Division of Pediatric Emergency, Critical Care, Pulmonology and Allergic Disorders

Department of Pediatrics
Institute of Child Health

Annual Performance Report 2023-24

Sir Ganga Ram Hospital
Rajinder Nagar, New Delhi – 110060

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Preface

It gives me immense pleasure to present the Performance Report for the year 2023-24 of our Division of Pediatric Emergency, Critical Care, Pulmonology and Allergic Disorders. The critical care unit was started in 1993 with only 4 beds and approximately 200 admissions annually. Over the years, we have evolved into a state-of the-art unit of North India. Our center is now a tertiary care referral unit in India and for neighboring countries. We have highly sophisticated equipments like NAVA, HFO and transpulmonary pressure monitoring devices to provide world class respiratory critical care. We have also developed state-of the-art neurological care, renal replacement therapy and hemodynamic critical care. The unit is fully equipped for dealing with all types of simple or complex medical or surgical cardiac diseases. We are pioneer in providing Pediatric Extra Corporeal Membrane Oxygenation (ECMO) facilities to critically sick children of all ages. We are now-equipped with intra- and inter-hospital short and long distance transport for sick children needing life saving support including ECMO.

Pediatric pulmonology as a specialty is available at very few centers in India. We have started pediatric flexible fiberoptic bronchoscopy in 1994 and today we are doing bronchoscopies not only in children on invasive or non-invasive ventilation but also intraoperatively on children with severely compromised airways. Over the last 6 years, we have also started pediatric airway reconstruction services for the first time in India. Impulse Oscillometry, a novel technique for measuring lung functions in small children and uncooperative adults, has also been routine done at the premises. We are also doing both nasal and oro-tracheal FeNO analysis for the needy patients.

Allergic disorders are being increasingly diagnosed in adults and children. We are managing various types of respiratory, food and skin allergies. At our allergy lab, we have been regularly doing skin prick diagnostic tests which help in identifying allergens and plan specific immunotherapy. We have rapidly expanded our 'Pediatric Allergy Lab' at the institute with glaring patient outcomes. We have recently received 'Centre of Excellence' designation by World Allergy Organisation in a first from the country.

I would like to express my heartfelt gratitude to the Chairman and board of management of the hospital for providing us the appropriate environment to excel in the pediatric sub-specialties. Finally I thank my colleagues and fellows for working tirelessly and sincerely to bring laurels to this division of Pediatrics and to Sir Ganga Ram Hospital.

Dr Anil Sachdev
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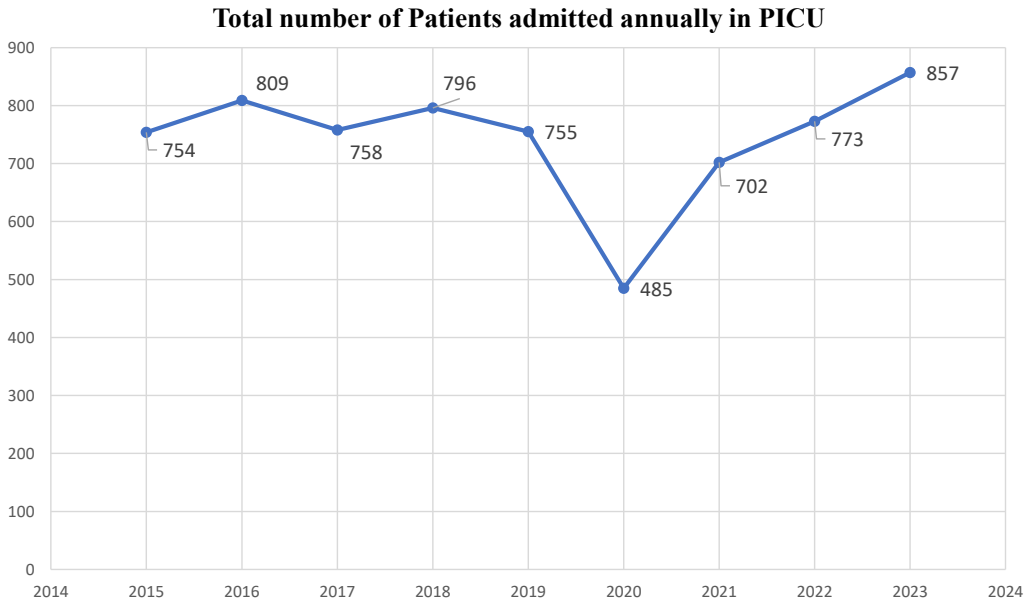
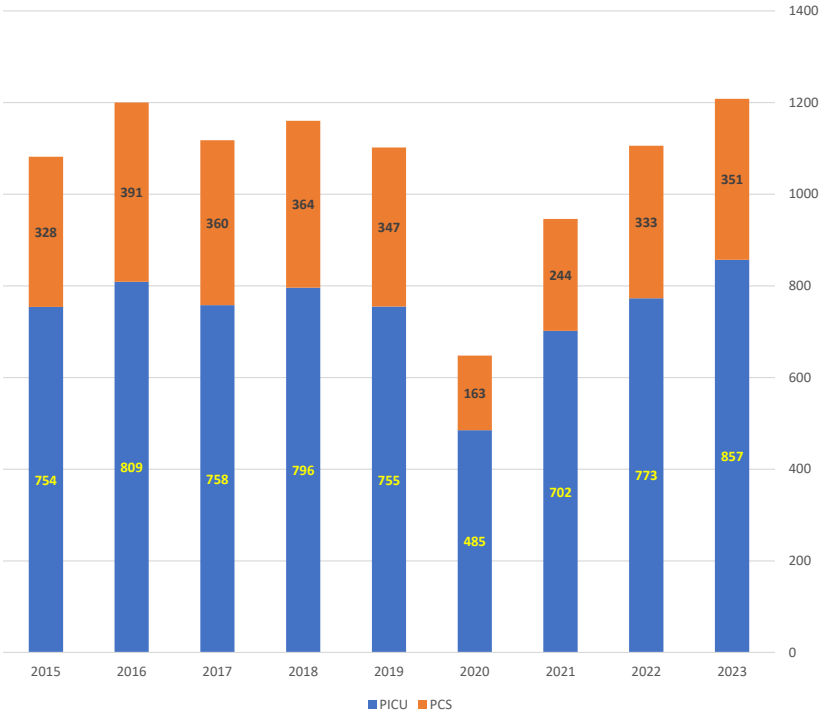
DEMOGRAPHIC PARAMETERS

