Summer Training at

Artemis Health Institute, Gurgaon
(April 9-June 2, 2012)

Training Need Analysis & Attrition Rate Analysis of Nurses

By
Shagun Gera

Under the guidance of
Dr. Kapil Garg

Post Graduate Diploma in Hospital and Health Management
2011-2013

Institute of Health Management Research,
Jaipur
2012

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Certificate

This is to certify that Dr. Shagun Gera from Institute of Health Management Research, Jaipur has undergone Summer Training in Artemis Health Institute, Gurgaon from 9th April, 2012 to 2nd June, 2012.

The candidate herself carried out the project. Her approach to the study has been sincere, scientific and analytical. This summer training is partial fulfillment of the course requirement is recommended for the award of post graduate diploma in health and hospital management.

I wish her success in all her future endeavors.

Dr. Kapil Garg
IHMR Jaipur

ARTEMIS
HEALTH SCIENCES
the art of healthcare

Dated: 2nd June 2012

TO WHOM IT MAY CONCERN

This is to certify that Dr. Shagun Gera from Institute of Health Management & Research, Jaipur has done her training in Human Resource Department at Artemis Health Institute, Gurgaon from 9th April 2012 to 2nd June 2012.

During her training period, she observed the managerial aspects and the overall functioning of the following departments:

1. Medical services (IPD,OPD, Diagnostics and TPA)
2. Marketing Department
3. Quality and Systems
4. Infection Control Department
5. CSSD
6. Dialysis Unit
7. Chemotherapy Unit
8. Labor and Delivery Unit
9. Operation Theatre
10. Intensive Care Unit (MICU, SICU, PICU, NICU)
11. Cardiac Catheterization Laboratory
12. Information Technology
13. Food and Beverages Department
14. Blood Bank Unit

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

We wish her success in future.

For Artemis Health Institute,

Artemis Medicare Services Ltd.

Ramanjit Kaur Virk
Group Team Leader – Training and HR

Declaration

This is to certify that Dr.Shagun Gera, student of PGHHM from Institute of Health Management Research Jaipur has successfully completed her project titled "Training Need Analysis & Attrition Rate of Nurses "under my supervision

To the best of my knowledge, this project is the original work of the candidate .I am fully satisfied with her project work.

Wishing her all the best for her future endeavours.

Dated: 2-June-2012

Mrs.Ramanjit Kaur Virk

Group Team Leader

(Training & HR)

Artemis Health Institute

Declaration

I Dr. Shagun Gera, student of PGDHHM in Institute of Health Management and Research Jaipur hereby declare that I have completed my project in HR department of Artemis Health Institute Gurgaon on the topics "Training Need Analysis & Attrition rate of nurses "under the guidance of Mrs. Ramanjit Kaur Virk(GTL Training & HR) .This project has been solely done by me using factual data collected from the hospital.

Date : Dr. Shagun Gera

Acknowledgement

As I reach this stage of conclusion of my project, I owe my sincere gratitude to all those who gave me support to work in this prestigious institution. I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals. I would like to extend my sincere thanks to all of them.

My foremost thanks goes to HR department head **Mr. Biswajit Das** for giving me an opportunity to commence my project .I am deeply indebted to my supervisor **Mrs.Ramanjit Kaur Virk** for her in-depth support ,stimulating suggestions and encouragement throughout my training period as well as providing necessary information regarding the project.

I am highly grateful to my organization IHMR Jaipur, **Dr.S.D Gupta** (Director),**Dr.S.K Puri** (Dean)who gave me opportunity to work here & my mentor **Dr.Kapil Garg** for guiding me through my training period .

A special mention needs to be made of the staff of AHI for their help and cooperation in successful completion of the project.

Finally I would like to appreciate my family and my friends for the wonderful cooperation shown by them during the project. My thanks and appreciations also go to my colleagues in developing the project and people willingly helping me out with their abilities.

Contents

Overview

Artemis Health Institute (AHI), at Gurgaon is a NABH 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 Tyres 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.

The services offered by Artemis encompass comprehensive medical solutions including consulting, diagnostics and therapy. 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.

The facility at Gurgaon is designed and constructed in strict accordance with International guidelines. Spread across a total area of 525,000 square feet (when completely built), the facility focuses on offering patients technology-backed world-class healthcare delivered by leading medical professionals and certified by international medical bodies. Eventually, this state-of-the-art, multi-specialty, tertiary care hospital will accommodate 550 beds to fulfill the ever growing need for high quality patient care. Additionally, Artemis follows patient-centric processes conforming to International Patient Protocols, thereby establishing new standards of service and care.

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.

Artemis 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 Infor mation System)

An endovascular suite inside an operating room, which will allow endovascular surgery and catheter-based procedures along with hybrid surgery in the composite unit

Functional MRI Scanning using Non-Contrast Imaging for Cancers (DWIBS)

MRI-PET fusion technology

First Hospital in the country to install state of the art Image Guided Radiation Therapy for Cancer Treatment.

3D dynamic road mapping for reconstructive imaging

First & the only centre in Haryana, which is licensed and government approved for conducting Renal Transplant Surgeries

Fertility Preservation Services for Cancer Patients.
First In Vitro Fertilisation & Assisted Reproductive Technique centre in India to start

KEY DIFFERENTIATORS

A technology tie-up with Philips Medical Systems allows Artemis early and exclusive access to the latest global imaging and monitoring equipment

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)

One of the very few operational Paediatric ICU and Neonatal ICU in North India

ACCREDITATIONS & 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

Awarded Asia Pacific Hand Hygiene Excellence Award 2010-2011

MILESTONES

- 2007-- Started with 260 beds July
- 2010-- Clinics in Rewari & Dwarka
- 2010-- Expanded to 300 beds
- 2012-- 50 bedded hospital in Dwarka
- 2014-- Expansion to 500 beds

Vision Statement

"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 Best Scientific Minds."

Mission Statement

- Deliver world class patient care service.
- 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 wellbeing and development.

Core Values

- **C**are for customer
- **R**espect for Associates
- **E**xcellence through Teamwork
- **A**lways Learning
- **T**rust Mutually
- **E**thical Practices

Artemis Services Standards

Quality Policy at Artemis

- Deliver world class patient care through medical excellence.
- Create a patient-centric environment
- Ensure high standards and safety of treatment during the patient's stay.
- Continuous Quality Improvement through implementation of robust clinical and non-clinical process and protocols.
- Having world-class infrastructure and cutting edge technology utilized by highly skilled employees.
- Complying with statutory regulations.

SWOT of the Hospital

Strengths

- Exclusive centre for Cardiology and Oncology
- Core Specialities are cardio, neurology, oncology, nephrology, fertility centre & bariatric surgery
- Ambience and homely environment
- Cutting Edge Technology
- Internationally renowned faculty
- International Quality Protocols
- Patient Centric Approach
- Healthy and friendly environment
- Liver Transplant Centre & Cosmetic Clinic
- Separate PCS team for Registration , Billing & Handling Queries

Weakness

- Access to the hospital through public transport is less
- Low awareness in public

Opportunities

- Awareness among the public
- Scope of international patients
- Branding at airports

Threats

- Competition from upcoming hospitals

Floor Directory

Ground Floor

- Atrium(Reception)
- PCS-OPD
- Phlebotomy(Sample Collection)
- Physiotherapy
- OPD-Pharmacy
- International Patient Lounge
- Health & Wellness Department
- Diagnostics(Imaging)
- Auditorium
- Blood Bank
- Emergency(12 beds)
- PCS-IPD
- TPA & Financial Counselling
- Visitors Cafeteria

First Floor

- Operation Theatre Complex(9 OT's with one hybrid OT)
- Recovery Area
- Cath Labs
- Day Care
- Surgical ICU(34 beds)
- NICU(10 beds)
- LDR(6 beds)

Second Floor

- PICU & MICU(34 beds)
- Administrative Block
- Chairman's Office
- Library
- IT Department
- Biomedical Services

Third Floor

- Twin Sharing Rooms
- Economy Rooms(Four Sharing)

Fourth Floor

- Twin Sharing Rooms
- Sleep Lab

Fifth Floor

- Executive Single Room
- Deluxe Single Room
- Liver Transplant Centre

Sixth Floor

- Nursing Administration Office
- Executive Suite
- Presidential Suite

Basement

- Dialysis unit(9 beds)
- Chemotherapy & Nuclear Medicine
- Clinical Research Office
- Endoscopy
- OPD(Dermatology & Ophthalmology)
- NAT Lab
- Infection Control Office
- MRD
- IPD Pharmacy
- Staff Cafeteria
- Laboratory Services
- Mortuary
- Clinical Engineering
- CSSD
- CGHS Wards
- Food & Beverages Department
- Nutrition & Dietetics
- Housekeeping Office

Services at Artemis Health Institute

Artemis Super Specialities:

