (Nucleic Acid Amplification Test)

AWARDS

- Most Promising Start-Up of the Year 2007 award by Express Healthcare magazine
- Best IT Implementation for the Year 2008 from PC Quest magazine for Hospital Information System
- Best institute for Medical Value Year 2010- the CNBC Awaaz travel awards
- Asia Pacific Hand Hygiene excellence award Year 2011- WHO

ARTEMIS- FUTURE PLANS

- Expand the present tertiary unit from 300 to 600 beds
- Employ hub and spoke model of Health care services by creating:
 - 3-4 secondary care hospitals (1 such hospital is already in pipeline)
 - 8– 10 multispecialty clinics (4 such clinics are operational at present)
- Start Hospital on Wheel service concept

1.2 Hospital Philosophy

VISION

“To create an integrated world class healthcare system, fostering, protecting, sustaining and restoring health through best in class medical practices and cutting edge technology developed through in depth research carried out by the world’s leading scientific minds.”

MISSION

- Deliver world class patient care services.
- Excel in the delivery of specialized medical care supported by comprehensive research and education.
- Be the preferred choice for the world’s leading Medical professionals and scientific minds.
- Develop, apply, evaluate, and share new technology.
- Be an active partner in local community initiatives and contribute to its well-being and development.

CORE VALUES (CREATE)

C: Care for customer

R: Respect for Associates

E: Excellence through Teamwork

A: Always Learning

T: Trust Mutually

E: Ethical practices

ARTEMIS SERVICE STANDARDS



Figure No: 1

PEOPLE, PROCESS AND CULTURE

PEOPLE

We believe that our people are our most valuable asset. At Artemis Health Institute, we have been able to attract the best talent in the medical field, most of who have trained abroad, recognized internationally and are also certified by the Foreign Certification Boards.

PROCESS

At Artemis Health Institute, the hospital system and Processes are patient-centric and are designed to be among the best in the world. A sophisticated hospital information system links all the hospital areas allowing smooth flow of patient Information and seamless delivery of services. This allows for a “paperless” and “filmless” environment.

CULTURE

Artemis Health Institute provides an open, warm and conducive work environment for professional growth and experience. Striving to build life-long relationships with its employees, customers and partners, Artemis Health Institute nurtures talent and skill to improve the overall health standards of the community. The organization encourages a transparent work culture and endeavours to provide a truly world-class healthcare experience.

HEALTH CARE DELIVERY

Through Artemis Health Institutes, Artemis Health Sciences plans to bring high-end care and medical technology to India. Hospitals will be set up in major cities across the country, which will conform to the International Patient Services Protocols and Infection Control norms, to ensure patient safety and well-being. These hospitals will combine the best of technology world’s leading physicians to deliver quality patient care.

The aim of these institutes will be to bring the best of health care practices worldwide to India, delivered in an open, warm and patient- centric environment.

RESEARCH AND DEVELOPMENT

Artemis Health Sciences will build an independent Research and Development facility, to complement the health care delivery at the tertiary care hospitals. Located near the first Artemis Health Institute in Gurgaon, the research wing will be spread over 25,000 sq. feet. The premises will include a small and large animal facility, to carry out advanced in-vivo and in-vitro research, initially focused on cardiovascular diseases and Oncology. The technology led effort will include research in medicine, biotechnology, genomics, proteonomics, stem – cell therapy and nanotechnology.

MEDICAL EDUCATION

Artemis Health Sciences will establish Artemis Medical Colleges in India, to provide high-calibre medical education and training. These colleges will focus on achieving academic excellence by building digital classrooms, bringing together the world's best faculty in medical, nursing, paramedical education and allied health training. Artemis Medical Institutes will have affiliations and clinical collaborations with some of the finest medical universities in the world.

DEVICE DEVELOPMENT

In India, vast resources like infrastructure, intellect and skills exist, which have the potential to develop medical devices and equipment. Artemis Health Sciences is collaborating with some of the best technology companies worldwide, to manufacture and distribute medical equipments in India. The indigenous production of high quality, precision-engineered medical devices will help bring down health care costs, making it easily available and affordable to the masses.

HOSPITAL FLOW CHART

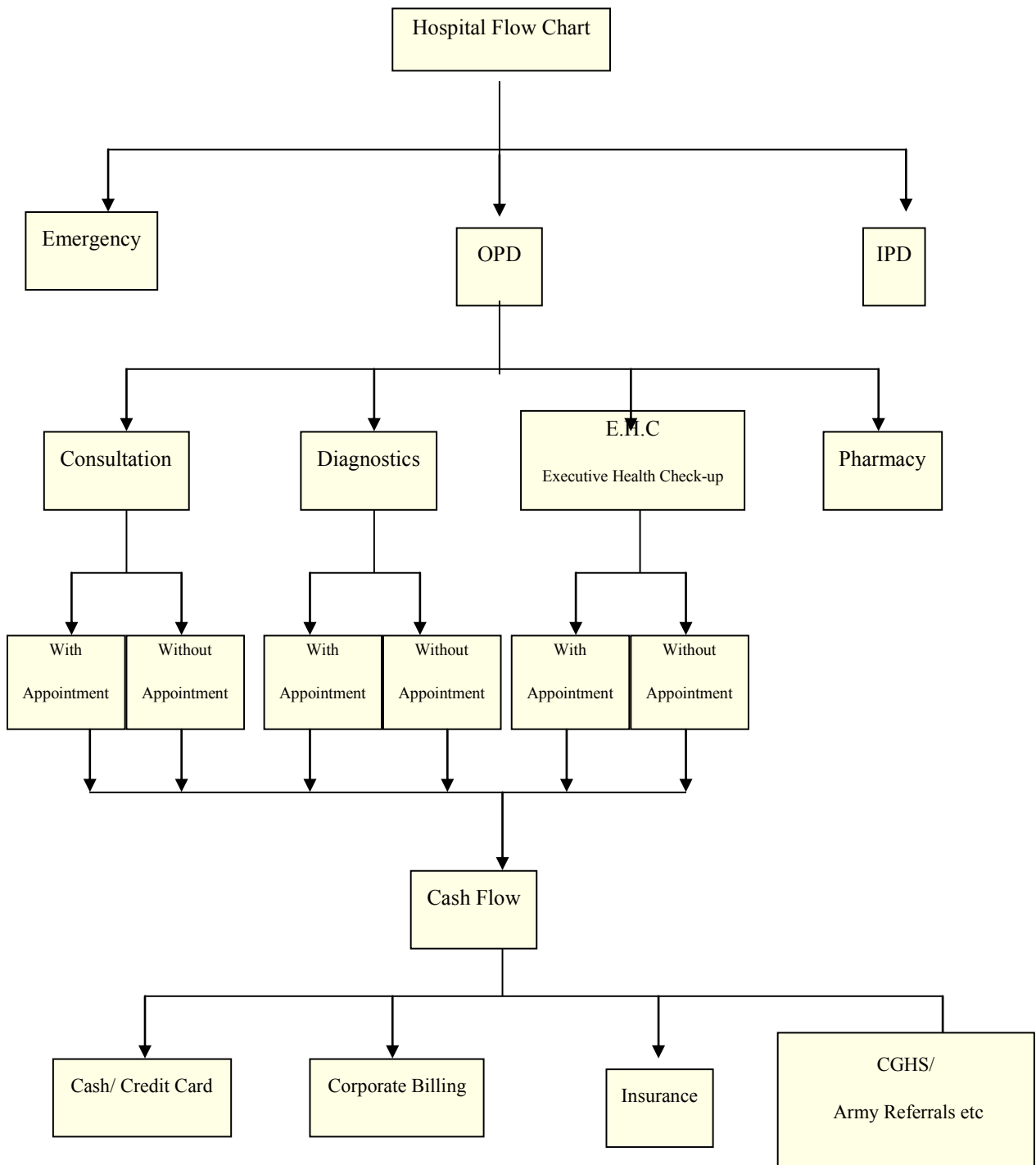


Figure No: 2

1.3 DEPARTMENT PROFILE

OUT PATIENT DEPARTMENT

Overview: Outpatient department is the first point of contact for patients in Artemis. All the patients with appointment or without appointment come to OPD for registration.

Location: Ground Floor

Layout: OPD adjoins atrium. There are multiple OPD registration counters with a separate counter for international patients. Sub waiting area present next to consultation chambers. Consultation rooms are divided into three clusters in double loaded single corridor

Manpower: Patient care service executives and associates

OPD Timings: 8am to 8pm

Consultation charges: Depends on speciality (Rs 500 – Rs 1000)

OPD Services:

Table no: 1

OUT PATIENT SERVICES		
Consultation	Diagnostic	Therapeutic
General	Imaging	Chemotherapy
Specialist	Laboratory	Radiation therapy
Disease Group	Non invasive speciality	Dialysis
Emergency	Metabolic medicine	Ophthalmology
Health check up	Nuclear medicineChe	Endoscopy
		Physiotherapy
		Dentistry
		Asthetic
		Anbulatory Care Services

Process flow of OPD:

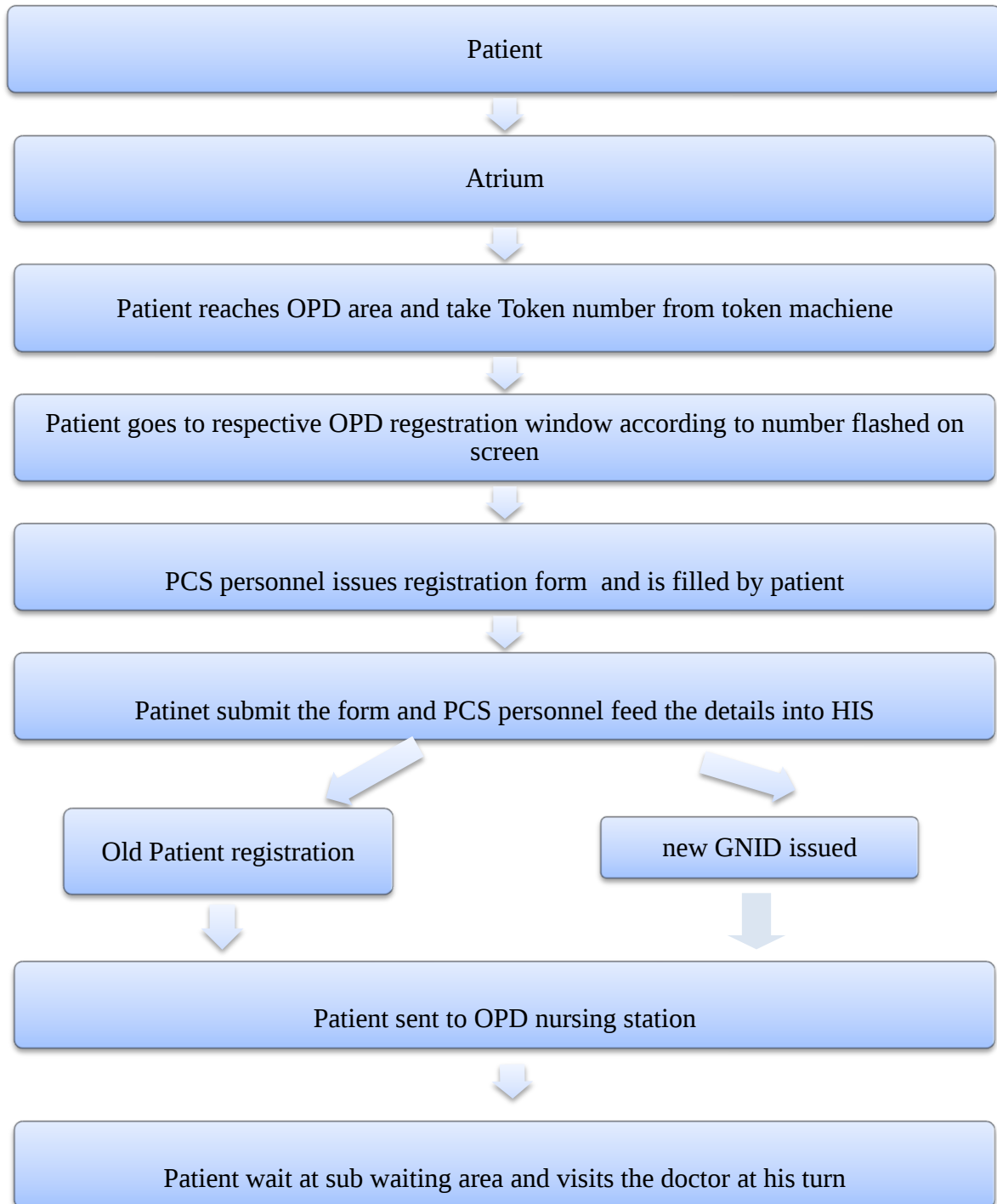


Figure: 3

INFECTION CONTROL DEPARTMENT

Overview: - Infection control department takes care of the microbial level of the hospital and especially of the critical areas .The teams conducts weekly audits of different areas.