Growth Trends



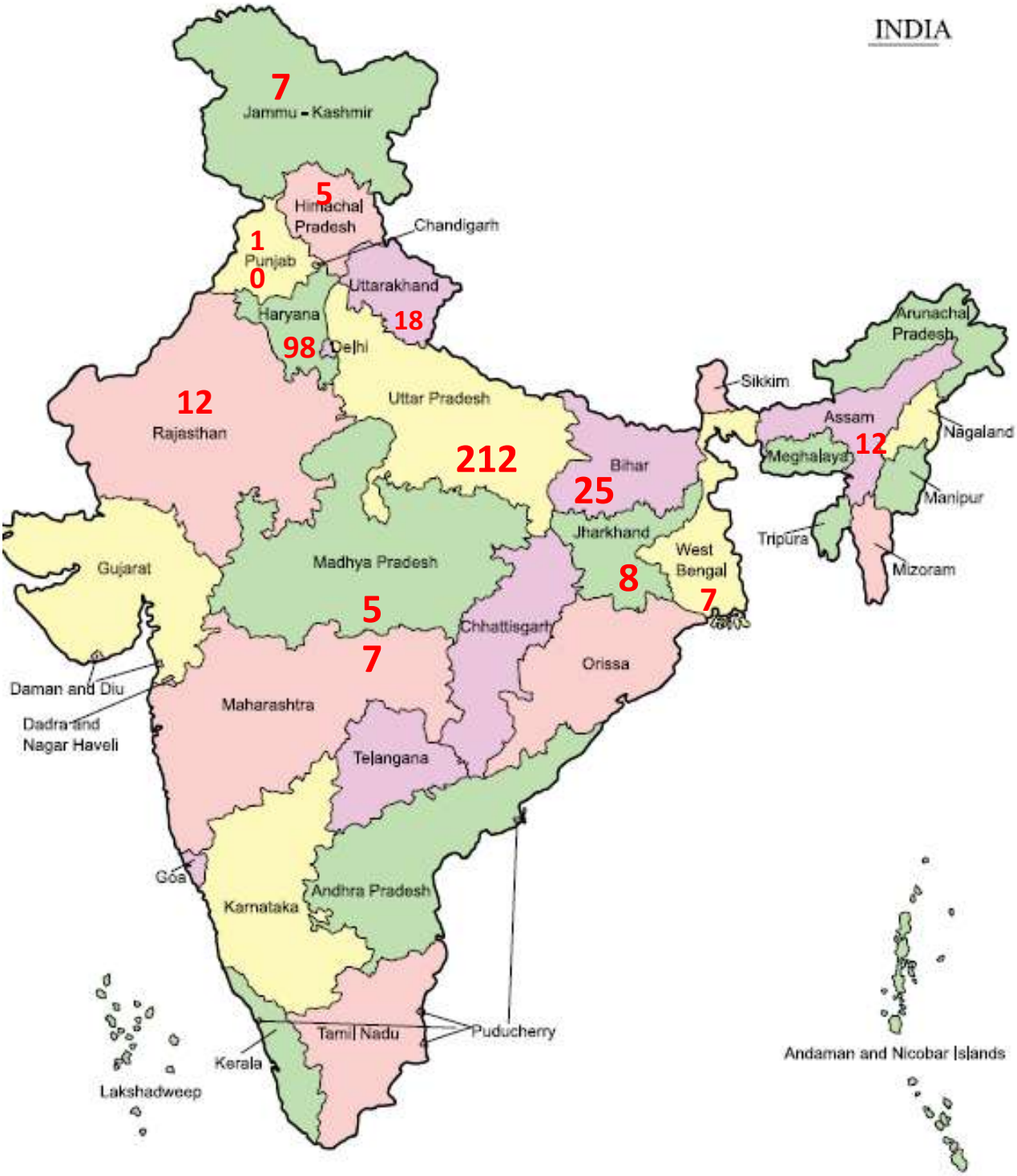
- Total number of admission in 2023 were 857.
- Average number of annual admissions in last 9 years were 743.2 .
- Patients were referred to us from other facilities across all over India like Haryana, Punjab, Uttar Pradesh, Madhya Pradesh, Assam, Himachal Pradesh, Arunachal Pradesh, Jammu Kashmir, Bihar and parts of north-eastern states.
- We also cared for few international patients from Nepal, Iraq, Uganda, South Africa and Bangladesh.
- Apart from outside referrals, other admissions to PICU were from wards, pediatric emergency room and operative room.
- Total bed occupancy days for year 2023 were 4595 days.
- For year 2023, the bed occupancy rate per day was around 12.58 beds/day (>100%).