- ENT
- Dental
- Urology
- Neurolgy
- Radiology
- Paediatrics
- Cardiology
- Nephrology
- Orthopedics
- Critical Care
- Lab Services
- Physiotherapy
- Spine Surgery
- Cardio Thoracic
- Artemis Artificial Limb Centre
- Holistic Medicine
- Internal Medicine
- Nuclear Medicine
- Bariatric Surgery
- Gastroenterology
- Surgical Oncology
- Medical Oncology
- Pulmonary Medicine
- Alternative Medicine
- Laparoscopic Surgery
- Reproductive Medicine
- Gynae Oncology
- Anesthesiology
- Endocrinology
- Ophthalmology
- Neuro Surgery
- General Surgery
- Vascular Surgery
- Clinical Psychology
- Radiation Oncology
- Emergency Medicine
- Human Organ Transplant
- Blood Transfusion Services
- Obstetrics & Gynaecology
- Plastic & Reconstructive Surgery

Artemis Centres of Excellence:

- Artemis Transplant Centre (Liver, Renal and Corneal)
- Artemis Cancer Centre
- Artemis Heart Centre
- Artemis Neurosciences Centre
- Artemis Joint Replacement & Orthopedics Centre
- Artemis Minimally Invasive & Bariatric Surgery Centre
- Artemis Renal Centre
- Artemis Birthing Centre
- Artemis Fertility Centre
- Artemis Critical Care & Pulmonology Centre
- Artemis Gastro sciences Centre

Diagnostic

Imaging Services

- 64 Slice CT Scanner
- 3.0 Tesla MRI Scanner
- PET- CT
- Bone Densitometry (DEXA)
- Digital Mammography
- 4D Ultrasound
- 4D Colour Doppler
- Dual Head Gamma Camera
- Fluoroscopy

Laboratory Services

- Neuro Lab NCV
- EEG, EMG

- Non-Invasive Cardiology stress Echocardiography TMT & Holter Monitoring

Special Programmes and clinics

- Artemis Health and Wellness Programme
- Health @ Work Programme
- Artemis Breast Clinic
- Pain Clinic
- Artemis Maternity Program
- Artemis Heart Club
- Safe Spine Surgery Programme
- Stroke Management Centre
- Memory Clinic
- Artemis Joint Onco Clinic
- Artemis Artificial Limb Clinic
- Hepatology Clinic

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 and 2011 and it strictly follows 5 steps of Hand Hygiene to prevent hospital acquired infections like VAPS , SSI, 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.
- **Audits :** Week 1 Air Culture of the OT(random)

  Week 2 Hand Swab of the ICU staff (random)

  Week 3 Hand Swab of the OT staff (random)

  Week 4 Hand Swab of the Food and beverages staff (random)

  Random collection of environmental samples of different critical areas

- **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.
- **Chemicals used**: Cidex,Cipirit,Virex,Renalin,Clean and Sept, Envirosafe, Sterisol Saniscrub, Microshelf, Sanisquad Softcare etc.
- **Training:** Every Thursday training of nurses as per the training calendar in Biowaste management, Hand Hygiene etc taken by the infection control department .Apart from this, the new staff has a detailed infection control training given as part of their orientation program. The head of infection control plans a training schedule/CMEs for the clinicians periodically

Dialysis

- **Location**: Lower Ground Floor
- **Layout** : 9 cubicles with one bed and a TV each (8 operational and 1 kept for emergency plus 3 additional units in the ICU) .All the cubicles are segregated for patient privacy
  Other rooms: Clean utility, dirty utility, Workroom, Doctors room, RO plant room
- **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
- **Communication :** Through HIS and Phone
- **Equipments Present** :9 dialysis unit of Frezenius ,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 is followed and infection control policies are followed
- **Patient flow** :1000 patients per month (24 to 28 patients per day) .Dialysis is done in 3 shifts of 4hrs each
- **Special Features**
  UPS power back up is present
  RO plant: Dialysis unit has its own taking in about 10,000 litres of water per week each patient requiring around 120 litres.
- **Complications**: Improper maintenance of AV fistula leading to blockage as well site infections, electrolyte disturbance with regular checking of potassium and other level, air bubble and cardiac arrest.
- **Prices** :Each dialysis session per patient would cost about Rs. 2700/-, this would not involve the price of the erythropoietin inj that may be required for patients which would cost another 1700/-

CSSD

- **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: 1.Dirty Zone
  2. Clean Zone
  3. 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, Cath Lab)
- **Connectivity** : It is connected to the OT through the lifts(dumbwaiters)
- **Protocol followed**
  - **1. Prewashed** : All instruments are prewashed at their respective depts. before they are sent to CSSD.
  - **2.Dirty Zone :**Instruments are received,checked,sorted according to checklist

  Equipments present

Name of the equipment	Function	Duration
Automatic washer	It cleans the instruments in 5 stages at 82 degrees i.e. prewash**,** washing **,** enzymatic, rinsing and drying .It has capacity of 250 litres (6-7 trays) .The enzyme used is Rapid Multi enzyme low foam and 80ml is used per cycle.	1 hr runs 8-9 cycles per day
Large ultrasonic washer with air gun	Used for large and delicate instruments respectively. After cleaning of instruments with rapid cleanser in the ultrasonic bath they are rinsed in running water.	15-20 minutes
Small ultrasonic washer		
Dumbwaiter	To bring down the soiled instruments from the OT	

- The instruments of HIV patients come in a red bag which are washed with hypochlorite before putting in ultrasonic bath
- There is a trolley wash area for cleaning the trolleys also.
- There is no pressure difference between the dirty and the clean zone.

- **3.Clean Zone**

After washing, the instruments are carried to the clean zone. The packing of instruments is done in this zone in linen.

Equipments Present

Name of the equipment	Functioning	Duration
Autoclave (750 lit)	Used for instruments in bulk (121 to 134 degree Celsius and 32 psi	30 to 50 min
Autoclave (250 lit)	Used for instruments required in emergency .It can autoclave one tray in a short time.	15 to 20 min
Boiler	Supply to both the autoclaves	

ETO (Ethylene Oxide) zone

Equipments present

Name of the equipment	Functioning	Duration
ETO unit	Used for instruments which are sensitive to high temperatures like cautery,plastic objects etc.. These are sterilised at 50 degree Celsius using ethylene oxide gas in a 100ml cartridge. The process releases CO gas which is exhausted from a 6 ft pipe on the 6th floor. The instruments are packed in medical grade paper before sterilisation. It is also attached to a air filter to remove moisture.	Cycle of 16hrs (valid after 48 hrs after check by infection control dept.
Packing unit (automatic and manual)	For sealing of instruments packed in medical grade paper.	1 to 2 minutes

- 4.**Sterilized zone**

All the sterilized instruments are kept in this zone and from here they are sent to OT and ICU through dumbwaiter. Some instruments are kept in loan format as backup for emergency. It is a positive pressure room and has a temp of 22 -27 degree Celsius. The temperature and pressure are maintained by the biomedical engineering department.

In this room Validation of sterilisation is

- Normal packing : OT : 3days & Wards: 7 days
- Medical Grade Paper: 6 months for all instruments

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 staff is 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.
- **Prices** Per cycle is on an average 5000

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

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

Process of inventory

Chef prepares the list (2 days in advance)

⇩

Hands it over to the store incharge

⇩

Order given to vendors for the supplies

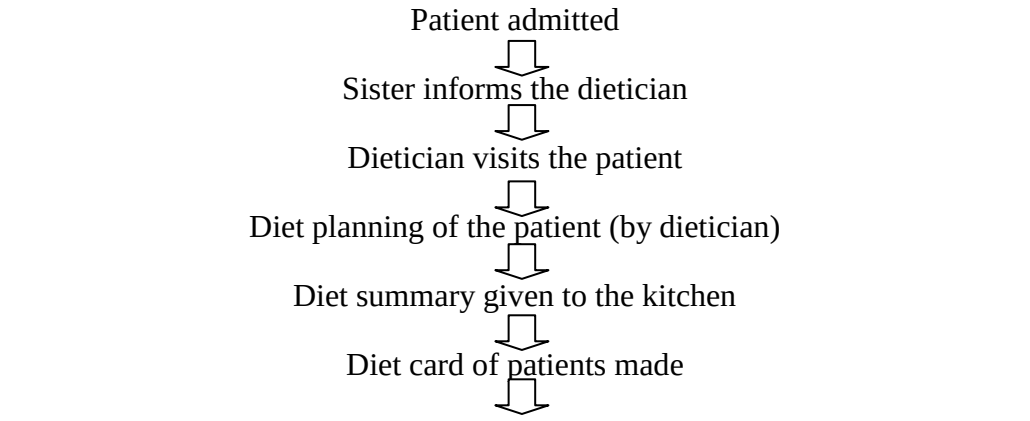
⇩

Items received and segregated by chef & store incharge

⇩

The batch no. ,date of receiving and MRP is displayed on items and items are stored

Process of food delivery to the patient



- **Prices** 325 rs for whole day for the patient

Biomedical Engineering Department

- **Location** : 2nd floor
- **Layout** : Single room
- **Manpower** :1 team leader
  3 Engineers
  1 Engineer (of Philips Company)
- **Responsibilities**
  - Deal with the new requirements of different departments. The concerned department sends request for new equipment which may be Capex(new technology) or Opex (routine new equipment) to the Bio engineering department(BED) .BED forwards it to the purchase dept. The purchase dept. calls the meeting of vendor, purchase dept personnel and biomedical engineering dept. person. The vendors give a demo to the users (doctors, nurses etc.) and feedback is taken from them. According to the feedback and the quotations of the vendor the equipment is bought.
  - Maintenance
    AMC Annual Maintenance Contract including only the labour cost and is 1 % of the total cost of the product
    CMC Company Maintenance Contract including the labour cost and the cost of the spare parts.
    PMS Preventive Maintenance Services are done quarterly depending on the type of the equipment.
  - Training
    Training of the staff every Tuesday regarding the use of the equipment.
- **Quality indicators** : PMS, Downtime ,Response time to a call ,AMC

Blood Bank

- **Location** : Ground floor adjacent to the emergency (open 24 by7)
- **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

- **Equipments**

Room	Equipment room
Blood collection room aphaeresis room	2 couches 2 couches with attached component separating unit of Fennuel Baxter.
TTI	2 Elisa testing machines (for HBcAg,HIV,HCV,HbsAg,Malaria.
Serology room	Incubator Water bath Blood group testing unit
Sterilisation area	Autoclave for sterilising infected blood before discarding
Storage section	2 Quarantine freezers 2 Deep freezers Platelet agitator Cryobath Pharma fridge Cold storage
Component separation room	C3 3000 baxter Amicus machine and 2 separators which can separate 3 components at a time.