Location: - Lower Ground Floor

Manpower: - Department Head 1 (MD Microbiology)
Nurses 2

Special feature: - The hospital won the Asia Pacific Award for Hand Hygiene in 2010-2011 and it strictly follows 5 steps of Hand Hygiene to prevent hospital acquired infections like VAP, SSI and Needle Stick injuries.

Findings: - Maximum infections were found to be needle stick injuries among the GDAs (General Duty Assistants) during bio waste disposal and UTI among the patients. But the rate of hospital acquired infections among patients is very less.

Infection control methods: - Fogging or fumigation of OT done once a week on Saturdays and frequency is increased if number of infected cases is more.

Training: - Every Thursday training of nurses as per the training calendar in Bio waste management, Hand Hygiene etc taken by the infection control department .Apart from this, the new staffs has a detailed infection control training given as part of their orientation program. The head of infection control plans training schedule/CMEs for the clinicians periodically.

DIALYSIS

Location: - Lower Ground Floor

Layout: - 9 cubicles with one bed and a TV each (3 additional units in the ICU). All the cubicles are segregated for patient privacy.

Other rooms: Clean utility, dirty utility, Workroom, Doctors room, Reverse Osmosis plant

Manpower: - Doctors 4(1 HOD nephrology + 2 associate consultants+1 resident)

Technicians 4

Nurses 4

- (2 technicians & 2 nurses in every shift & there are two shifts of 6 hrs each & at night they have on call service in case of emergency)

Timings: - 8:00 am to 9:00 pm

Equipments Present: - 9 dialysis unit of Fresenius, crash cart and other basic things.

Procedures done: - Peritoneal and Renal dialysis.

Process

- Registration of the patient is done on first contact and GNID number is given
- Scheduling of the dialysis procedure is done and patient is given appointment from one of the shifts(8to 12,12:30 to 4:30,5 to 9)
- Consent form is taken and details are entered in HIS
- Blood tests done before the dialysis to check HIV, HbsAg and CBC
- Tubes of infected patients are not reused but for other non-infected cases they can be reused after cleaning with renalin .This saves 700rs of the patient and can be reused 3 times
- Biomedical waste Management and infection control policies are followed

Patient flow: -1000 patients per month (24 to 28 patients per day). Dialysis is done in 3shifts of 4hrs each.

CENTRAL STERILE SUPPLY DEPARTMENT

Location: - Lower ground floor

Manpower: - 9 (3 per shift including one supervisor and 2 technicians)

The technicians have a diploma in CSSD

Layout: - Small Hallway which leads to the door of dirty zone .It is the point of receiving of soiled instruments from the OPD and IPD personnel.

Zones:-

- Dirty Zone
- Clean Zone
- Sterilized zone

Timings: -For receiving: 8:30am to 9:30am & 2:00pm to 3:00 pm (from OPD and IPD)
24 hrs (from OT, ER, ICU, CathLab)

Connectivity: - It is connected to the OT through the lifts (dumbwaiters)

Protocol followed

- **Prewashed:** All instruments are prewashed at their respective depts. before they are sent to CSSD.

Cleaning of the Dept: Virex (10 ml in 5lit) for the floors twice day and Cleanex tablets (500mg for 2 lit) for counter tops.

Fumigation is done once every month

Quality indicators use: Chemical and biological indicator tests, Strip test, Autoclave tape, Bowe Dick indicator. The infection control department team comes for monthly audits to collect swabs and make culture reports.

CHEMOTHERAPY

Location: Lower ground floor. It faces the outside greenery with full length glass windows making for a calming ambience.

Layout: It has 7 segregated cubicles with a clear view of each bed from the nursing station.

Manpower: 8(including one doctor and 7 nursing staff. 5 of the nursing staff stay in day care unit and two stay in the IPD.)

The staffs are very good in hospitality and make the patients comfortable. Counsellors also come for the patients when required.

Patient flow: 6 to 17 per day

Timings .It runs from 8:00 am to 8:00 pm while the new admissions close by 4:00 pm. There are 3 shifts of 6hrs each.

Process: Patients have to get pre cycle tests of LFT, KFT and CBC. If tests are fine they undergo the cycle and are given the next appointment. Patients also come for the flushing of chemo port and PICC line every 21 days with heparin. Chemo port is usually inserted by the CTVS team after an appointment. The precaution to be taken with them is to avoid blockage as well any infection at the site. Careful surveillance of the line is usually done by the nursing staff

Chemotherapy and dialysis unit have a common crash cart and fire extinguishing system.

FOOD & BEVERAGES

Outsourced from Sodexo

Location: Lower Ground Floor

Accessibility: Lifts and Staircase

Layout: One entrance which leads to the cooking area (Unilateral Flow)

Cooking area is divided into four sections

- Liquid Section
- Bulk cooking section for the staff
- Patient food section
- Chopping section (colour coded boards for chopping veg and non veg)
- Packing counter

Storage section

- Cold Storage room
- Separate Fridges for the veg and nonveg food
- Chest Freezers

Washing Area

- For Large and Small Utensils
- Ceiling made up of stainless steel with hoods present in them for air circulation and fire alarms and sprinklers.

Menu: 8 cyclic menus

Table no: 2

Services offered	Type	Timings
1 st	Early morning tea	6 am
2 nd	Breakfast	8am
3 rd	Mid morning soup	10:30 -11:00 am
4 th	Lunch	1 pm
5 th	Evening tea	3:30 pm
6 th	Evening soup	5:30 -6:00 pm
7 th	Dinner	8:00 pm
8 th	Bed time milk	9:30 pm

Clearance done after 30 minutes of service

Manpower: 82 outsourced from sodexo, 4 administrative staff from Artemis hospital and 4 dieticians on shift basis.

Policies and Procedures

- PFA accordance displayed
- Quality control measure taken
- Approval from Food Adulteration Department
- HACCP guidelines followed
- Colour coded chopping boards :

Red- meat

White- bread

Green- vegetables

Blue- Fish

- Colour coded dusters : white for service area , green for all hot and cold objects, blue for walls and tiles
- Colour coded buckets : Red for sodium hypochlorite and orange for clean water
- Hygiene audits held and hygiene cards of all employees checked regularly.

BLOOD BANK

Location: Ground floor adjacent to the emergency (open 24*7)

Layout:

- **Donor Registration and screening area**

In this area the donor is registered and his height, weight and Hb is tested .It includes three rooms for the consultants, 1 for Hb testing and a separate registration counter

- **Blood collection area**

- Whole blood donation area
- Aphaeresis room
- Refreshment room
- Waiting area
- TTI (transfusion transmitted infection) testing room
- Serology room for blood group testing
- Issue counter (also has Pneumatic shoot)
- Sterilisation room for discarding blood
- Storage section
- Component separation room
- Record section ...Records of donor maintained for 5 years

Manpower: 11 technicians 3 doctors 6 nurses

Process flow of Blood Bank:

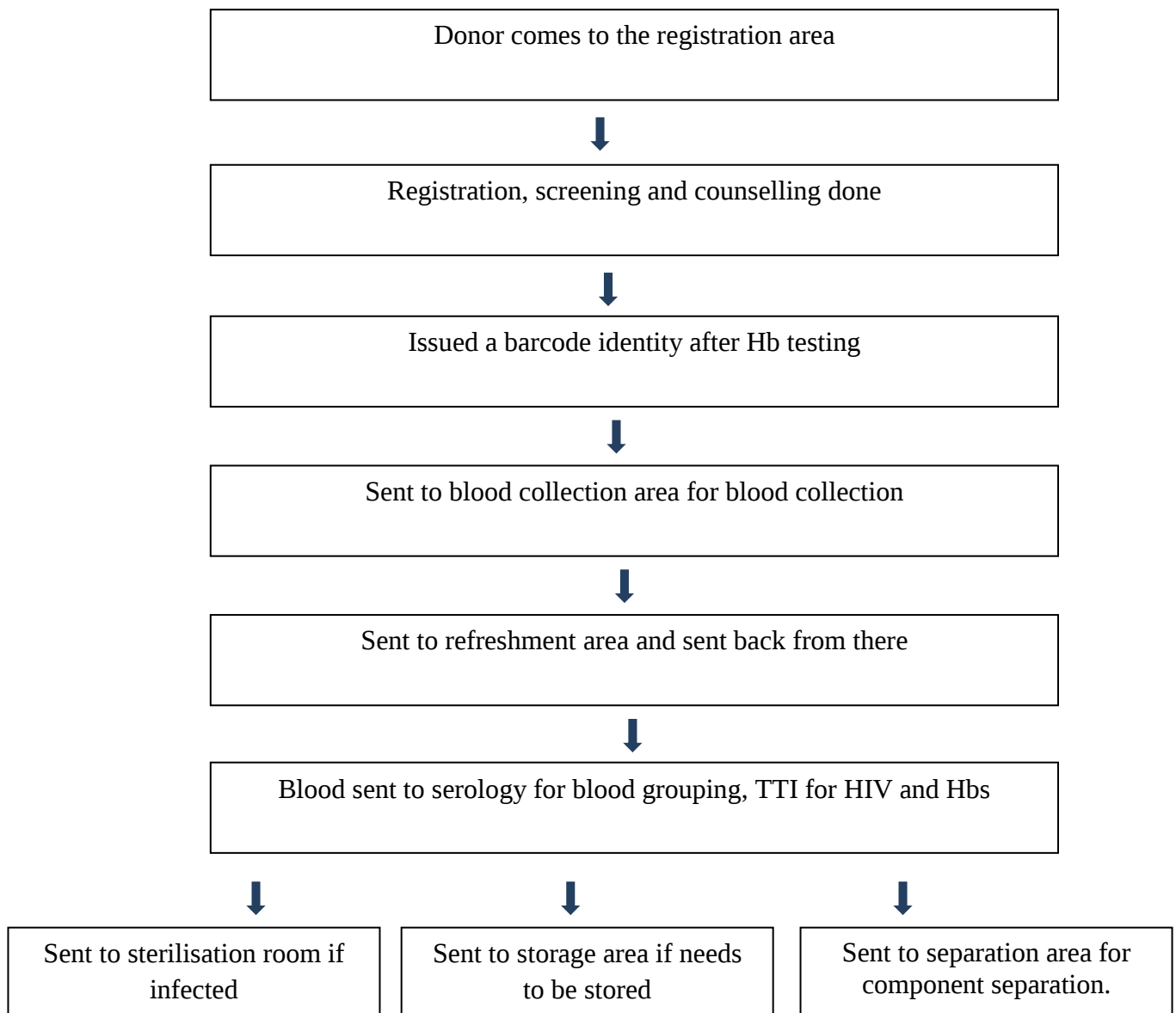


Figure No: 4

INTERANTIONAL MARKETING

Location: Ground Floor

International Marketing desk is situated inside the international patient lounge. It is special area exclusively designed for all international patients arriving hospital for their treatment.

Layout: International waiting lounge is equipped with modern amenities for international patients including Internet access, LCD with 24 hour Arabic and other news channel, tea coffee arrangements, international news papers.