PICU and PCS admissions over last 9 years



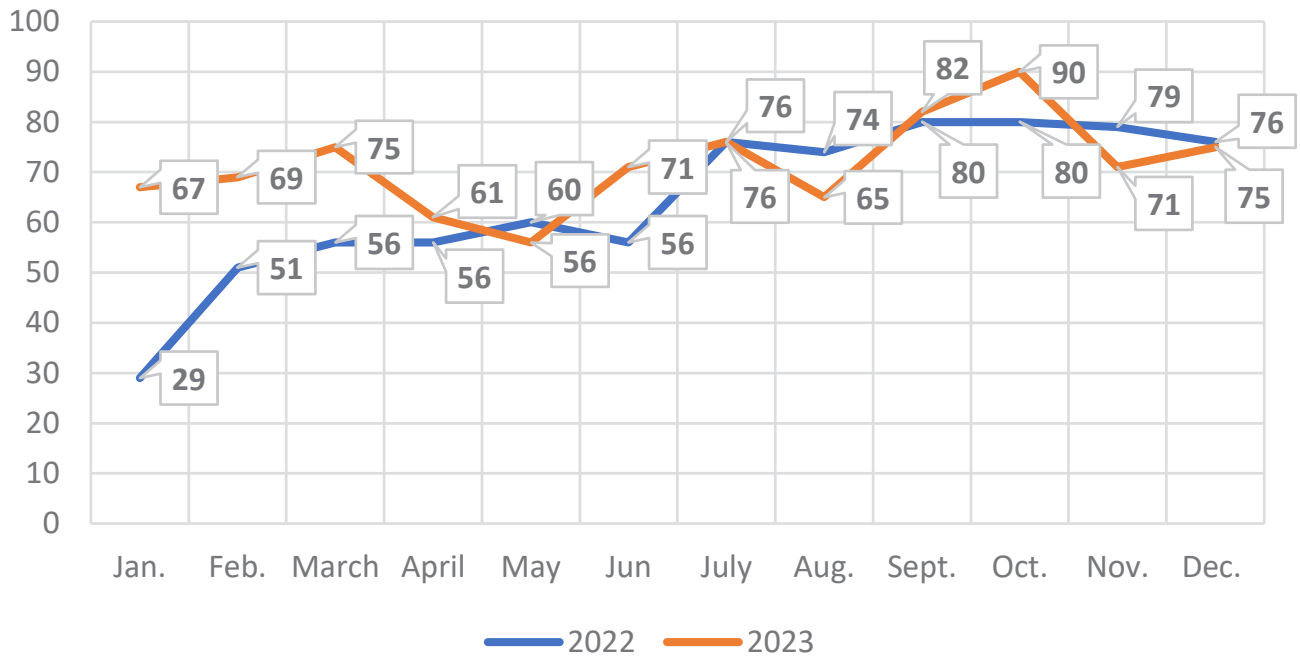
- Apart from PICU, we also provide critical care services to pre-op and post-op Pediatric Cardiac patients, which are admitted in a specialised 8-bedded cardiac ICU, at Department of Pediatric Cardiac Sciences (PCS).
- In 2023 alone, 351 children with cardiac problems were admitted with us, increasing the tally of sick patients to 1208 (PICU + PCS).

Our Referral Base Across the Nation in 2023



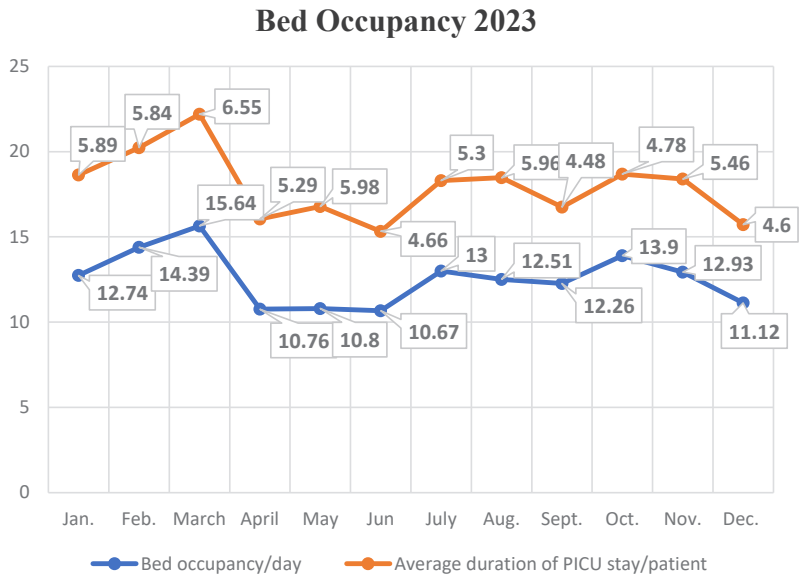
National Capital Region (NCR)	**376**
Non-NCR	**471**
International	**10**

Monthly admissions in PICU



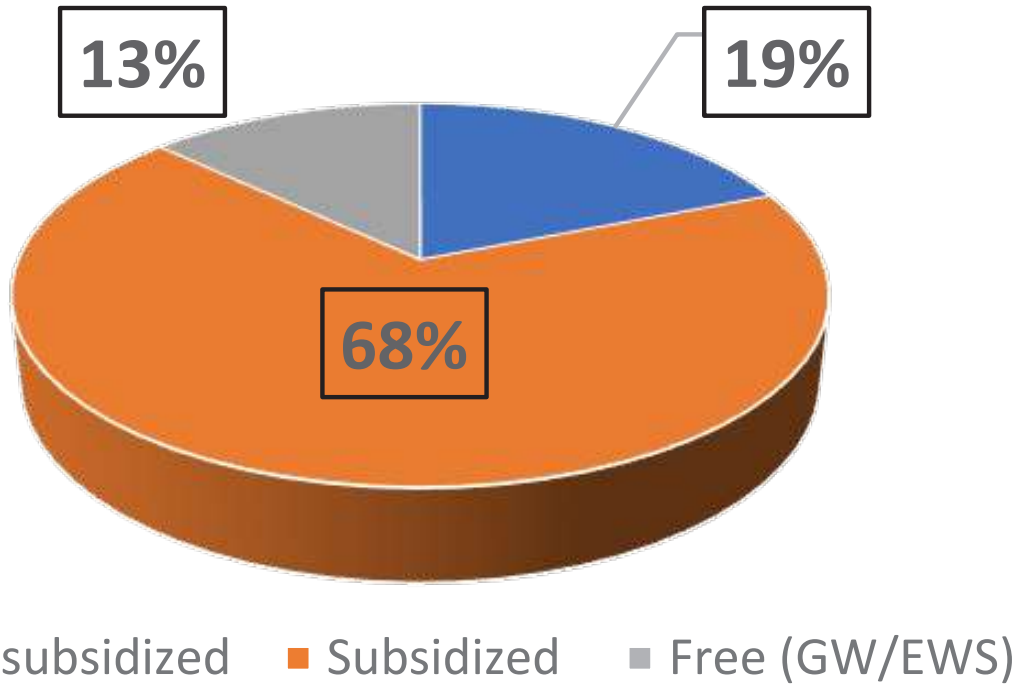
- Average number of admissions per month were 71.4 in the year 2023.
- We saw a steady rise in number of patients over the year with maximum patients in October. Likewise 2022, October 2023 witnessed maximum admission. This seasonal variation might be explained by surge in tropical infections (especially Dengue) during this time.
- The monthly pattern of admission has shown a variable trend during the last two consecutive years.