- Temperature of 22 degrees is maintained all through out
- **Manpower** 11 technicians 3 doctors 6 nurses
- Calibration of instruments done every morning.

- **Process flow**

Donor comes to the registration area

Registration, screening and counselling done

Issued a barcode identity after Hb testing

Sent to blood collection area for blood collection

Sent to refreshment area and sent back from there

Blood sent to serology for blood grouping
TTI for HIV and Hbs

Sent to sterilisation room if infected /Sent to storage area if needs to be stored/sent to separation area for component separation.

- **Quality Indicators**: Transfusion reactions ,TAT for issuing and blood collection, Component usage, Rate of discarding blood, Expiry of Product.
- **Standards**: You need 20 units per bed per year. So 6000 units per year and 500 units per month and 40 units of every blood group. Discarding rate is 1% for RBC 20% for Platelets 80-85% is used. Viability of RBC is 42 days,1 year for plasma,5 days for platelets.

Labour delivery room section

- **Location :**First Floor
- **Layout** : 6 LDR rooms with four facing the greenery side

  10 bedded NICU (separate for premature and sepsis patient)

  Nursery

  Nursing station with billing desk and waiting area

- **Manpower** 4 nurses in LDR 1 in IPD and 1 in OT
- **Quality indicators :** Cases of haematoma, bed sores, infant swapping ,infection control ,
- **Equipment in LDR :**Hundley beds which can be converted to labour table ,CTG machines , Crash cart ,Lithotomy table
- **Patient flow** 70 to 80 patients per month out of which 70% are C -Sections

Cath Lab

- **Location** :First Floor
- **Layout** : Hallway having male and female change room ,directors room and cath recovery room
  Cath unit having control room with C arm, Clean and dirty utility room and Cath pharmacy.
- **Manpower** : 2 nurses and 2 technicians and 3 doctors in 2 shifts
- **Training** 3 seats for PGDC of 2 years approved by IGNOU
- **Patient flow** 350 patients per month (200 angio and 100 of implants)
- **Time taken** for angiography is 15 to 20 min
- **Prices** Angiography 15000
  Angioplasty 1 lac

Introduction to Human Resource Department

Human Resource department of AHI has following responsibilities:

Work flow of Human Resource Department

1. Manpower Planning
2. Recruitment
3. Selection
4. Joining Formalities
5. Induction and orientation
6. Training & Development
7. Performance Appraisal
8. Employee engagement activities
9. Leave Administration
10. Salary Administration
11. Resignation or Termination of an employee

1**. Manpower planning**

HR department deals with the manpower planning of the hospital .It makes sure that the number of people required in a department are appropriate , their qualifications are as per the requirement and recruits new people if there is shortage of staff.HR takes care that there is no understaffing or overstaffing in any department. As there is acute shortage of nursing staff in this hospital, so this project deals with recruitment and selection process of nursing staff , their attrition rate & training need analysis .

2. Recruitment

Methods of recruitment at AHI are

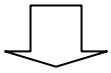
- Advertisement in newspapers like HT, Economic times ,Manorama ,Times of India
- Referral by employees
- Walk in interviews every Thursdays
- Campus recruitment
- Nursing agencies

3. Selection Process

Selection consists of four rounds

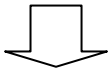
1st round: Screening Test

It consists of a set of 25 objective questions and time allotted is 30 minutes. Cut off percentage for the test is 50%.Candidates passing this test move to the next round after filling the personal information form.



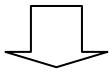
2nd &3rd rounds: Interview by nursing department

Second and third rounds consist of interview by Controller and Head of Nursing. Candidates are analysed on the basis of nursing core competencies like patient care & monitoring, documentation, handling emergencies, participation in self & staff development. On the basis of this they are Rejected/Put in Data Bank/Shortlisted/Selected. Selected candidates move to the fourth round.



4th round: Interview by HR department

Fourth round consists of interview by the HR department to analyse them on their personality, communication, job knowledge, attitude, confidence, managerial capabilities, computer literacy, technical skills, leadership & quality of experience .Using these attributes they are graded on scale of Outstanding, Good, and Average & Poor. Selected candidates are explained their salary structure .Letter of intent is issued to them with a joining date .Post that they are called for medical.



Medical

It is to be conducted before the joining which includes full body check up by health and wellness department. Candidates fill the pre medical form and give samples for testing. At the time of joining the selected candidates are given their medical reports.

4. Joining Formalities

On the date of joining the selected candidates report to the HR Department to complete the joining formalities. They fill the forms in the joining kit which includes

- Personal information form
- Joining report to be signed by the HOD(head of nursing)
- Job description to be read and signed by the candidate
- ESI form no. 1 if salary is below 16500
- Provident fund form no. 11

- Dependants declaration form
- Dress code policy
- Needle Stick Injury
- Form of appointment of beneficiary under the Personal Accident Policy Scheme
- Gratuity Nomination form
- Employee Confidentiality Agreement

Other Joining Formalities

- Temporary ID card is issued at the time of joining and Permanent ID card provided after 10 days. Uniform is given to the new employees on the date of joining.
- Joining Announcement of new employees is done through emails and notice boards along with their designation and department to introduce them to the existing employees.
- Finger prints taken for the Biometric Punching in and out for attendance purpose.

5. Induction and Orientation

Aagaman

It is welcoming of the new joinees to the organization. The candidate is taken for a felicitation round of the hospital to make them familiar with different departments and know where is what.

Then they are given a presentation about the hospital and the HR policies

- Organogram of the hospital
- Leave Structure
- Referral policy
- Employee engagement programs
- Employee rights and responsibilities
- Performance bonus &awards
- Performance appraisal system
- HR Policies like Grievance Policy, Disciplinary Policy, Dress Code Policy ,Sexual Harassment Policy, Employee Suggestion Policy & In house Medical Policy
- Services like shuttle, sodexo etc
- Employees are given NABH cards and training book to keep record of their training
- AOP
  (Artemis orientation Programme) taken once in a month where the new employees are oriented by giving an introduction of working of different

departments of the hospital .It is a two day program in which heads from different departments come to orient the new employees about who is there in that department, what they do and how they do , their escalation matrix , process flow , etc .Departments covered are HR, Medical services ,Supply chain ,Finance , Support services , Infection control ,Marketing ,Quality ,PCS, Lifestyle & Diet Plan ,IT, Nursing , BLS ,etc

- Nursing Induction program is held for 15 days after joining of employee where they are oriented towards all the nursing activities and protocols.

6. Training

First training given is the Aagaman session which includes the facilitation round and an introduction about HR policies. After that during their tenure employees are given different trainings. A training calendar is prepared at the beginning of every month which includes technical training given by the respective department and developmental training given by HR or support services

Some of the Training Programs are as follows:

- Continuous Nursing education everyday from 1 to 2 which includes departmental training on different topics. (Topics chosen are decided by the nursing education team in consent with the nurses).Artemis has a separate nursing education team for training of nurses.
- Communication Skills training
- Soft Skills training
- Grooming Standards & Personal Hygiene
- ACLS & BLS Training
- Training of different codes in the hospital
- NABH/JCI standards
- Fire Safety Training with mock drills
- Care of New Born & Vulnerable Patients
- Hospital Infection Control Policies & Hand Hygiene
- Bio Waste Management
- Sentinel Events
- Equipment Training
- Admission & Discharge Process
- Bed Side Training

7. Performance Appraisal

Performance appraisal is done annually by the end of financial year which includes four key players including the employee also. According to the performance appraisal the salary revisions are done and scope of further improvement is taken into account.