Data Managed at International Desk

- Daily international patient inflow at OPD
- Daily international patient inflow at IPD
- Visa Invoice
- Fit to go statement
- Queries back up
- Final bill status back up

International Patient Care: The hospital treats many international patients and has a dedicated wing for international patients. The hospital also offers extra services to international patient's like-

- Offer seamless, end-to-end services
- Complimentary expert opinion and treatment estimate
- Language interpretation services
- Provision for guest house for patient and companion's stay outside the hospital
- Detailed treatment schedule customized to the patients requirements
- Concierge services (local mobile connection, foreigner's registration with police, currency exchange, local transport, confirmation of air tickets, and sightseeing & visa extensions)

FLOOR DIRECTORY

Ground Floor

- Atrium(Reception)
- PCS-OPD
- OPD-Pharmacy
- International Patient Lounge
- International Marketing
- Health & Wellness Department
- Dental centre
- Auditorium
- Blood Bank
- Emergency(12 beds)
- PCS-IPD
- TPA & Financial Counselling
- Visitors Cafeteria

First Floor

- Operation Theatre Complex
- Surgical ICU(34 beds)
- NICU(11 beds)
- LDR(6 beds)

Second Floor

- PICU & MICU(34 beds)
- Administrative Block
- Library
- IT Department

Third Floor

- Twin Sharing Rooms
- Economy Rooms(Four Sharing)

Fourth Floor

- Twin Sharing Rooms

Fifth Floor

- Deluxe Single Room

Sixth Floor

- Nursing Administration Office
- Executive Suite
- Presidential Suite

Basement

- Dialysis unit(9 beds)
- Chemotherapy & Nuclear Medicine
- Infection Control Office
- MRD
- IPD Pharmacy
- Staff Cafeteria
- Clinical Engineering
- CSSD
- CGHS Wards
- Food & Beverages Department
- Nutrition & Dietetics
- Housekeeping Office
- Store receiving unit
- Stationary store
- Power Plant

2.0 Medical Tourism at Artemis Health Institute

2.1 Introduction: “Medical Tourism” can be defined as provision of ‘cost effective’ private medical care in collaboration with the tourism industry for patients needing surgical and other forms of specialized treatment”

Medical tourism (also called medical travel, health tourism or global healthcare) is a term initially coined by travel agencies and the mass media to describe the rapidly growing practice of travelling across international borders to obtain health care.

The concept of Medical Tourism is not new one, In Roman Britain patients travelled to the Hot Waters Springs to cure their diseases. Florence Nightingale was also considered a pioneer in the concept of medical tourism as described in her own letters in 1856 She wrote detailing the condition, physical descriptions, dietary information and other vitally important details of patients whom she directed to the spas of Turkey which were significantly less expensive than their home country of Switzerland she was obviously directing patients of meagre means to affordable treatment

It is a practice that continued for 2,000 years. From the 18th century wealthy Europeans travelled to Spas from Germany to the Nile. Since the early nineteenth century, when there were no restrictions on travel in Europe People visited neighbouring countries in order to improve for their health. In this century, however, Medical Tourism expands to a much larger scale. Thailand, followed by India, Puerto-Rico, Argentina, Cuba and others quickly became the most popular destination for Medical Tourists

2.2 Medical Tourism in India

In 2004, Howard Staab, a 53-year-old carpenter living in Carborro, North Carolina, discovered that he needed heart surgery to replace a failing mitral valve (Lancaster, 2004; Singh and Datta, 2005). However, he had no health insurance. After, investigating with Durham Regional Hospital, he was told that the total cost of the procedure would be \$200,000. Instead, he decided to head to Delhi, India where the cost for the surgery and all related expenses including a three-week stay in the hospital and airfare was just under \$10,000. This is a typical example of Medical Tourism, whose evolution can be traced back to the early 1990's when affluent consumers from developing countries travelled to industrialized countries for medical treatment. After 2001, the wealthy individuals from the Middle East and South East Asia sought treatment in places such as India, Thailand, Malaysia and Singapore.

The emerging trend implies 'first world health care at third world prices' wherein the under-insured and un-insured consumers from industrialized nations seek first world care and quality at developing country prices (Turner, 2007)

Medical Tourism India (a.k.a. Health Tourism India) is a developing concept whereby people from all over world visit India for their medical and relaxation needs. Most common treatments are heart surgery, knee transplant, cosmetic surgery and dental care. The reason India is a favourable destination is because of its infrastructure and technology in which is in par with those in USA, UK and Europe. India has some of the best hospitals and treatment centres in the world with the best facilities. Since it is also one of the most favourable tourist destinations in the world, Medication combines with tourism has come into effect, from which the concept of Medical Tourism is derived.

Factors that have led to the increasing popularity of medical travel include the high cost of health care, long wait times for certain procedures, the ease and affordability of international travel, and improvements in both technology and standards of care in many countries.

Medical tourists can come from anywhere in the First World, including Europe, the Middle East, Japan, the United States, and Canada. This is because of their large populations, comparatively high wealth, the high expense of health care or lack of health care options

locally, and increasingly high expectations of their populations with respect to health care. The most popular medical tourism destinations are third world (developing) nations because wages are lower, infrastructure costs are less, and physicians don't normally pay exorbitant amounts for liability or malpractice insurance.

Confederation of Indian Industry reported that 150,000 medical tourists came to India in 2005, based on feedback from the organization's member hospitals. The number grew to 200,000 by 2008. A separate study by **ASSOCHAM** reported that the year 2011 saw 850,000 medical tourists in India and projected that by 2015 this number would rise to 3,200,000.

The demand for Indian healthcare services primarily comes from three types of consumers.

Table No: 3

Group Description	Countries	Demand Driver
Non residential Indians	Numbering 20 million across the world	Low cost healthcare combined with trip back to home
Patients from countries with under developed facilities	Nepal, Burma, Bangladesh, African Countries, Middle East, Latin America	Quality healthcare at affordable prices
Patients from developed countries	USA, UK, Canada	Low cost of healthcare, capacity constraints for services in home country

Advantages for medical treatment in India include reduced costs, the availability of latest medical technologies, and a growing compliance on international quality standards. Most estimates claim treatment costs in India start at around a tenth of the price of comparable treatment in America or Britain. India's medical tourism sector is expected to experience an annual growth rate of 30%, making it a Rs. 9,500-crore industry by 2015

Indian Brand Equity Foundation (IBEF) suggests that the Indian healthcare sector is expected to become a US\$ 280 billion industry by 2020 with spending on health estimated to grow 14 percent annually

Likewise, a study by Credit Suisse, FICCI-Ernst and Young, estimates medical tourism to be growing at 25-30% annually primarily due to: the low treatment cost in India (20% of the average cost incurred in the US, Singapore, Thailand and South Africa); rising consumerism; globalisation and changing lifestyles (AHEL, 2009).

Medical tourism agencies, or a medical travel facilitator, these are companies – (some are mom and pop operations) that, as their name suggests, act as facilitators or middlemen for medical tourism patients engaging in medical tourism. Medical Tourism Facilitators act as a third party and have played an important role in promoting the growth of medical tourism, and for many medical tourism patients, represent their first face to face contact with the concept of medical tourism. India is renowned for ancient alternative therapies such as Ayurveda, Yoga and Meditation, and naturopathy

SWOT FOR MEDICAL TOURISM IN INDIA

Table No. 4

Strengths • Quality and Range of Services. • Affordable costs • Internationally reputed hospitals. • Personal touch by the doctors in India. • Transport system is well developed and easy to go from one country to another country. • Medicines and lab cost is low as compared to developed countries.	Weakness • Low strong government support • Low coordination between the various players in the industry- airline operators, hotels, and hospitals. • Lack of uniform pricing policies across hospitals.
Opportunities • Increased demand for healthcare services from countries with aging population (US, UK) • Fast-paced life style increases demand for wellness tourism and alternative cures. • Shortage of supply in National Health Systems in countries like UK, Canada. • Demand from countries with underdeveloped healthcare facilities. • Demand for retirement homes for elderly people especially Japanese.	Threats • Strong competition from countries like Thailand, Malaysia and Singapore. • Overseas medical care not covered by insurance providers. • Under – investment in health infrastructure • Identifying a real practitioner is a major problem in India. • Exploitation of tourists by illegal money changers.

Source: Secondary Data

2.3 Medical Tourism in Gurgaon: Gurgaon has recently emerged as the latest hub for Medical Tourism. Apart from being IT hub and a favourite haunt for MNC offices, the city has a number of world class hospitals that not only treat Indian citizens but also people from outside. Medical tourism has emerged a prolific business in India. Due to the rising cost of medical care in foreign nations like USA, UK, and other European countries, people from outside countries are relying on Indian medical care as they are pocket friendly and high quality.

Gurgaon is the latest destination for Medical Tourism in India as it is the latest modern upcoming city near Delhi. Delhi, the centre of India is already popular for its world class medical care. However, due to lack of space and required infrastructure the focal point of Medicare is gradually shifting to Gurgaon. The availability of land and decent living conditions are factors that attract new and world class hospitals and doctors in Gurgaon.

Gurgaon hospitals specialize in various fields that most of the foreign patients want to get treated for. Off beat areas of medicine like holistic treatment, dental surgery, cosmetics surgery, addiction treatment, hair transplant, and so on. Procedures like Knee replacement, chemotherapy, Hip Joint Replacement, Lap Band Surgery, are successfully performed in Gurgaon hospitals.

The two most relevant hospitals in Gurgaon that come in the category of Medical Tourism are Artemis and Medanta. Medanta is a 1250 bedded multi specialty hospital that is run by successful and old doctors with various specializations. Apart from targeting medical tourism the hospital aims to develop as a varsity. Artemis is an even older hospital popular for treating foreign patients. It's a 300 bedded health care facility that excels in a number of procedures. Gurgaon also offers a number of service apartment facilities where patients can stay in case of long treatment or follow-ups. These apartments are equipped with international living standards so that patients find home away from home. Medical tourism is pulling a lot of foreign citizens to Gurgaon. World class hospitals like Artemis, Medicity, Paras, Fortis, Max, are well-equipped to offer foreign patients the desired treatment and nursing. So this millennium city holds a lot of potential when it comes to offering Medicare of International standards.

2.4 Justification of the study

In this project the main objective is to study the entire process of Medical Tourism at Artemis Health institute. There will be study of each aspect starting from the process of bringing the patient to the hospital, his treatment and return to their.

For business development from international patients we need to study the entire process of medical tourism. Ravaged by diminishing revenues and intense price competition, hospitals desperately need to find profitable areas of healthcare. Finding out through which countries we are getting maximum patients and also maximum business. What are the operational limitations? What are the causes for the same and how we should overcome those?

Globalization has left nothing in black & white anymore and we are now living in a rainbow of grey. We need to be very fast and responsive according to the needs of the patients which makes in time response to queries of patients cardinal. Thus analyzing the response time of patient queries through third party and their conversion rate will help us in finding the profitable areas. This would further contribute in conceptualizing tailored strategies for these areas to aim very high in business development.

2.5 Objective: To study the process of medical tourism and international business in respect to countries and clinical specialities at Artemis Health Institute. It also includes in-depth analysis of Third Party Patient queries as a strategy of strengthening Medical Tourism at Artemis Health Institute.

2.6 Specific Objectives

1. To study the process of International Patient services along with marketing strategies.
2. To study the catchment area of patients coming to the proposed hospital
3. To analyze patients profile in terms of medical speciality required
4. To analyze third party patient queries response time and measures to reduce it.

2.7 Limitations

1. Response time of preceding months could not be found due to extensive data and limited time.
2. Facilitator wise distribution of queries could not be showed due to confidentiality of data.
3. Long term feasibility of the measures to strengthen business cannot be predicted due to limited follow up time of effects.

3.0 Methodology

3.1 Framework and data collection

Design of study is a logical construction of the study having a complete sequence of steps taken ahead of time to ensure that the appropriate data will be obtained in a way which permits an objective analysis of a particular problem leading to valid and precise inferences in most economic and useful forms. The design of this study was done in following steps:

1. collected all the possible data relevant to International patient services, International Marketing and Medical tourism (primary and secondary both)
2. Then data screening was done and took some measures for synchronising and arranging.

Study area

International Marketing & Medical Services department of Artemis Health Institute, Gurgaon

Study Period

22 April - 31 May 2013

Study design

Exploratory

Type of data & Source of data

Quantitative data from Secondary Source

Quantitative and Qualitative data from Primary Source

Data collection technique & Tools

Table No. 5

	TECHNIQUE	TOOLS
Primary Data	Personal Interview Observation	MS Excel 2007
Secondary Data	Observation	Records of Hospital, HIS, Websites, E-magazines, Journals, Article, Books

Statistical software used for data analysis

Pivot Tables, Pie chart, Bar Graphs

3.2 Variables

1. Objective 1: Taking active participation in the process from bringing patient to the hospital till discharge. This involves keen observation. This involves handling of third party patient query, sending the visa invitation and getting all the formalities done arranging for the pickup and accommodation of the patient, discharge process etc.