Bed Occupancy



- In our 12 bedded PICU, mean bed occupancy was 12.58 (100%) beds per day, which increased during busy months of September and October.
- The general recommendation is that general ICUs should have an average bed occupancy of 60-70% (BJM,1970).
- Patients stayed for on an average 5.36 days across the year of 2023.

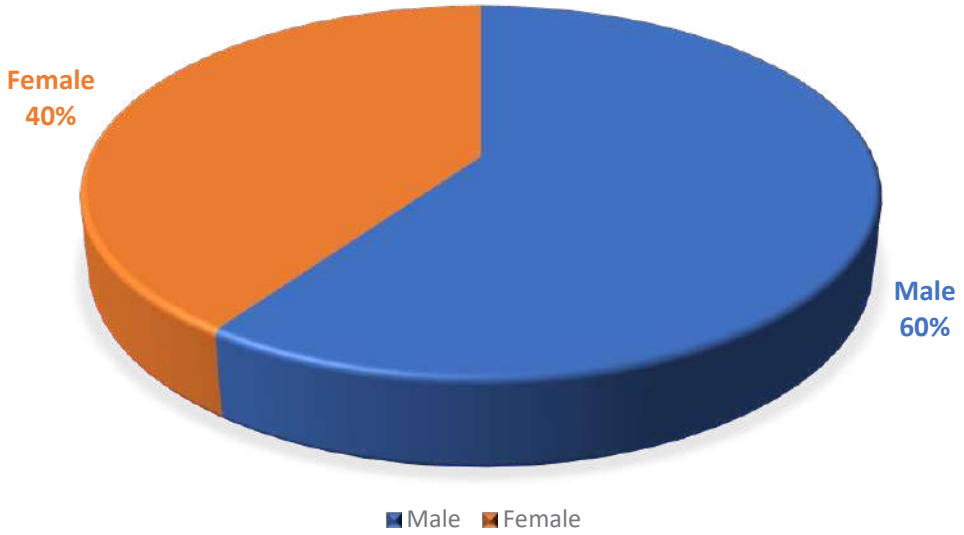
Financial assistance by hospital



Patients are routinely admitted in non-subsidized (fully paid), subsidized (partially) and free (GW/EWS) categories according to availability of beds in PICU.

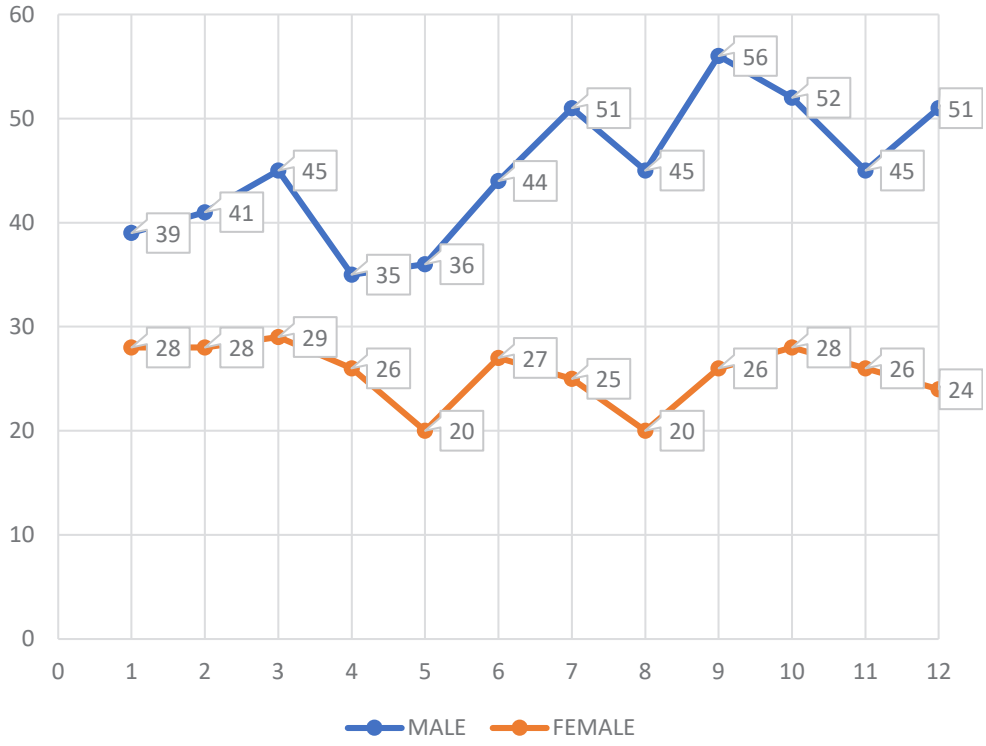
- Out of 12 beds in the PICU, 20% are allocated to free category at any given point of time. The patients either directly get admitted in EWS (Economically weaker section) or are provided with a facility of general ward (GW) during stay. All patients are entitled for similar treatment facilities irrespective of their categories.
- Nearly 80% of the patients have been provided financial assistance by the hospital during PICU stay in the year 2023, as depicted in above pie chart.
- ICU beds are limited in any hospital. Rationalized use for needy patients is necessary. Length of stay (LOS) is, therefore, used to assess quality of care and resource utilization. Average LOS in year 2001 Norfolk General Hospital was 4.36 days in general ICU (Quality indicators for ICU:ISCCM guidelines for ICUs in INDIA).