Purpose of doing Performance Appraisal is

- Evaluate the Performance
- Wage & Salary Administration
- Training Need Assessment
- Promotions

8. Employee Engagement Activities

- Nursing Day Celebration
- Doctors Day Celebration
- Paramedical Day Celebration
- Administration Day Celebration
- Employee of the Quarter Award
- Movie of the month
- Celebration of Festivals (like Christmas, Onam ,Diwali etc.)
- Birthday Celebrations (with cake and sending emails)

9. Leave Administration

- Casual Leave : On Pro rata Basis & none can be accumulated
- Sick Leave : On Pro rata Basis & can be accumulated
- Privilege Leave :After 1 year & can be accumulated)
- Maternity Leave for 3 months as per Maternity Benefit Act 1961 (after completion of 8 days of attendance)
- Short Leave : for 2 days per month

10. Salary Administration

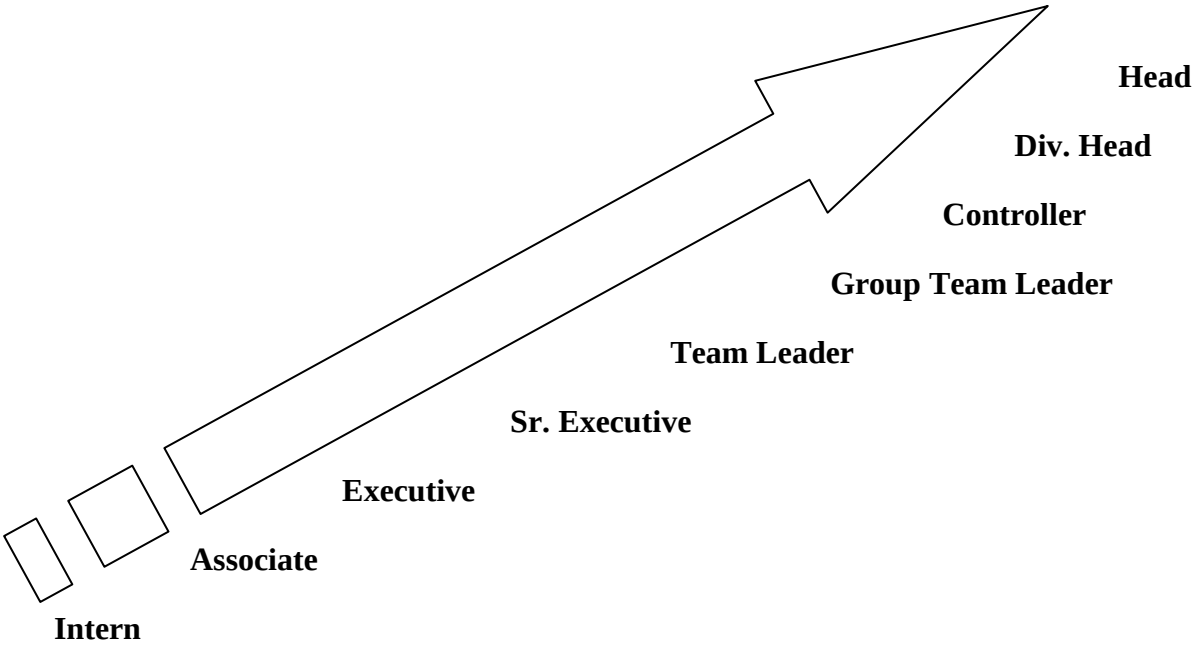
Components of salary

- Basic Pay
- PF
- Gratuity
- Labour Welfare Fund
- ESI
- Flexi Benefit Plan
- Performance Bonus

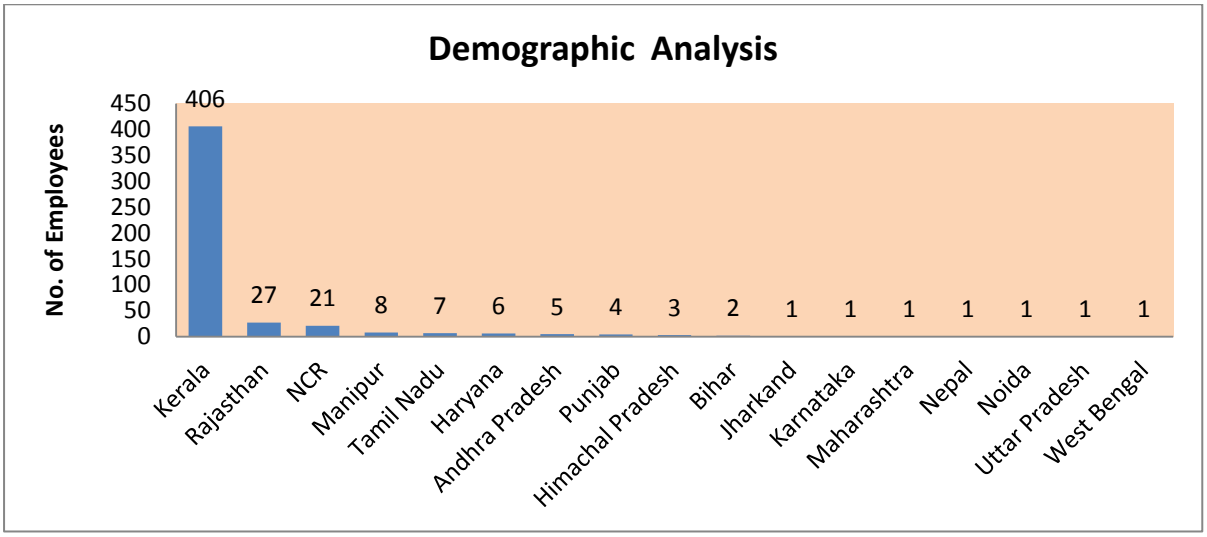
11. Resignation

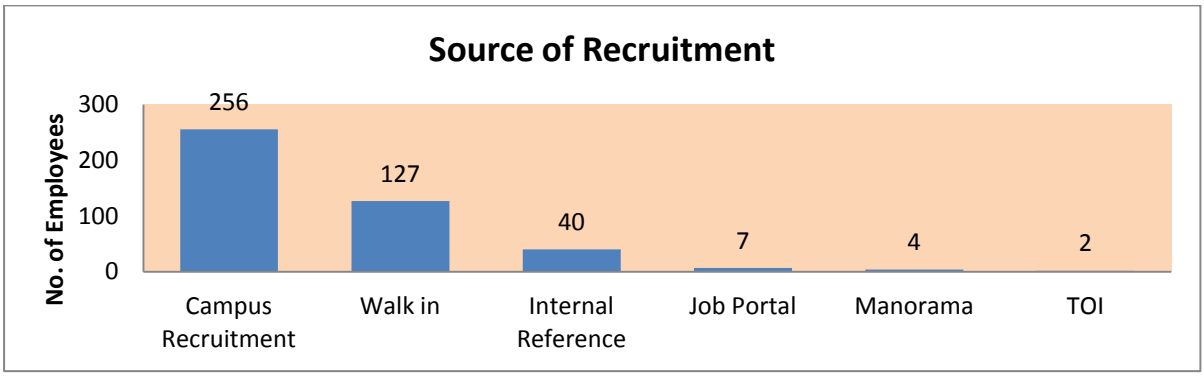
An employee has to serve 15 days notice period during probation time and one month prior notice after that. He gets the no dues certificate and taken for the exit interview.