2. Objective 2 and 3:

Analysis and interpretation of data on Excel sheet which includes

- I. Total no. of international patients coming in past five months including studied period (Month wise)
- II. Country wise distribution in past five months including studied period (Month wise)
- III. Medical specialty wise distribution in different countries

3. Objective 4:

Done in two phases

- a. Analysis of past four month's data of third party patient query response time, finding insufficiencies and suggesting recommendations to decrease response time.
- b. Making Excel sheet and keeping daily record of all third party patient query after recommendations and doing comparative study of increase in the flow of international patients of that particular country and speciality within the duration of study.

Other methods used for the objective study are:

- a. Key Personnel Interviews
- b. Self Observation

4.0 Data Collection, Interpretation and Analysis Plan (According to Objective)

4.1 OBJECTIVE ONE

To understand International marketing strategies and the entire process of handling International Patients starting from the reply to medical query regarding treatment plans, cost and success of surgery, pre departure arrangements to the post discharge services.

Marketing strategies used for Medical Tourism

To understand the marketing strategy we need to understand that how patients are coming to the hospital?

Third Parties: It includes Individual Healthcare Facilitators (HCF), medical tourism company, international doctors & diagnostic centres, Governments.

Web Queries: Patient's directly send web queries to hospital's ID through surfing on internet

Public Relations: Patients are referred by previously treated patients.

Promotional Strategy used by hospital: Hospital organises health check-up camps in different countries. Hospital also organizes and takes part in CME conference and medical seminars.

OBSERVATION: Total patients who came during the studied period shows that 80% of patients are brought to the hospital by Third Party and rest 20% walk in.

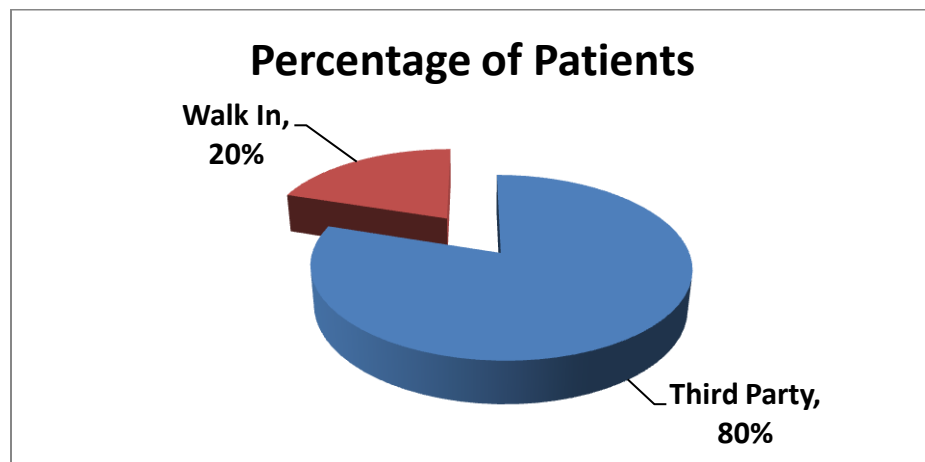


Figure No: 5

PROCESS FOR INTERNATIONAL HEALTHCARE FACILITATORS

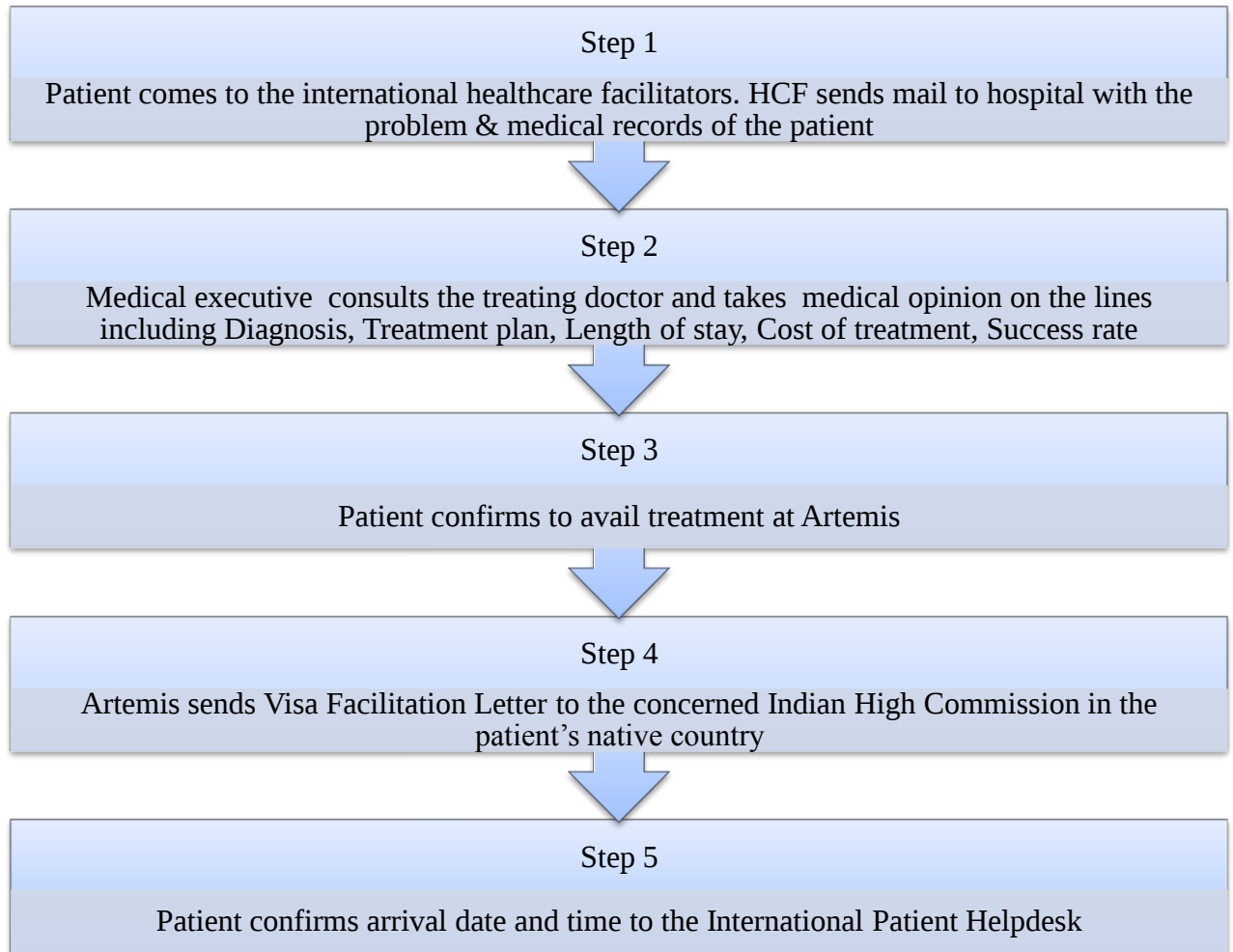


Figure No: 6

PROCESS OF HANDLING THIRD PARTY QUERY

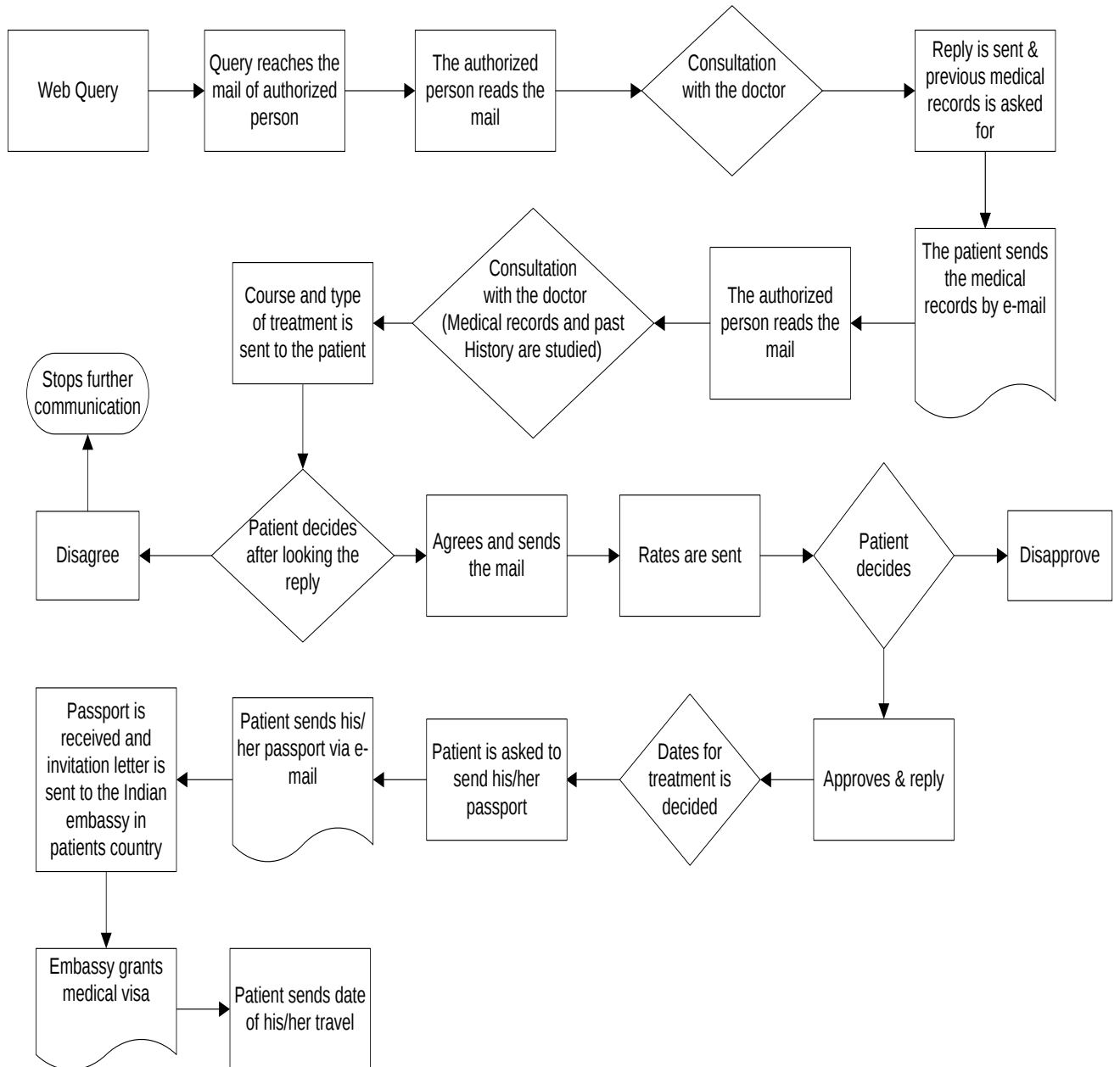


Figure no: 7

Various services provided to International Inpatients are:

PRE DEPARTURE SERVICES

- Tele-consults and Pre Departure Evaluation
- Facilitate Travel arrangements (if required)
- Visa Services
- Hotel Booking (Budget, Deluxe and Luxury Hotels)
- Pickup and drop at the International Airport in New Delhi
- Bedside admission in the Hospital

POST ADMISSION SERVICES

- Highest quality patient care
- Centrally air-conditioned hospital
- Choice of rooms from private to luxury suites
- Choice of International cuisines
- Interpreters in select languages (Arabic, French, Spanish)
- Mobile Phones for easy access and communication
- Wi Fi enabled suites
- Travel Desk within the hospital
- Money Exchange
- Personal relationship executive 24x7
- Patient's progress available online for relatives and friends
- Send messages and greetings

POST DISCHARGE SERVICES

- Post Discharge travel arrangements through a travel partner
- Post discharge stay in Delhi in a choice of hotels
- Sightseeing in Delhi
- Travel and stay in the Himalayas or any other tourist location in India
- Travel back home facilitated

TRAVEL AND ACCOMMODATION SERVICES

- Travel arrangements to reach India
- Visa Services
- Hotel Booking (Budget, Deluxe and Luxury Hotels)
- Pickup and drop at the International Airport in New Delhi
- Post discharge stay in Delhi in a choice of hotels
- Sightseeing in Delhi
- Travel and stay in the Himalayas or any other tourist location in India
- Travel arrangements for the journey back home