Gender- wise Distribution of Patients



- Male : Female ratio of 1.5:1 is observed.
- This trend is very similar to previous years, might be due to more preference for boys, either by the disease process or by the parents.

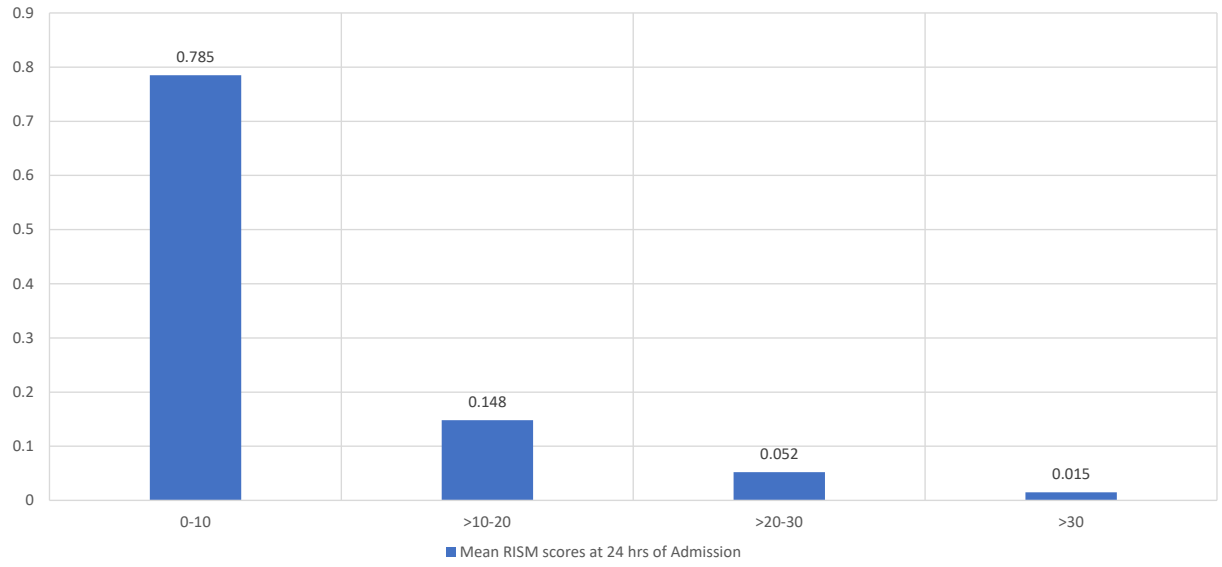
Monthly Distribution of Gender Ratio



- A similar trend of male predominance among the admitted patients of all ages was observed round the year.