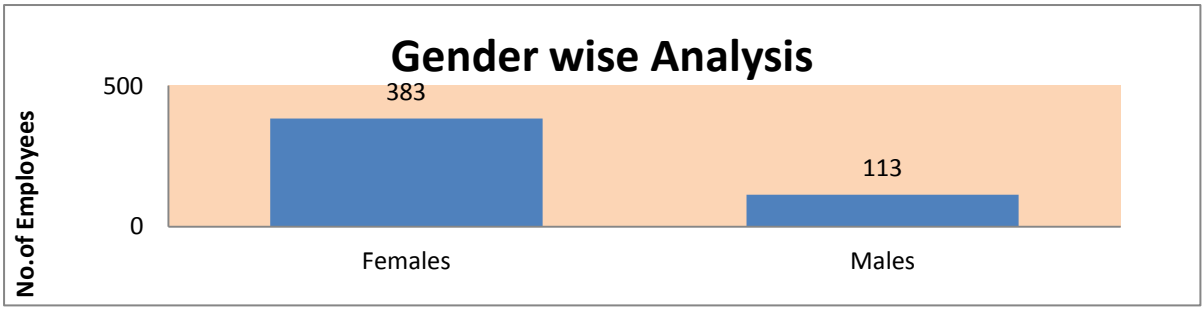
Career Ladder for Nursing Staff

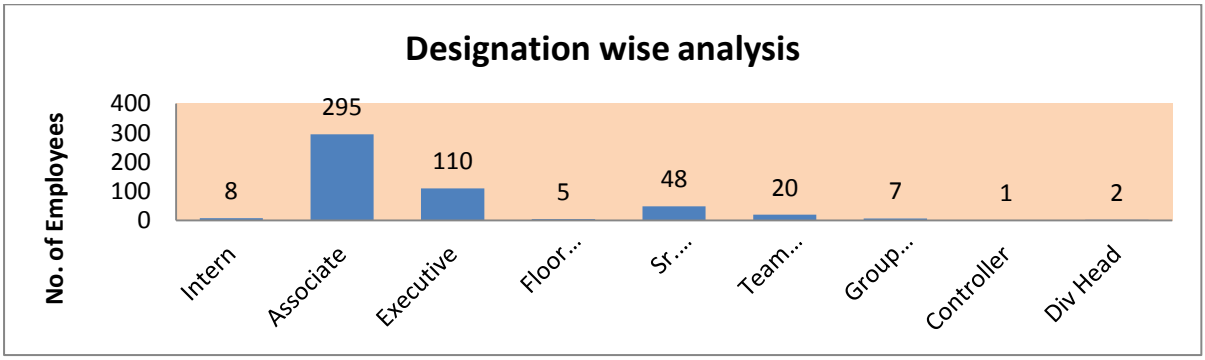


Staff Analysis

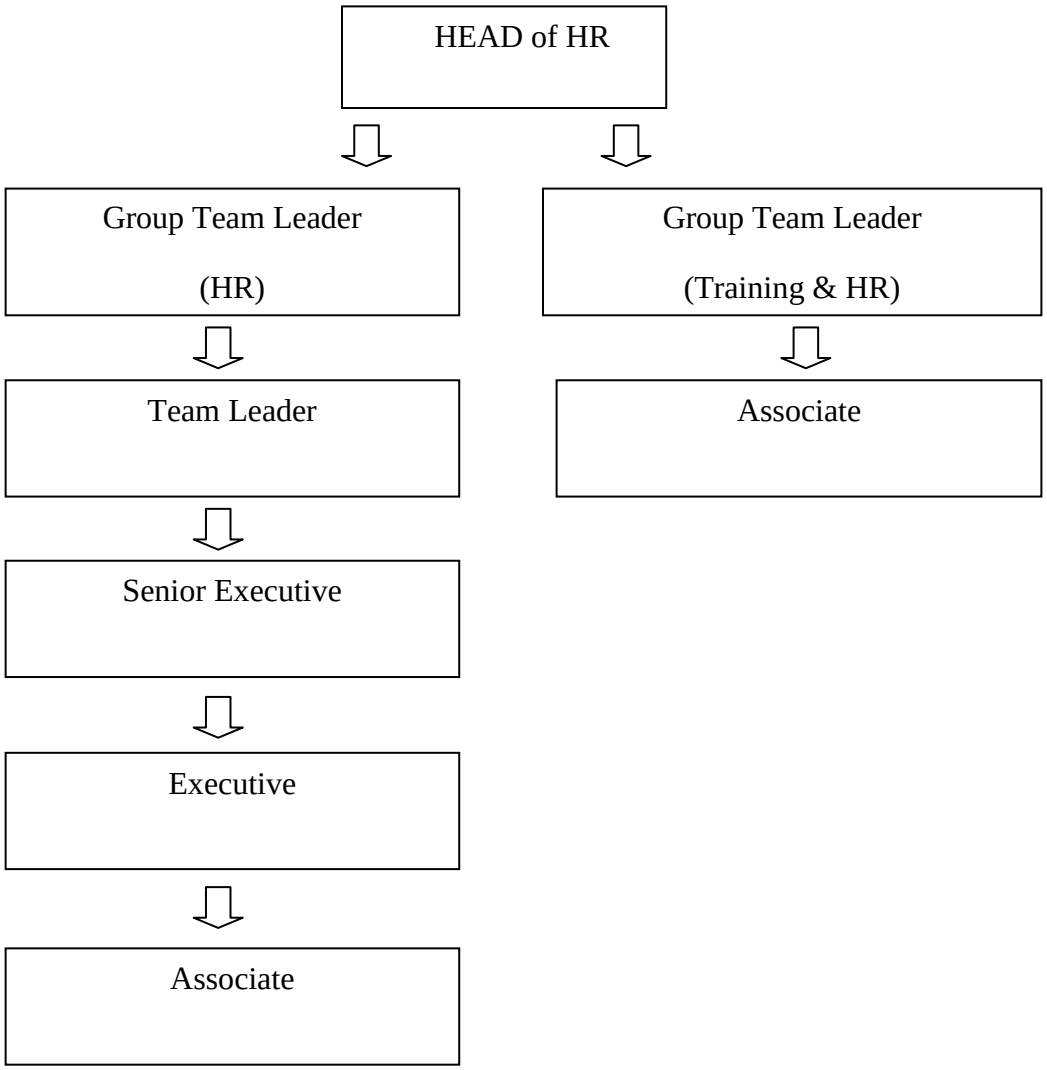








Organogram of HR



Attrition Rate of nurses

Introduction: Gone are the days when people would start and end their careers in one company. The employee turnover over the past decade has been increasing since. Recruiting and retaining nurses is fast becoming a point of concern for Indian hospitals. According to healthcare sector players, the attrition rate for nurses in the industry is the highest among all employee categories. No wonder that the cost of manpower resources is increasing by each day. Companies are literally bidding for good talent and attracting them with tempting salaries and designations. Undoubtedly, for any HR in the healthcare industry, retaining its employees is the need of the hour.

AIM

To study, analyse and calculate the attrition rate among the nurses (for the quarter Oct 2011 to April 2012) of Artemis Health Institute

Objectives

- To study , analyse and calculate the attrition rate in the nursing department of Artemis Hospital
- To review the exit interview forms in order to find out the major reasons of resignation and work on strategies to improve employee retention
- To understand the various procedures undertaken for recruitment of nurses

Methodology

- Study area: Artemis Health Institute (Nursing Care Services)
- Study topic : Attrition rate of nurses and reasons for it
- Study design : Descriptive study design
- Study Period : 9th April 2012 to 2nd June 2012
- Sample Size : 176 Employees who left between Oct 2011 to May 2012
- Sampling Method : Purposive Sampling Method
- Study Variable : Attrition rate
- Study tools : MS excel

  Mathematical Formula = y/x*100

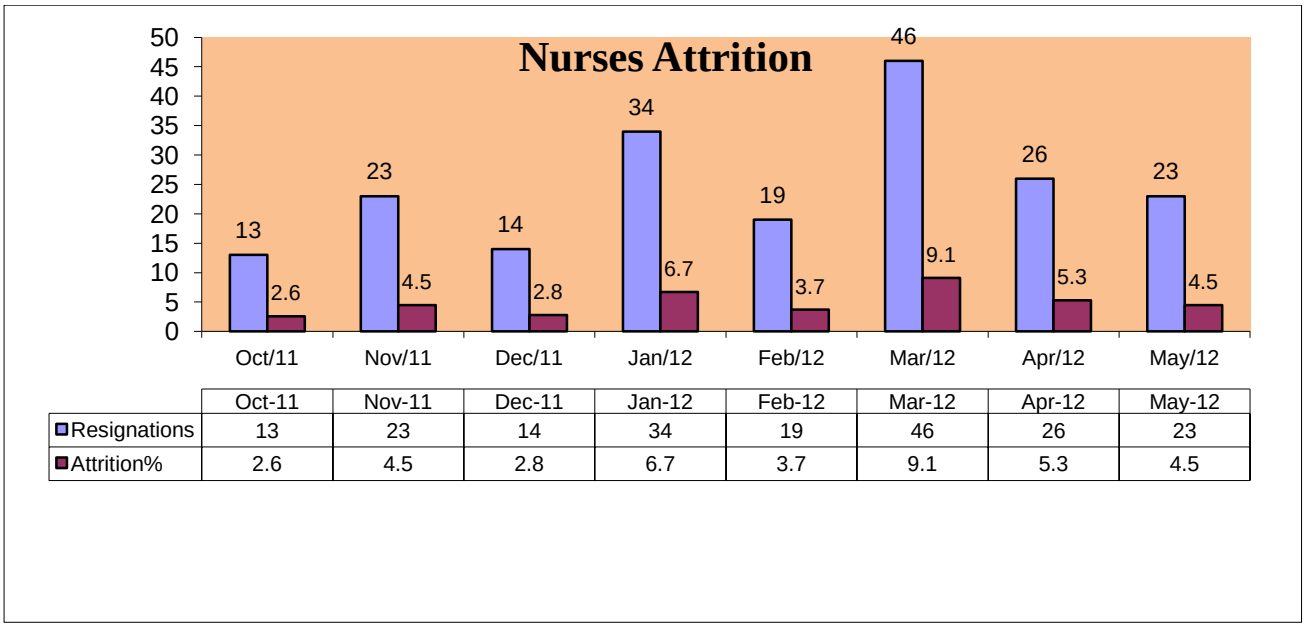
  Y number of people who left

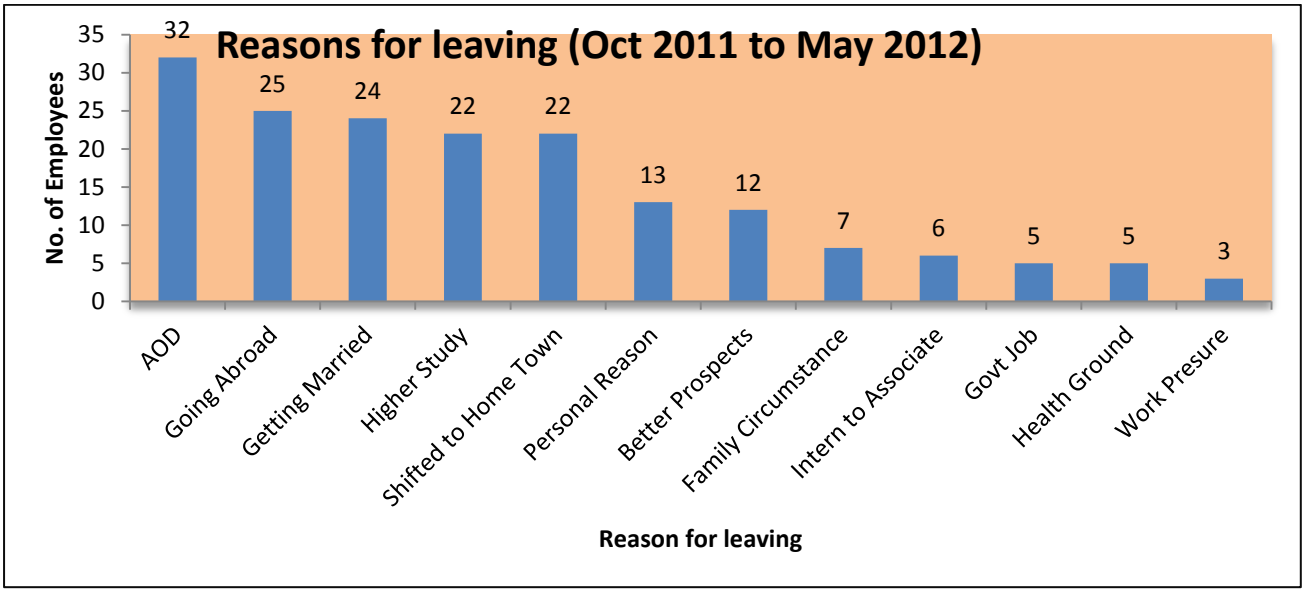
  X is number of people at the beginning of the quarter