4.2 OBJECTIVE TWO & THREE: OBSERVATIONS AND FINDINGS

PART 1: Inflow of International Inpatients (Jan 13-May 13)

TOTAL NUMBER OF INTERNATIONAL PATIENTS - MONTH WISE

Table No. 6

MONTH	NO. OF PATIENTS
JANUARY	220
FEBRUARY	309
MARCH	253
APRIL	259
MAY	340
TOTAL	1381

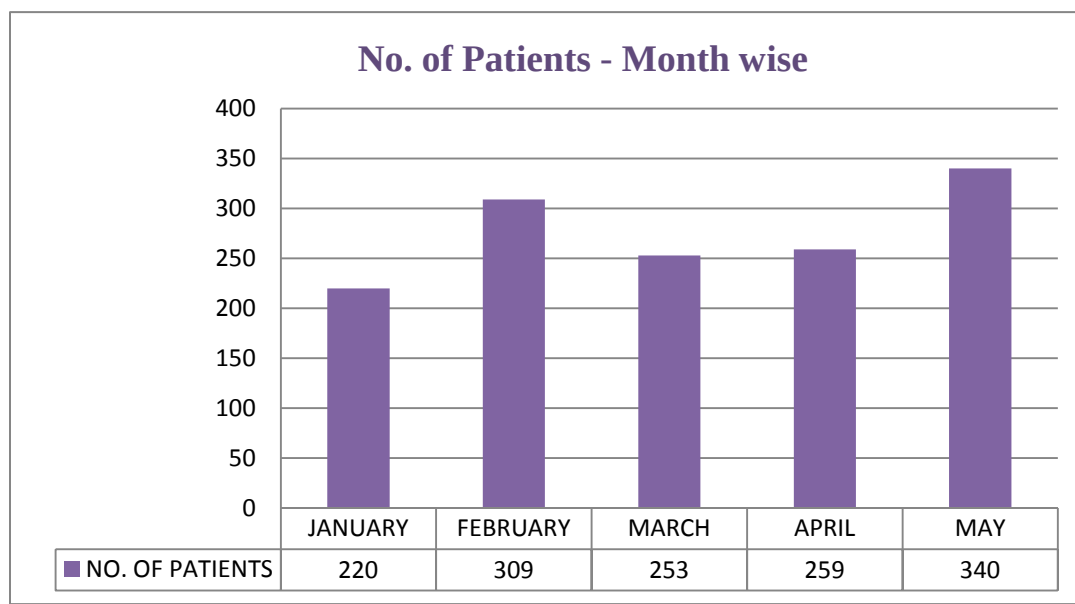


Figure no: 8

Source: Secondary data analysis

The inflows of international inpatients show sudden increase in the month of February and then decrease in month of March and April. The inflow of international patients **maximum in the month of May.**

TOTAL NUMBER OF INTERNATIONAL INPATIENTS- COUNTRY WISE

Table No. 7

COUNTRY	NO. OF PATIENTS
IRAQ	708
AFGHANISTAN	253
NIGERIA	172
MALAWI	106
CONGO	57
OTHERS	50
UZBEKISTAN	35
TOTAL	1381

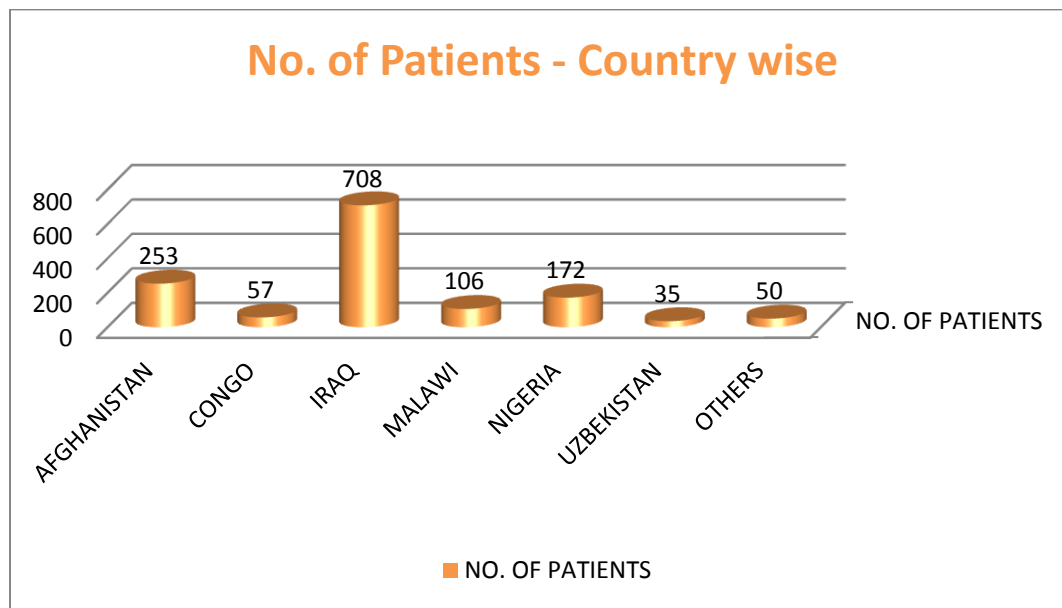


Figure no: 9

Source: Secondary data analysis

The **catchment areas for the Hospital** are **Iraq** (708 patients) followed by **Afghanistan** (253 patients) followed by **Nigeria** (72 patients) and **Malawi**(106 patients) .

TOTAL NUMBER OF PATIENTS – SPECIALITY WISE

Table no. 8

SPECIALITY	Jan	Feb	Mar	Apr	May	Total
Orthopaedics	44	74	65	65	85	333
Medical Oncology	41	60	38	66	79	284
Neurosurgery	42	45	35	34	44	200
Cardiology	10	25	14	7	12	68
Neurology	11	15	12	8	11	57
Internal Medicine	9	12	13	9	13	56
General Surgery	9	6	15	8	15	53
ENT	9	11	6	9	9	44
Nephrology	7	4	5	9	17	42
Ophthalmology	4	12	7	9	10	42
CTVS	5	9	8	3	12	37
Obstetrics & Gynaecology	8	10	5	6	5	34
Surgical Oncology	4	10	9	5	6	34
Cosmetic & Plastic Surgery	5	6	3	7	9	30
Urology	4	1	7	7	6	25
Others	6	5	8	2	4	25
Paediatric Cardiology	2	0	1	4	2	9
Paediatrics	0	4	2	1	1	8
Grand Total	220	309	253	259	340	1381