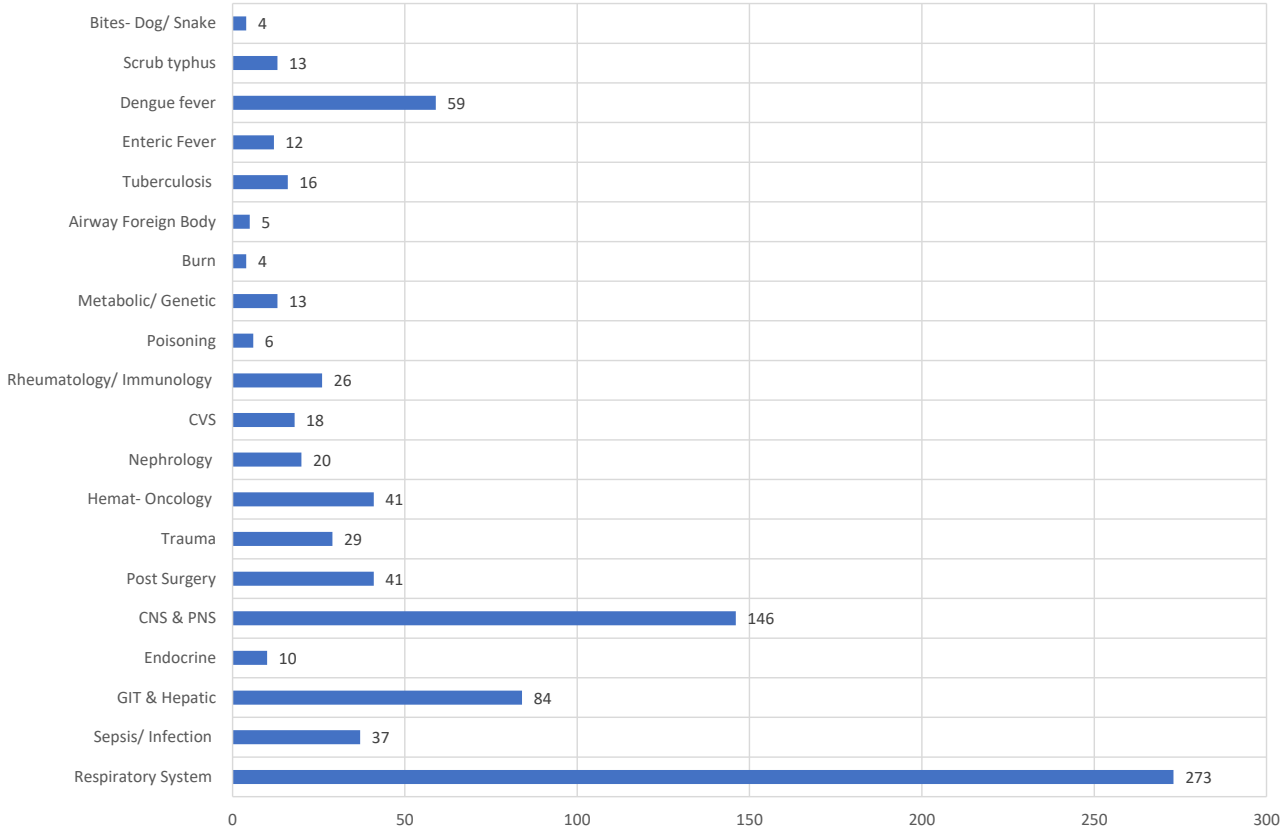
DISEASE SPECTRUM

PRISM Score of Children at 24 hours of admission

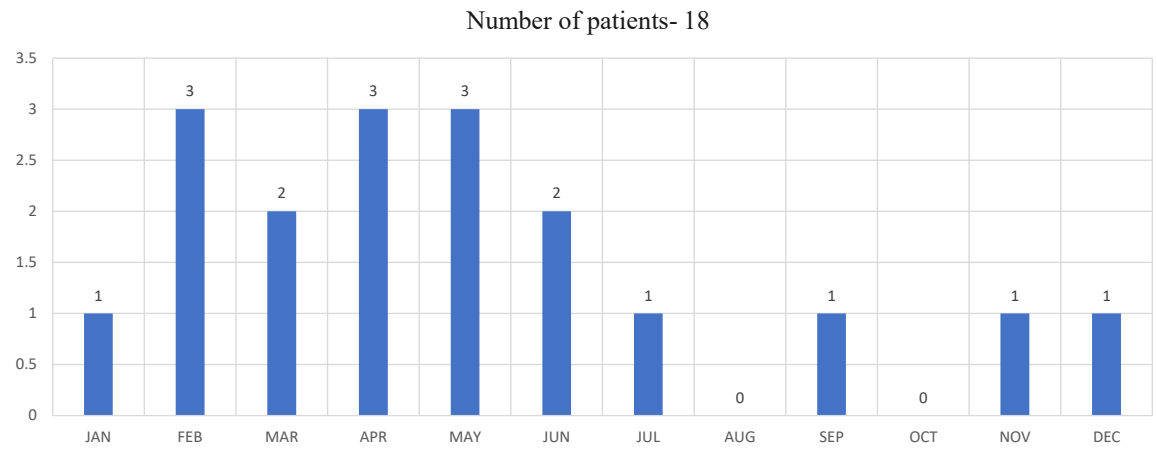


- Disease severity was assess with Pediatric Risk of Mortality (PRISM) Score
- 78.5% of patients had PRISM 24 score less than 10.
- Around 6.7 % of the patients had PRISM 24 score more than 20.
- Higher PRISM score at admission was associated with increased length of stay and increased mortality.

Diagnosis /Primary System Involvement

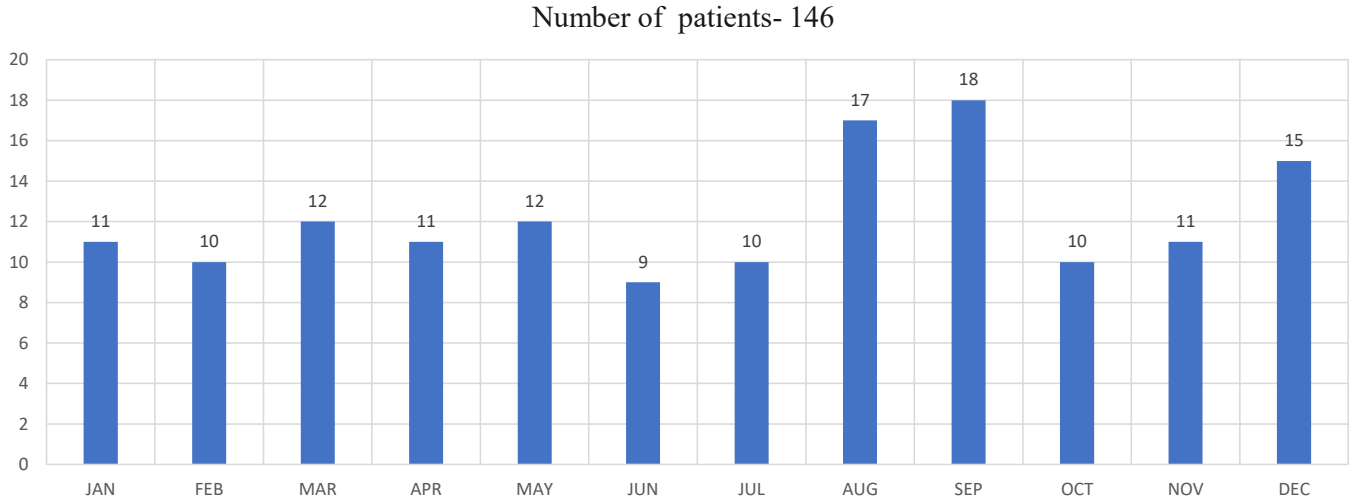


Cardiovascular Disorders



- Presentation of patients with cardiovascular instability
  - Congestive cardiac failure
  - Cardiogenic shock
  - Pulmonary edema
- Patients with congenital heart disease either had lower respiratory tract infection or peri-operative concerns
- Low admission rate in PICU was due to availability of dedicated Pediatric cardiac ICU services