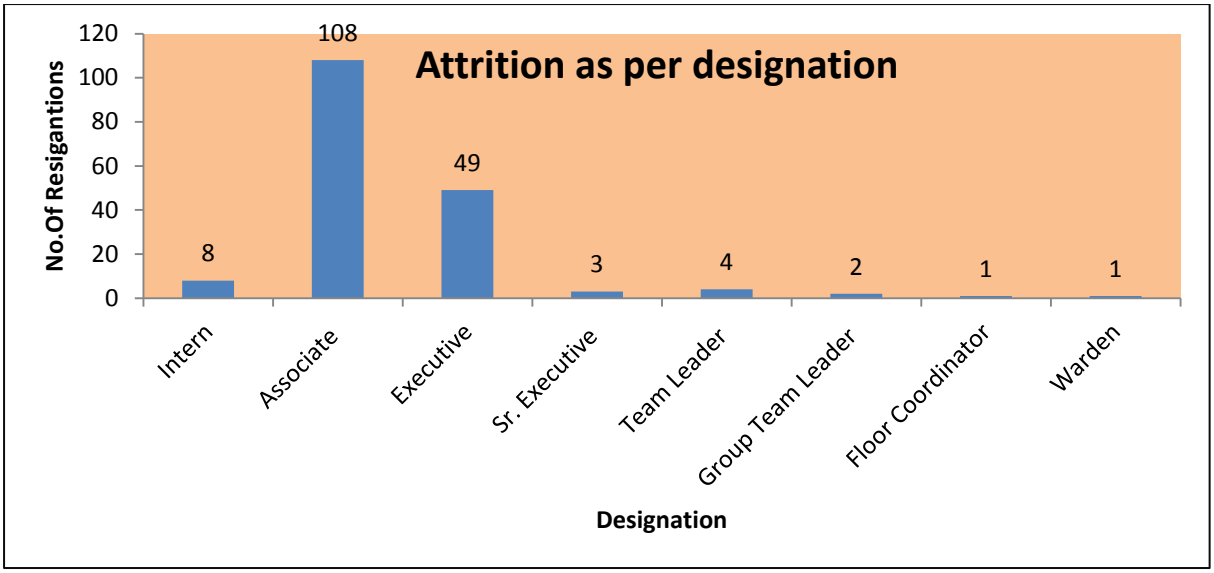
Source of data

Primary: Observation and conversation with the employees of the hospital
Secondary: Statistics, Exit forms, Literature review of Journals and periodicals

Month	Total Employees	Resigned	Absent From Duty	Total People who left in the Month	Attrition rate
Oct-11	504	10	3	13	2.6%
Nov-11	509	19	4	23	4.5%
Dec_11	498	11	3	14	2.8%
Jan-12	508	28	6	34	6.7%
Feb-12	513	13	6	19	3.7%
Mar-12	507	37	9	46	9.1%
Apr-12	492	11	15	26	5.3%
May-12	515	12	11	23	4.5%







Interpretation:

Average number of resignations has been 25 per month majority of which are at Associate and Executive level .The attrition rate has been the highest in the month of Mar 2012 and then in Jan 2012.Many people left the organization without information. Major reasons for leaving were personal & better future prospects. On an average employees stay for a period of 1.6 years.

Attrition rate for quarter Oct-Jan: 20.79%

Attrition rate for quarter Feb-May: 28.14%

(This is quite an alarming rate)

Costs involved in recruitment (COST OF HIRING AN EMPLOYEE)

- Advertising
- Travel
- Office rental
- Staff salary
- Referral bonus
- Job Portal

Recommendations

- Frequent meetings with the nursing staff to know about their problems for which hospital is making a work force committee
- HR can be more open to employee's suggestions. Shared governance and equal say in policy making creates a more satisfying environment
- Stress on improving nurse-physician relationship and valuing the job of nurses
- Collaboration with Nursing & Medical colleges
- Introducing new funds like Children's Education Fund ,Travel funds

- Giving extra benefits to the star performers
- Training the stayers into star performers
- Data entry operators and Pharmacists should be there to assist the nursing staff and decrease wastage of energy and time
- Frequent Verbal appreciation by the reporting officer, doctors and patients also if possible
- Job expansion of floor coordinator for answering patient queries which decreases work load of nurses
- Increasing the interaction between patient & nurses to develop a bond between the two .This would increase both patient and employee satisfaction
- More recreational activities like meditation & yoga camps for the staff to manage stress
- More computers for the nursing stations to decrease the waiting time of documentation

Training Need Analysis

People often "jump the gun" by assuming that training is the best solution to performance problems. Before you make that assumption, be sure training is the best solution after conducting a performance and need analysis.

Introduction

Needs analysis is as "an examination of the existing need for training within an organization". In other words, it identifies performance areas or programs within an organization where training should be applied. A needs analysis may identify more than one training need. These needs should be prioritized, and either placed into a formal training plan, or form a data base for future training. Training Need is utilized to identify what training workshops or activities should be provided to employees to improve their work productivity. Focus should be placed on needs as opposed to desires. This is mainly because a need analysis specifically defines the gap between the current and desired individual and organizational performance. The difference between where you are now and where you want to be defines where a training program should concentrate its effort .It is done when there are performance problems or anticipated introduction of new system task or technology.

AIM

To do the Training Need Analysis of nursing staff at Artemis Health Institute for the financial year April 2012 to Mar 2013

Objectives

- To do the Training Need Analysis of Nursing staff for the financial year April 2012 to Mar 2013
- To formulate the new training calendars as per the training needs
- To find out the gap in training and actual performance of the staff as per organization goals, NABH standards and JCI standards

Methodology

- Study area: Artemis Health Institute(Nursing Care Services)
- Study topic : Training Need Analysis
- Study design : Descriptive Study Design
- Study Period : 9th April 2012 to 2nd June 2012
- Sample size : 132 performance appraisal forms of the financial year Apr 2011 to Mar 2012
- Sampling Method: Purposive Sampling Method
- Study Variables : Training needs of the nursing staff
- Study tools : MS Excel

Sources of data

Primary Observation
Conversation with the employees
Interviews of the nursing education team and nurses
Secondary Performance Appraisal Forms
Literature review of Journals and periodicals

Process of performance Appraisal

- Appraisals at AHI are done annually at the end of mar every year
- Time Period: Financial year (Apr to Mar of next year)
- People involved: 1. Reporting officer of the employee
  2. Vertical head
  3. Employee Self
  4. Head of HR

Steps in Appraisal Process

Format of Appraisal forms prepared by the HR department

▼

Distribution of the forms done by the HR department to the Reporting Officer of the employee

▼

Forms filled by the Reporting Officer and given to the Vertical Head of the respective department

▼

Vertical Head fills the form and hands it to the employee to review and sign

▼

HR team reviews the inputs in the appraisals and makes a bell curve to ensure that the appraisals are proportional for the whole team. Any discrepancies are sent back to the Head of respective department for corrections .Finally the salary increments or promotions are decided by the HR department.