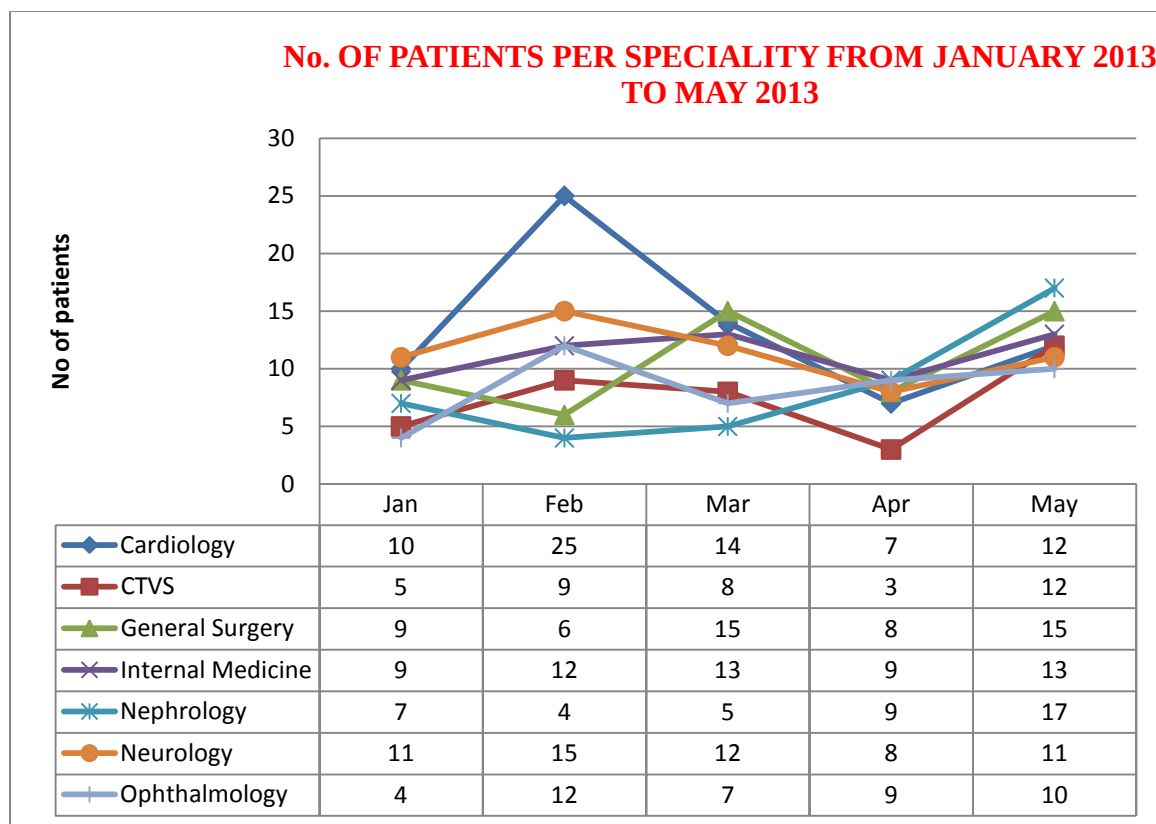


Figure no: 10

Source: Secondary data analysis

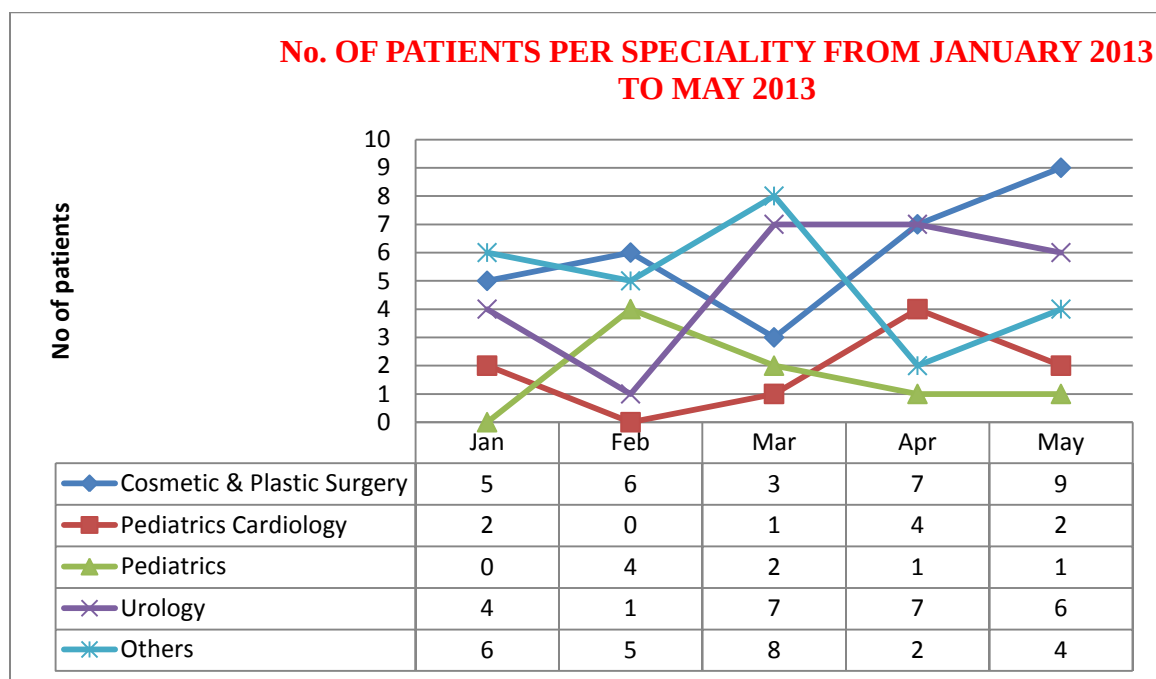


Figure no: 11

Source: Secondary data analysis

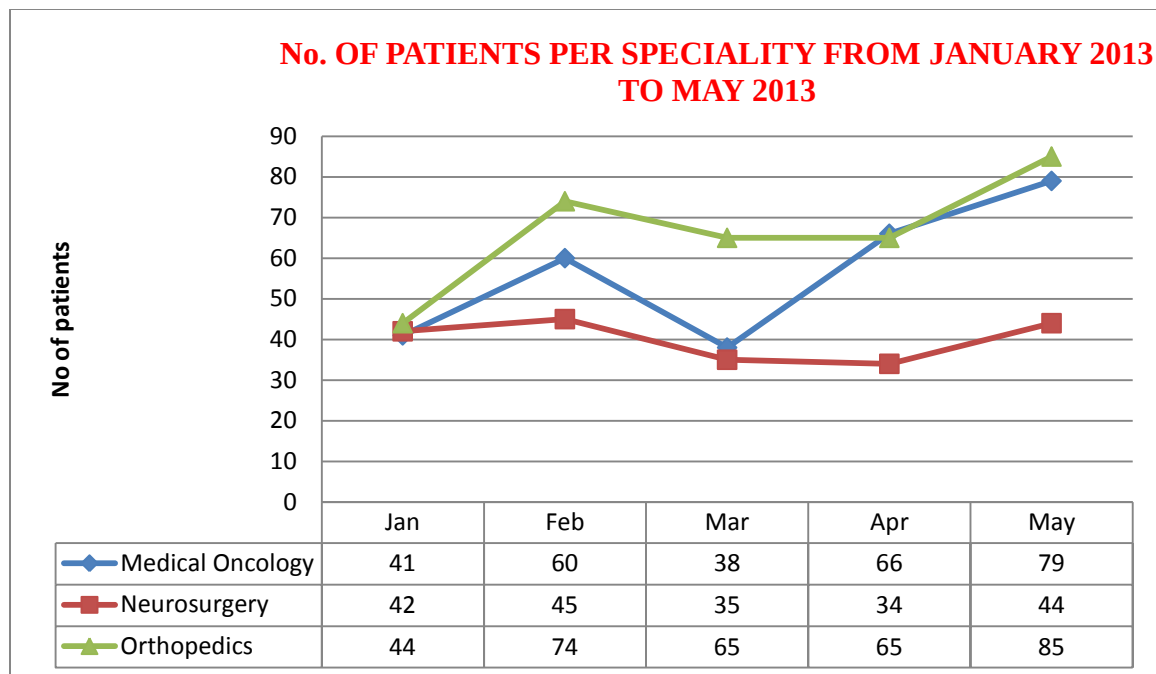


Figure no: 12

Source: Secondary data analysis

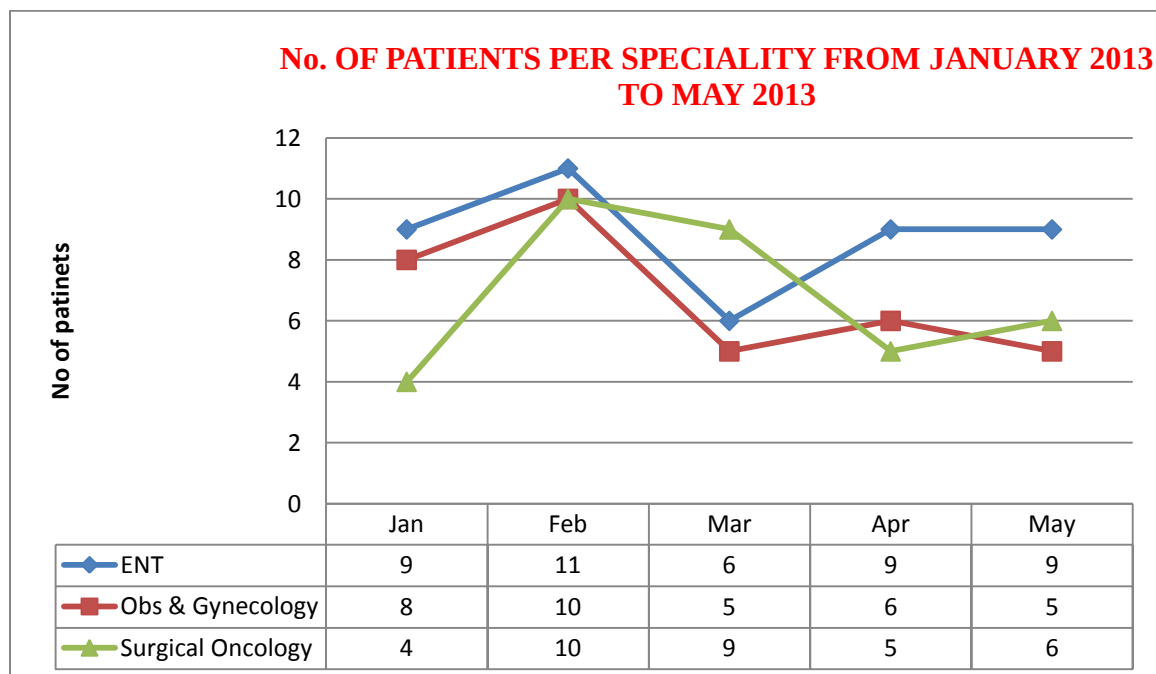


Figure no: 13

Source: Secondary data analysis

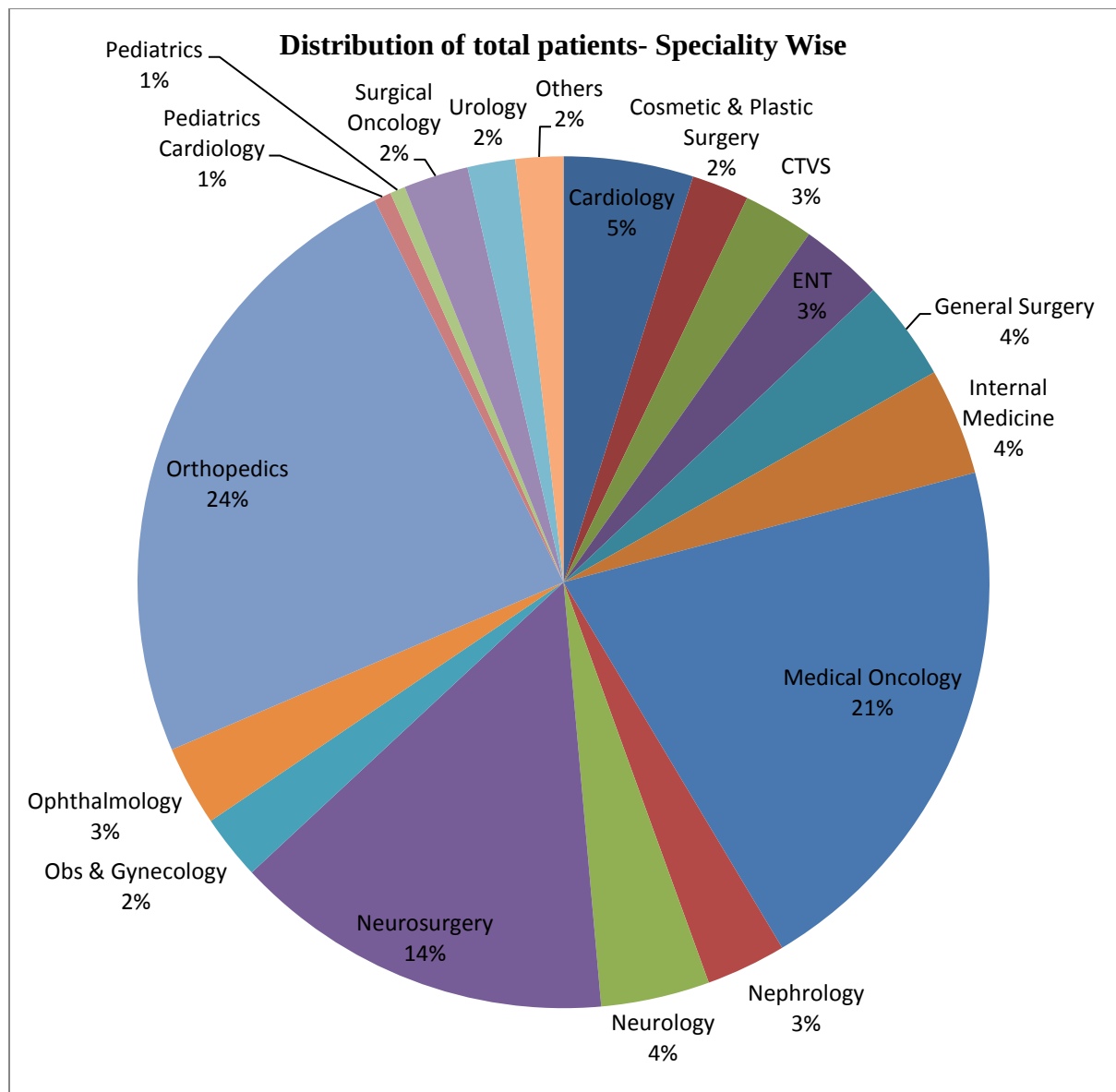


Figure no: 14

Source: Secondary data analysis

The inflow of international patients is **maximum in Orthopaedics** (333 patients) followed by Medical Oncology (284 patients), and Neurosurgery (200 patients)

PART 2: Significant Specialities of international patients according to most revenue generating countries (Iraq, Afghanistan, Malawi, Nigeria)

Table No. 9

Country	January	February	March	April	May
Afghanistan	Neurosurgery Cardiology	Medical oncology Orthopaedics	Orthopaedics	Medical oncology	Medical oncology Orthopaedics
Congo				Medical oncology	
Iraq	Medical oncology Neurosurgery	Orthopaedics Neurosurgery Medical oncology	Orthopaedics Neurosurgery Medical oncology	Orthopaedics Medical oncology Neurosurgery	Orthopaedics Medical oncology Neurosurgery
Malawi		Medical oncology	Medical oncology	Medical oncology	Medical oncology
Nigeria	Orthopaedics	Orthopaedics	Orthopaedics Neurology	Medical oncology	Neurology

International patients from Afghanistan mostly come for Orthopaedic and Oncology treatment whereas patients from Iraq visit the hospital for Orthopaedic and Neurosurgery. Malawi patients exclusively seek Medical Oncology treatment.

4.3 OBJECTIVE FOUR: OBSERVATIONS AND FINDINGS

To analyze third party patient queries (TPQ) response time and measures to reduce it.

Third party patient queries are those which are sent through individual healthcare facilitator, medical tourism company, or international doctors and diagnostic centres. Study was done to find response rate and response time of third party queries for the month of April – May.

OBSERVATION

Response pattern and response time for third party queries for the month of April showed a direct relation to decreased number of international patients coming to hospital. Detailed analysis of response rate and response time of third party queries from most revenue generating countries was done to find out the bottlenecks for the delayed and insufficient response.

It was found that in the month of April, a large number of queries were unanswered or had a very long response delay.