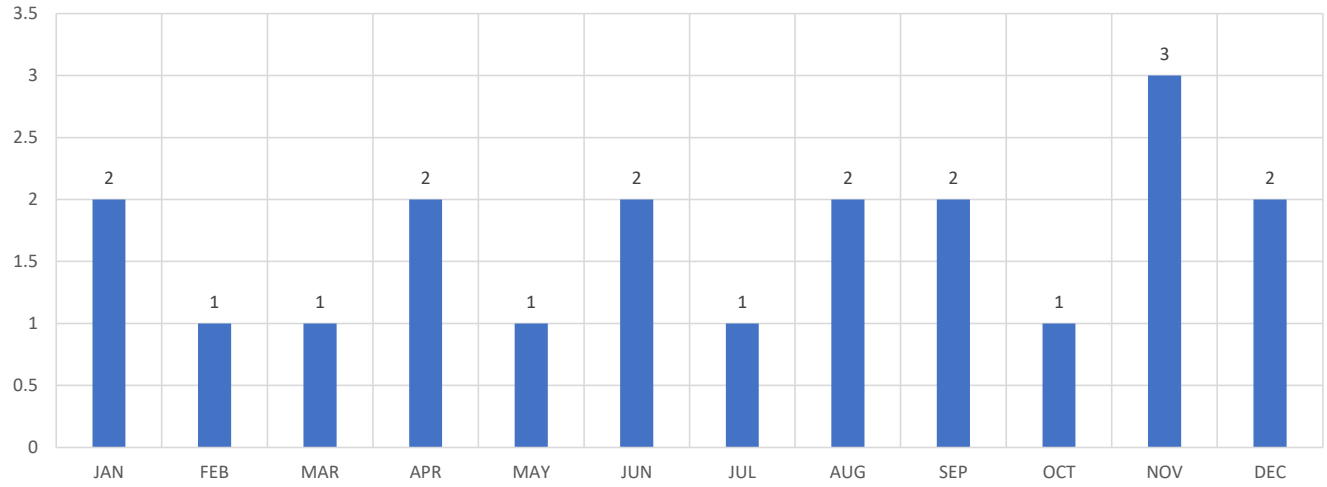
Central and Peripheral Nervous System Disorders



- Presentations of patients with CNS Disorders
  - Seizures
  - Status epilepticus
  - Altered sensorium
- Patients were diagnosed to have acute meningoencephalitis (bacterial, viral, TB), space occupying lesions, autoimmune encephalitis, Guillain-Barre Syndrome, Stroke, Central hypoventilation syndrome and myopathies and other congenital disorder.

Renal Disorders

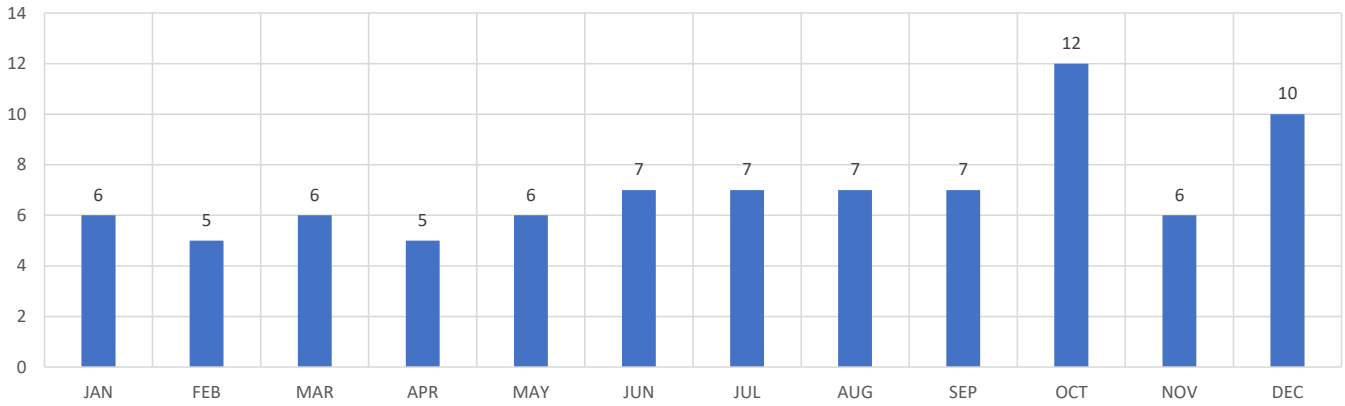
Number of patients- 20



- Presentations of renal disorder patients:
  - Anuria/oliguria
  - Pulmonary edema
  - Fluid overload/Anasarca
  - Hypertension
  - Hypertensive encephalopathy
- 20 children were admitted with acute or acute-on-chronic renal diseases.