Components of Performance Appraisal Form

Section A

- Employees Name
- Designation
- Responsibility Level
- Department
- Employee Code
- Date of joining

Section B

Performance evaluation of various parameters

- Job Knowledge
- Confidence
- Skills in Handling Emergency Situations
- Knowledge of drugs
- Adherence to Medical Protocols
- Quality of Medical Services
- Versatility
- Sensitivity to patient care
- Communication & Commitment
- Aptitude to learn & upgrade
- IT Knowledge
- Dependability
- Team Work
- Interpersonal Skills
- Task Completion
- Learning & Innovation
- Customer Service Orientation
- Self Discipline
- Commitment to Organization Philosophy & Policies

Scale used

5: Exceptional 4: Excellent 3: Good 2: Satisfactory 1: Needs Improvement

Section C

Training needs

Developmental Need for Enhancement of Performance

Behavioural Need
Communication Needs
Verbal & Non Verbal Communication
Listening Skills
Presentation Skills
Handling difficult customers
Written Communication
Interpersonal Skills
Telephone Etiquettes
Etiquettes & Grooming
Business Etiquettes
Personal Hygiene & Personality Developmental
Makeup & Hairstyling
Negotiation Skills
Leadership Skills
Handling Difficult Customers

Situational Leadership Team Management Working in Teams Being a team leader Problem Solving & Decision Making Managing Stress Finance for Non finance managers Project Management Coaching & Mentoring
Departmental Skills
SAP MS office PACS Equipment Training BLS & ACLS ER & Trauma Care Nursing Protocols Medical Terminology Departmental SOP's NABH/JCI Awareness Basic Course NABH lead Auditor Course
HIS Skills
Any Other Training

Section D

- Overall Performance Review Evaluation on scale of Exceptional/Excellent/Good/Satisfactory/Needs Improvement
- Comments & Recommendations of Reporting In Charge with Signature
- Recommendations of Vertical Head with Signature
- Comments of Employee post sharing the performance evaluation feedback with Signature
- Recommendations of Head –HR & Training /COO with Signatures

Training Topics of last year

- Unit Training
- Records Management
- Management of International Patients
- Departmental Training on different topics
- Communication Skills training
- Soft Skills training
- Grooming Standards & Personal Hygiene
- ACLS & BLS Training
- Training of different codes in the hospital
- NABH/JCI standards
- Fire Safety Training with mock drills
- Care of New Born & Vulnerable Patients
- Hospital Infection Control Policies & Hand Hygiene
- Bio Waste Management
- Sentinel Events
- Equipment Training
- Admission & Discharge Process
- Bed Side Training

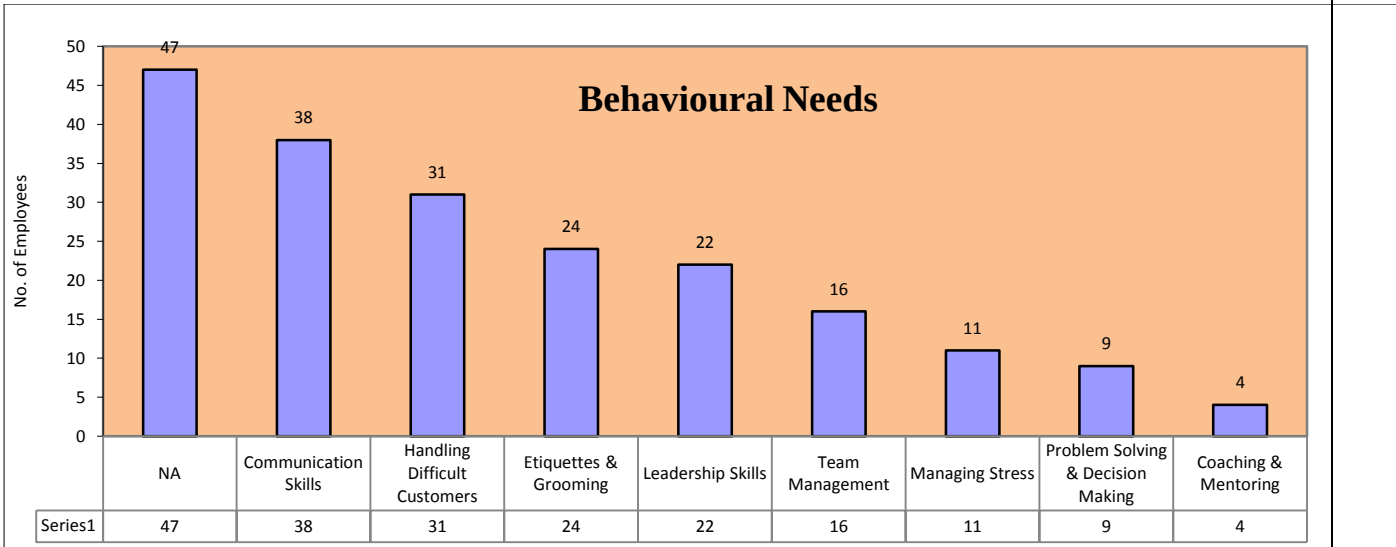
Training is given every day to the nursing staff from 1 to 2 as per the training calendar prepared every month.

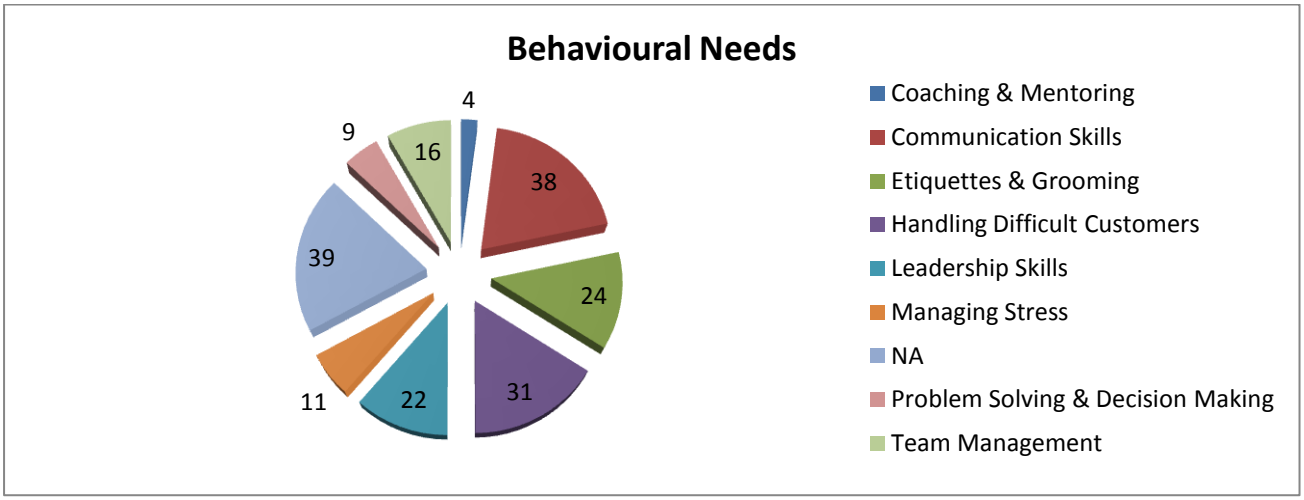
Knowledge Skills & Attitude Required as per

Organization Goals	NABH Standards	JCI Standards	Current Training Needs
➢ Strong Communication Skills ➢ Conceptual & Analytical Skills ➢ Computer Literacy & PC Handling ➢ Wide Knowledge ➢ Multitasking ➢ World Class high quality Patient Care ➢ Handling Emergencies ➢ Compliance to NABH/JCI protocols ➢ Patient Satisfaction	➢ Communication skills ➢ Knowledge about SOP,s & policies ➢ Knowledge about patient rights & responsibilities ➢ Know about service standards of the organization ➢ Soft skills & attitude ➢ Handling Equipment with care ➢ Trained in code red & needle sick injury ➢ Trained in handling adverse drug reactions & emergency cases ➢ The staff joining the organization is socialized and oriented to the hospital environment	➢ Effectiveness of communication among caregivers. Staff should enter into clear and understandable communication with patients ➢ International Quality Services ➢ Care of High-Risk Patients and Provision of High-Risk Services ➢ Upgraded knowledge to new medical procedures and Continuous Nursing Education	➢ Communication skills ➢ Leadership ➢ Team Management ➢ Managing Stress ➢ ACLS & BLS Training ➢ NABH/JCI standards ➢ Equipment training ➢ SOP's ➢ Handling Difficult Customers ➢ Etiquettes & Grooming