THIRD PARTY QUERY STATUS: APRIL

Table No. 10

Status	No of query
Replied within same day	46
Replied after 1 day	53
Replied after 2 days	68
Replied after more than 2 days	98
Not Replied	12
Insufficient reports	16

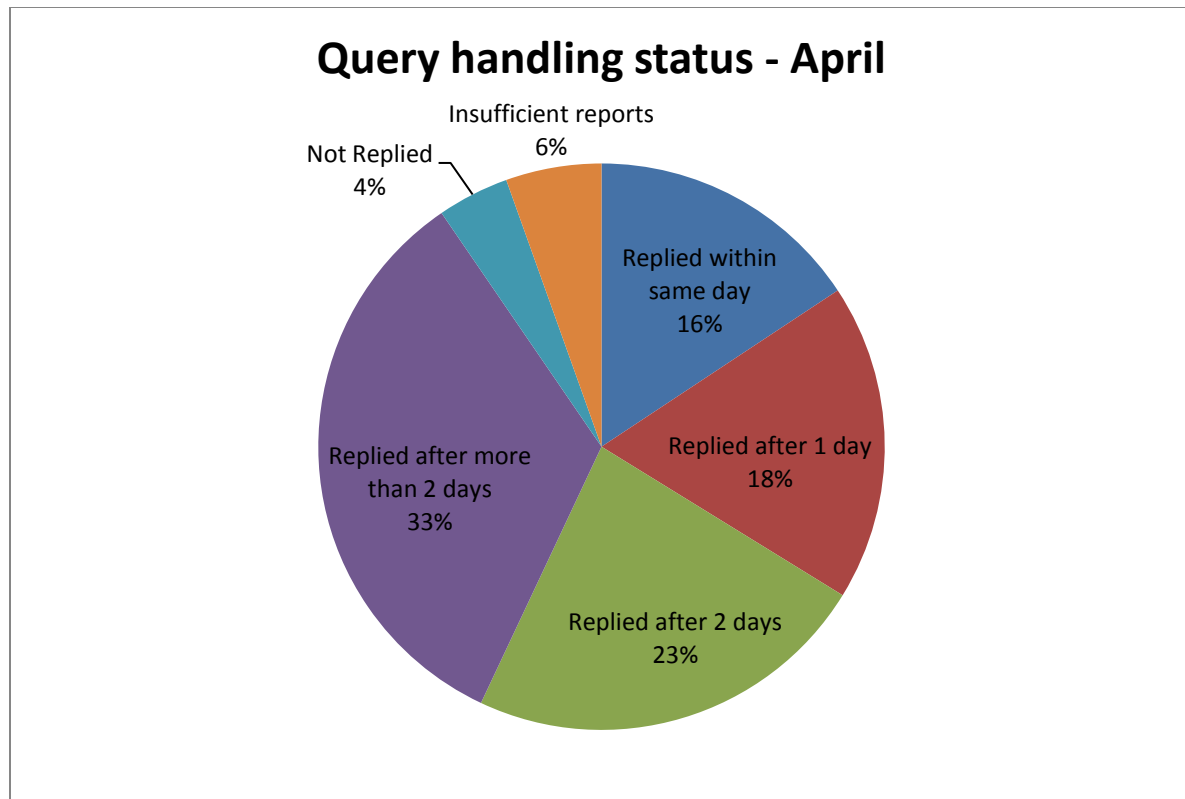


Figure no: 15

Source: Secondary data analysis

Factors contributing to the delay were:

1. Queries to respective doctors were sent only through email and most of the times they could reply due to inability to access their email timely.
2. Queries from facilitator were not properly formatted thus it used to take medical executive a lot of time to screen queries according to speciality
3. Insufficient clinical history or reports were attached to emails.
4. Query for a particular speciality was sent only to one doctor.
5. Queries received in evening remained pending till next day.
6. There was no benchmark of response time to be achieved.

To overcome these problems few measures were recommended, which were readily accepted and results were seen for the month of May to evaluate the effectiveness of the measures.

RECOMMENDATIONS

1. Query format was formed to be used in subject of the email to decrease the screening time of queries
2. Physical query handling through hard copies along with emails was initiated.
3. Two teams of doctor were alternatively approached for all major specialities.
4. Scheduling of queries was done according to OPD timings of the specialities.
5. Benchmark was set for response time for the team as follow

Recommended process for query handling

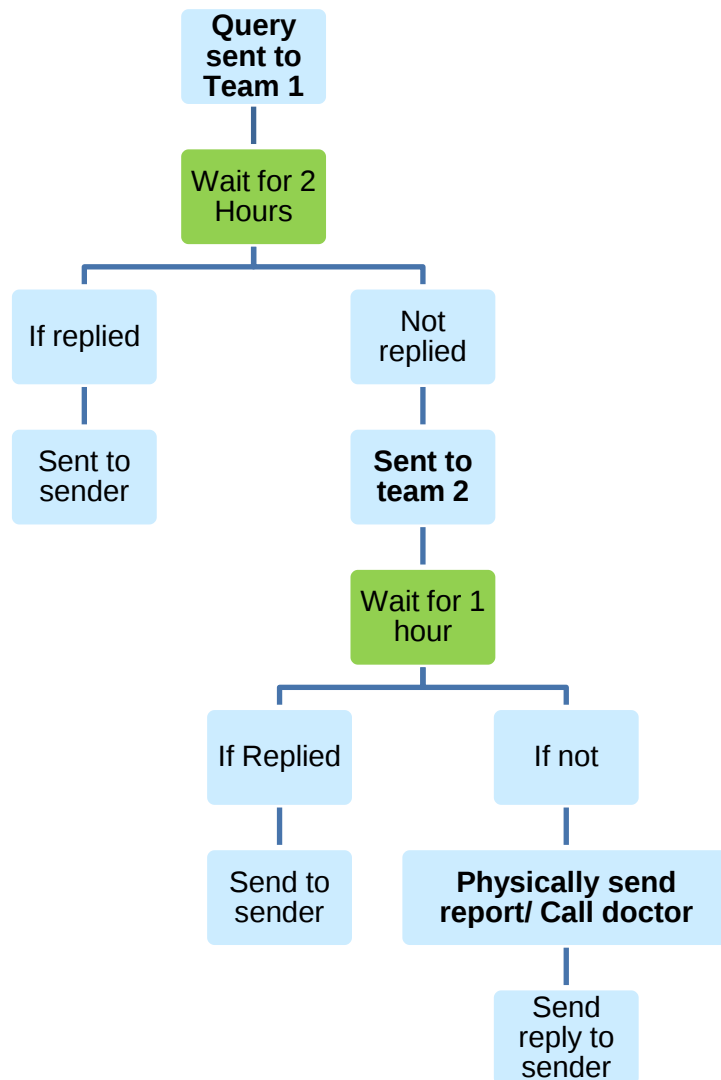


Figure No. 16

THIRD PARTY QUERY STATUS- MAY

Total Queries- 388

Table No. 11

Status	No of Queries
Replied within same day	206
Replied after 1 day	134
Replied after 2 days	17
Replied after more than 2 days	9
Not Replied	9
Insufficient reports	13

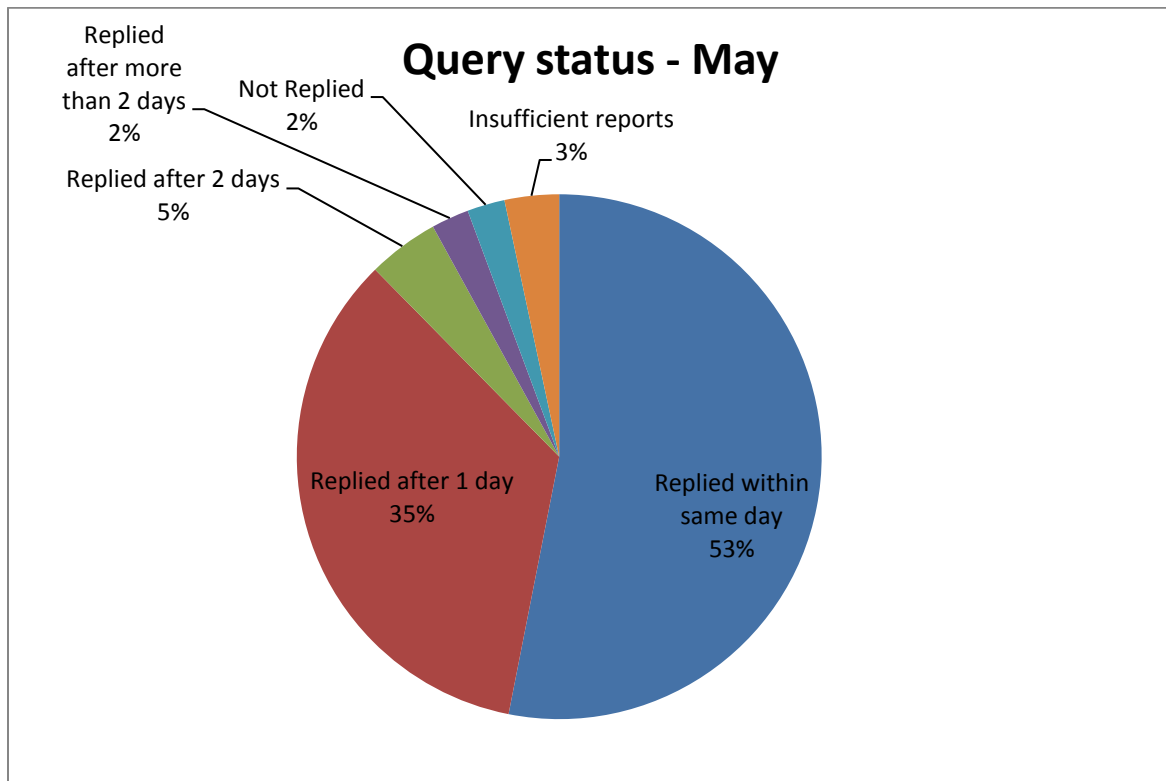


Figure no: 17

Source: Primary data analysis

COMPARITIVE STATUS OF MONTH OF APRIL AND MAY

Total Queries – Country wise

Table No. 12

COUNTRY	APRIL	MAY
IRAQ	158	177
NIGERIA	32	68
AFGHANISTAN	47	62
MALAWI	28	32
CONGO	15	25
UZBEKISTAN	4	14
OTHERS	9	10
TOTAL	293	388

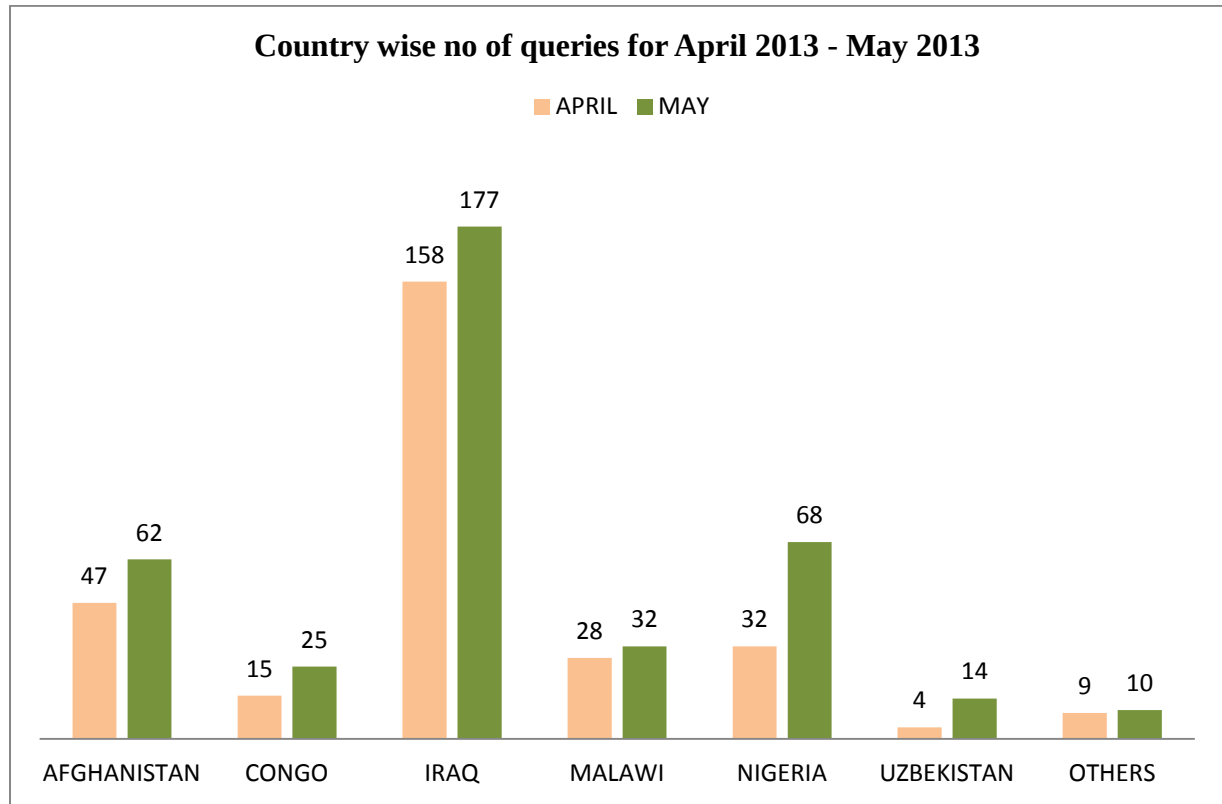


Figure no: 18

Source: Primary & Secondary data analysis

QUERY RESPONSE STATUS

Table No.13

Queries Status	APRIL	MAY
Replied within same day	46	206
Replied after 1 day	53	134
Replied after 2 day	68	17
Replied after more than 2 day	98	9
Not Replied	12	9
Insufficient reports	16	13
Total	293	388

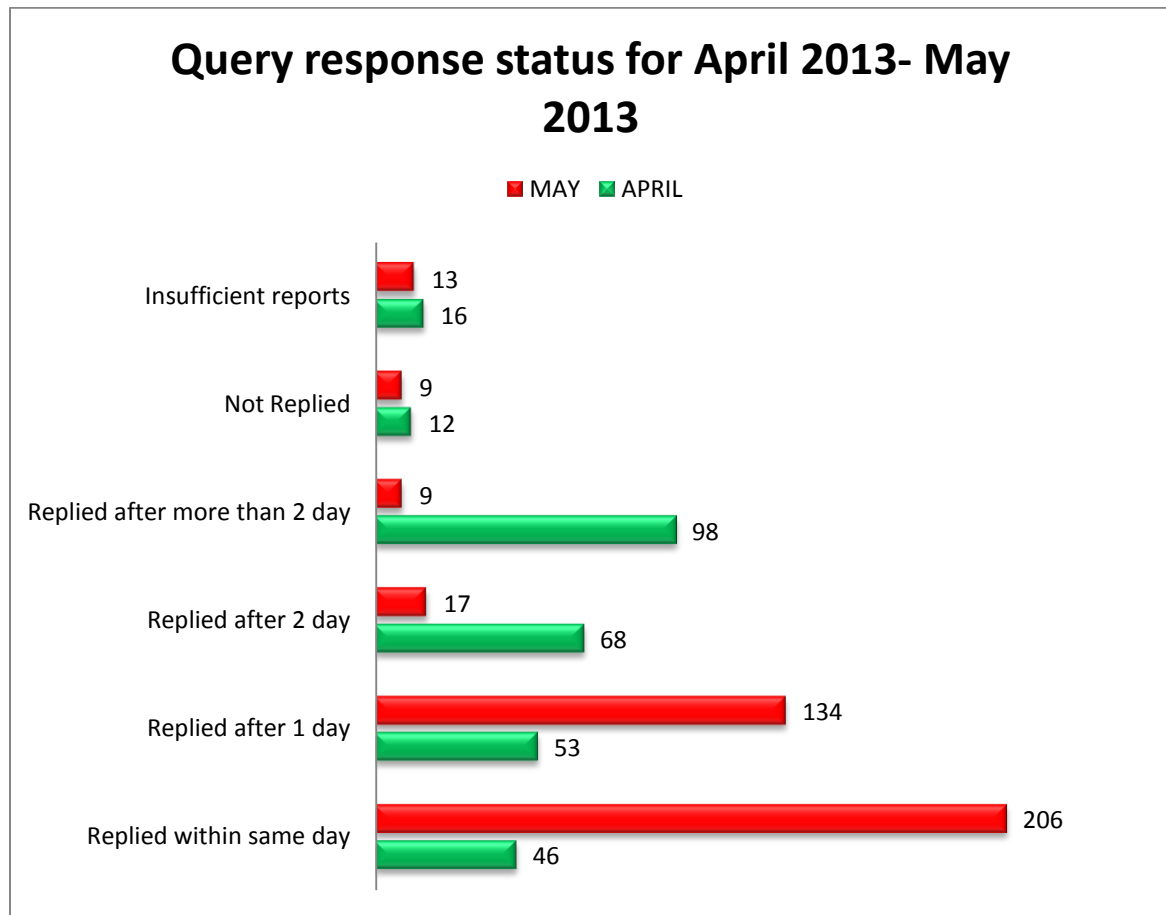


Figure no: 19

Source: Primary & Secondary data analysis

Patient Inflow – Country Wise

Table No. 14

COUNTRY	APRIL	MAY
Iraq	138	169
Afghanistan	38	50
Nigeria	28	42
Malawi	31	37
Others	6	18
Congo	11	13
Uzbekistan	7	11
TOTAL	259	340

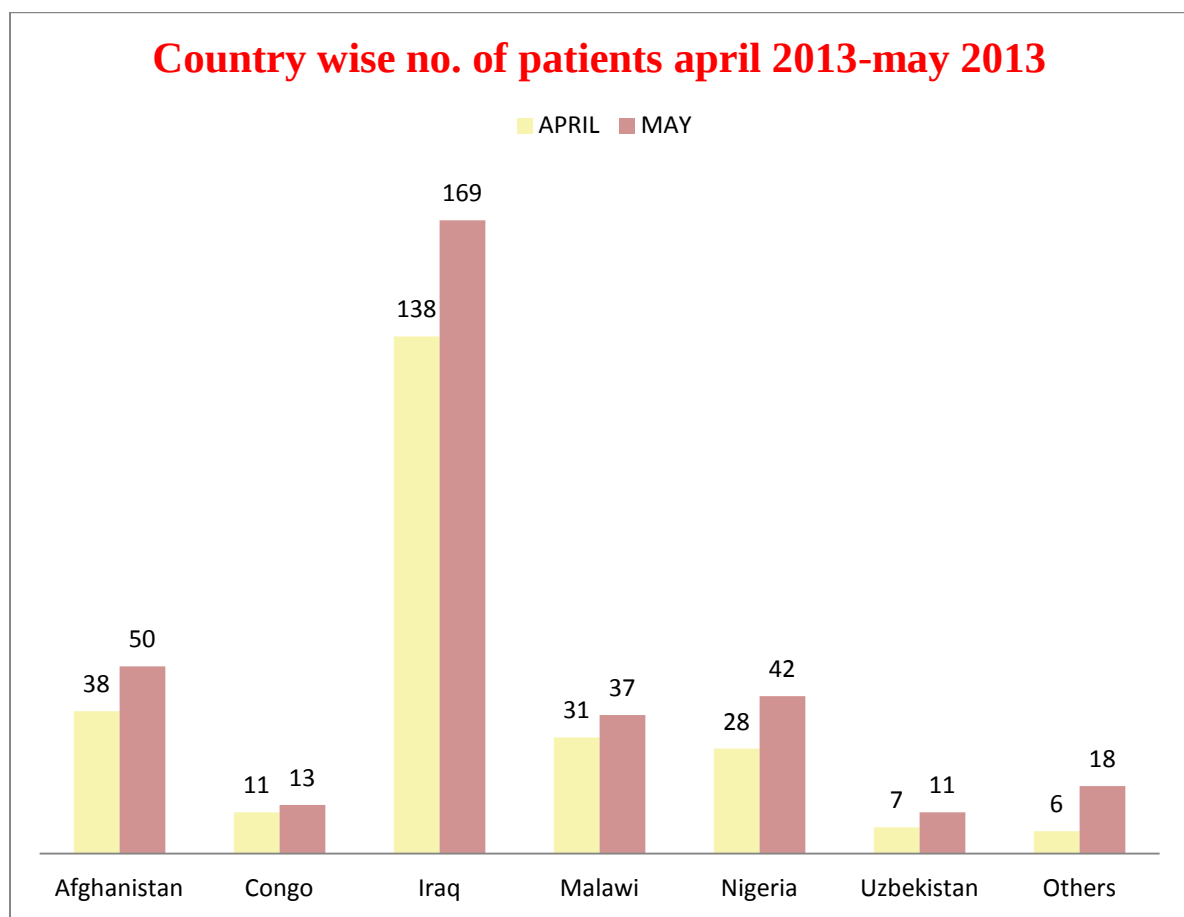


Figure no: 20

Source: Primary & Secondary data analysis

Patient Inflow – Speciality Wise

Table No. 15

SPECIALITY	April	May
Orthopedics	65	85
Medical Oncology	66	79
Neurosurgery	34	44
Nephrology	9	17
General Surgery	8	15
Internal Medicine	9	13
Cardiology	7	12
CTVS	3	12
Neurology	8	11
Ophthalmology	9	10
Cosmetic & Plastic Surgery	7	9
ENT	9	9
Surgical Oncology	5	6
Urology	7	6
Obstetrics & Gynecology	6	5
Others	2	4
Pediatrics Cardiology	4	2
Pediatrics	1	1
Total	259	340

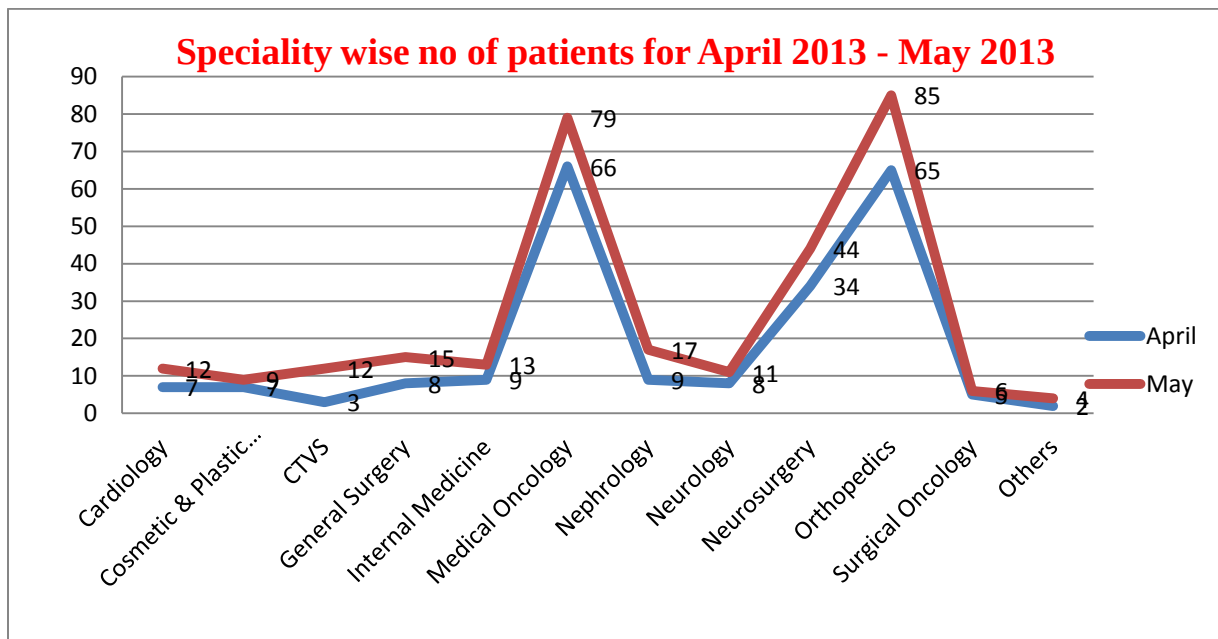


Figure no: 21

Source: Primary & Secondary data analysis

5.0 Findings

1. Catchment areas for the Hospital are Iraq followed by Afghanistan, Nigeria, Malawi and few patients are coming from Congo, Kenya, and Tanzania.
2. Uzbekistan can be the catchment area.
3. The patients coming to this hospital are coming through Facilitators (80%) and only 20% are direct patients.
4. Majority of the patients come for Orthopaedics treatment followed by medical oncology, Neurosurgery, cardiology and neurology.
5. Nephrology and CTVS services are now increasing used by international patients.
6. Early response to third party queries increases the inflow of patients

7.0 Conclusion

After conducting whole study the following we can interpret following things according to the objectives studies that majority of the patients which are coming to the studied hospital are coming from Iraq followed by Afghanistan, Nigeria and Malawi, few patients are from Congo other countries. Taking in to consideration the medical speciality for which patients are coming are cases of Orthopaedic, medical oncology, neurosurgery, and Cardiology. The patients coming to this hospital are coming through Facilitators (80%) and only 20% are direct patients. Nephrology and CTVS are the new upcoming specialities for which patients are seeking services. More patients are coming from Uzbekistan thus more focus can be given to get patients from there.

8.0 Recommendations

1. Hospital should work more on attracting walk in patients so that more business development can be done.
2. Public relation stories should be posted utilized through website to attract more patients.
3. Hospital should participate in Medical and Tourism exhibitions to cover untapped countries
4. International Camps and CME frequency should be increased
5. Dedicated international patient helpdesk should be available round the clock
6. Travel Desk should be present within the hospital
7. The hospital should arrange for videoconference or teleconference with the treating doctor
8. Post discharge Tele-consultation with the treating doctor
9. Cashless insurance facility through tie ups with leading international insurance companies should be started.
10. Multiple payment options: The hospital should accept payments through Travellers Cheque, Credit Cards (Master, Visa or Amex), Wire Transfer and Foreign Currencies from international patients.

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