Interpretation

Behavioural Training Needs

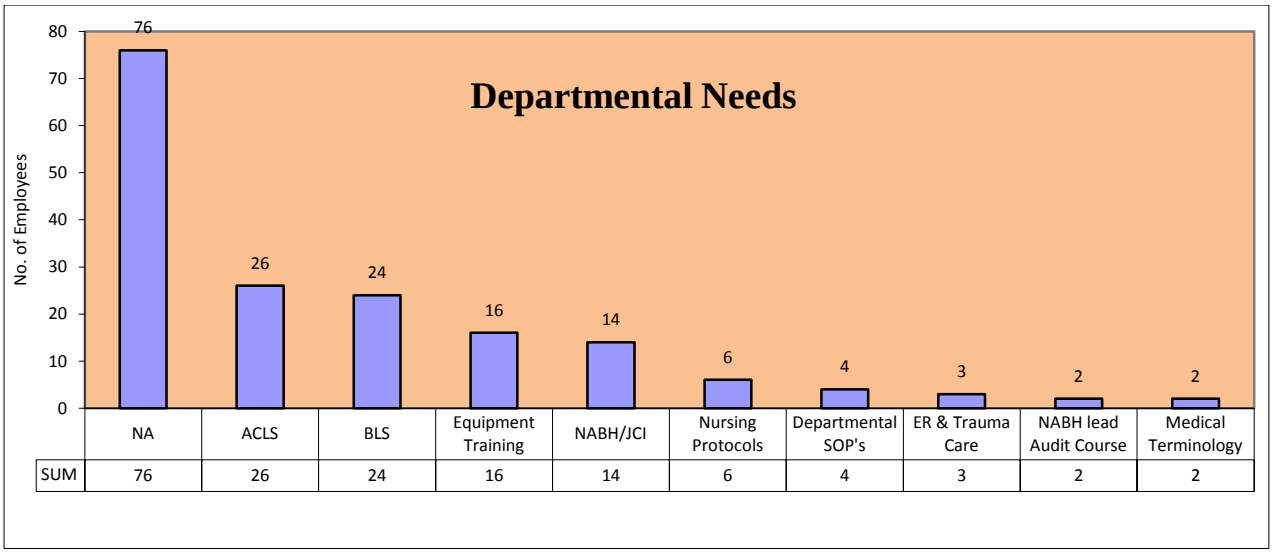


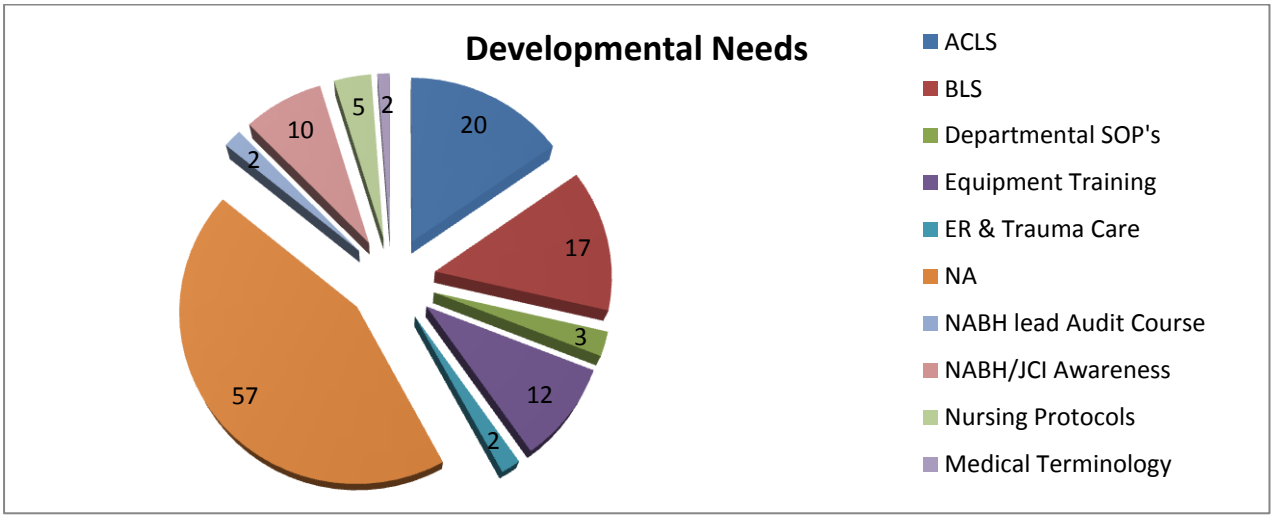


Results

Maximum Behavioural Needs were of Communication skills, Handling Difficult Customers & Etiquettes & Grooming .Among behavioural needs 38 % of the staff needs training in communication skills 24 % needs in Etiquettes & Grooming 31 % handling difficult customers 22 % in Leadership skills

Departmental Training Needs

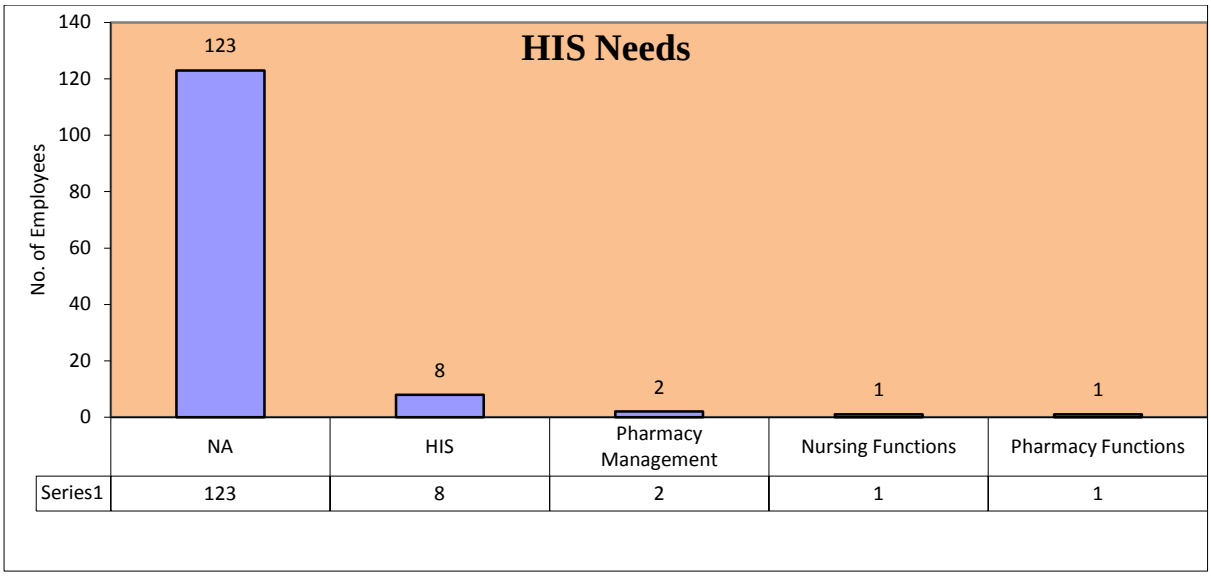


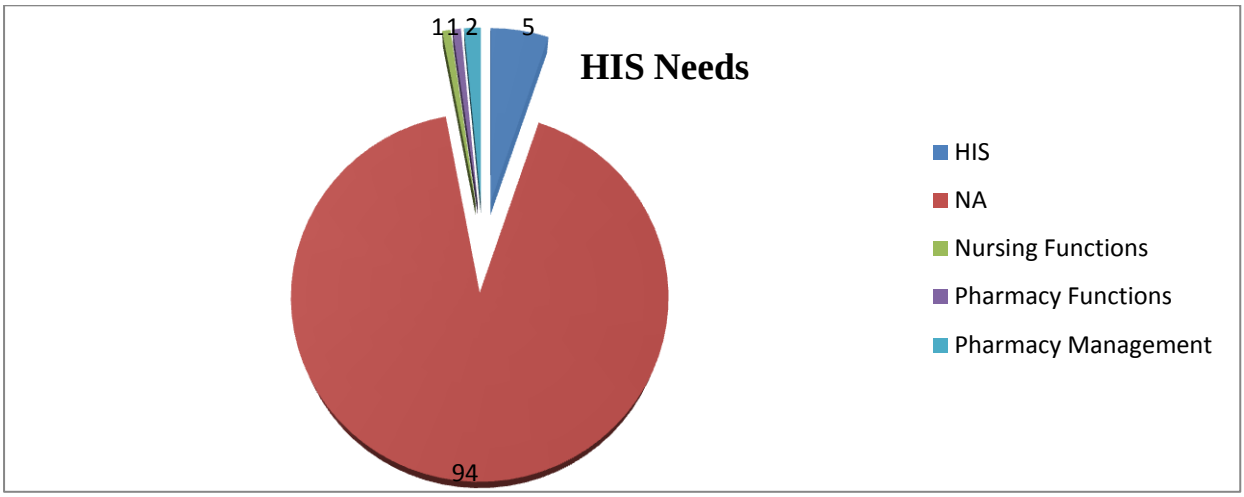


Results

Major Departmental Needs were found to be ACLS, BLS Equipment training& NABH/JCI awareness.57 % staff doesn't need any departmental training 37 % in ACLS & BLS 12 % in Equipment training 12 % in NABH/JCI awareness & NABH lead Audit course.

HIS Training Needs





Results

For most of the staff training in HIS was not applicable.94 % of the staff doesn't need training in 6 % need training in HIS. But according to the observation staff is lacking in HIS skills and take a lot of time in doing entries in HIS .Nurses spent more than 1 hr overtime to maintain the daily records.

Recommendations

- Cue cards for international patients to have better communication with them and prevent wastage of time
- Staff needs more training in behavioural skills like communication and leadership
- 360 degree evaluation can be done to improve the validity of the appraisal system
- One interpreter must be there in every team who is good in communication & leadership skills
- Column in appraisal form for employee to write his self training needs
- More of Bedside Training

Abbreviations

- AHI -Artemis Health Institute
- HR - Human Resource Department
- GTL -Group Team Leader
- Sr. -Senior Executive
- HIS -Hospital Information System
- PA-Performance Appraisal
- AOD –Absent of duty
- ACLS-Advanced Cardiac Life Support
- BLS-Basic Life Support
- NABH-National Accreditation Board for Hospitals
- JCI-Joint Commission International
- PCS-Patient Care Services
- OPD-Out Patient Department
- IPD-In Patient Department
- ICU-Intensive Care Unit
- LDR-Labour Delivery Room
- CSSD-Central Sterile Supply Unit
- CME-Continuous Medical Education
- CGHS-Central Government Health Scheme
- TPA-Third Party Agreement
- MRD-Medical Records Department
- SSI-Surgical Site Infection
- LFT/KFT-Liver Function Test/Kidney Function Test
- CTVS-Cardio Thoracic & Vascular Surgery