Gastro Intestinal and Hepatic Diseases

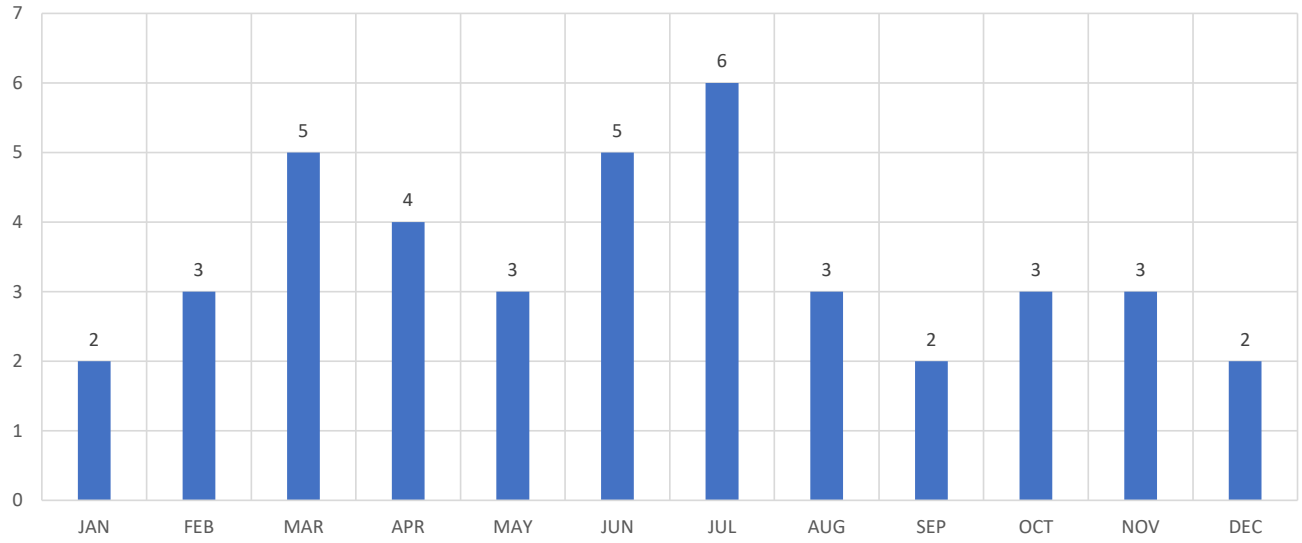
Number of patients- 84



- Presentation of patients with:
  - Diarrhea
  - Poor feeding with failure to thrive
  - Jaundice
  - Altered sensorium
  - Upper/Lower GI bleed
- The non surgical reasons for admission were viral hepatitis, hepatic encephalopathy, Wilson's disease.

Post Surgery Management

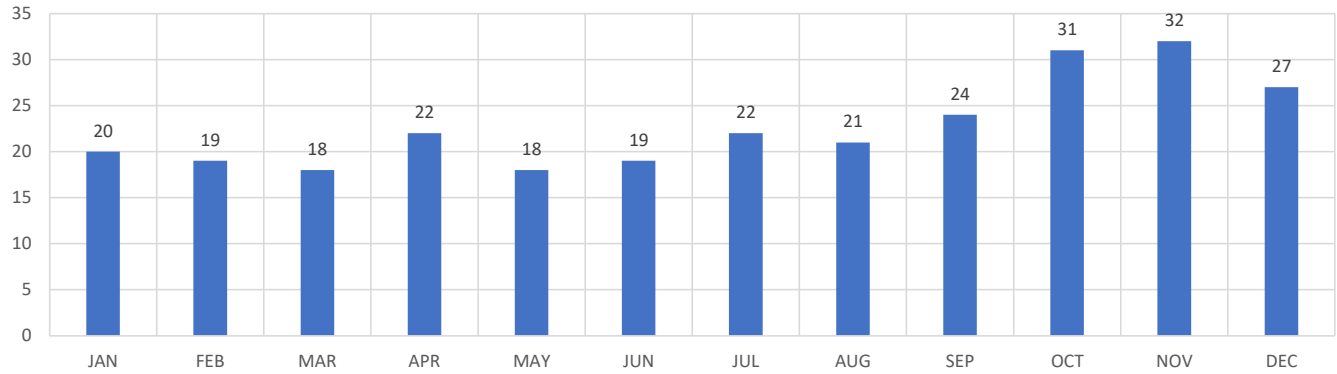
Number of patients- 41



- Patients were admitted for post operative care of gastrointestinal, hepatic/biliary, neurosurgery, urogenital, thoracic, orthopaedic surgeries.

Respiratory Diseases

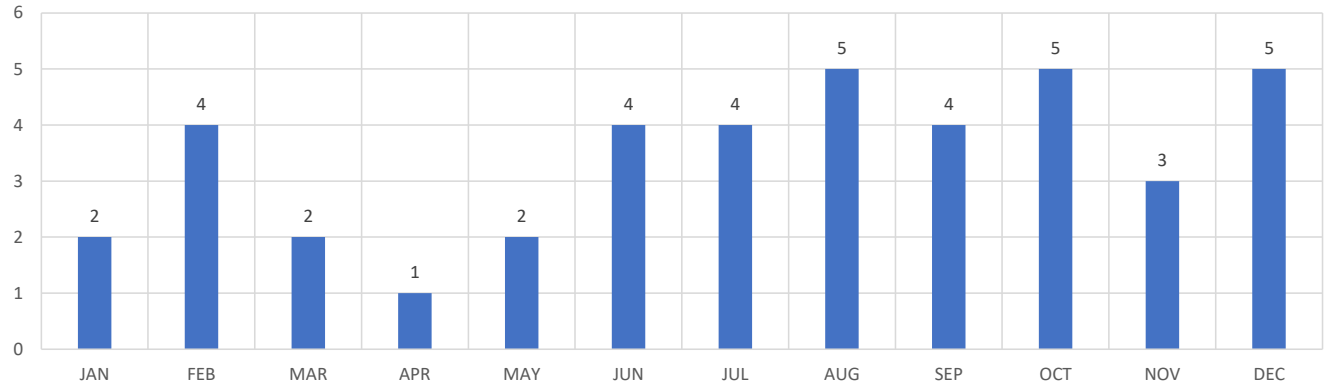
Number of patients - 273



- Patients with respiratory diseases mostly presented to us in winter months.
- Presentation of patients:
  - Tachypnea
  - Respiratory distress
  - Cyanosis
- Patients were diagnosed with - Community acquired pneumonia, bronchiolitis, empyema, foreign body aspiration, aspiration pneumonia, airway malacia etc.
- Many children were diagnosed with Viral Pneumonias- Influenza, Parainfluenza, Adenovirus and Rhino-Enterovirus infections

Hemato-Oncological Disorder

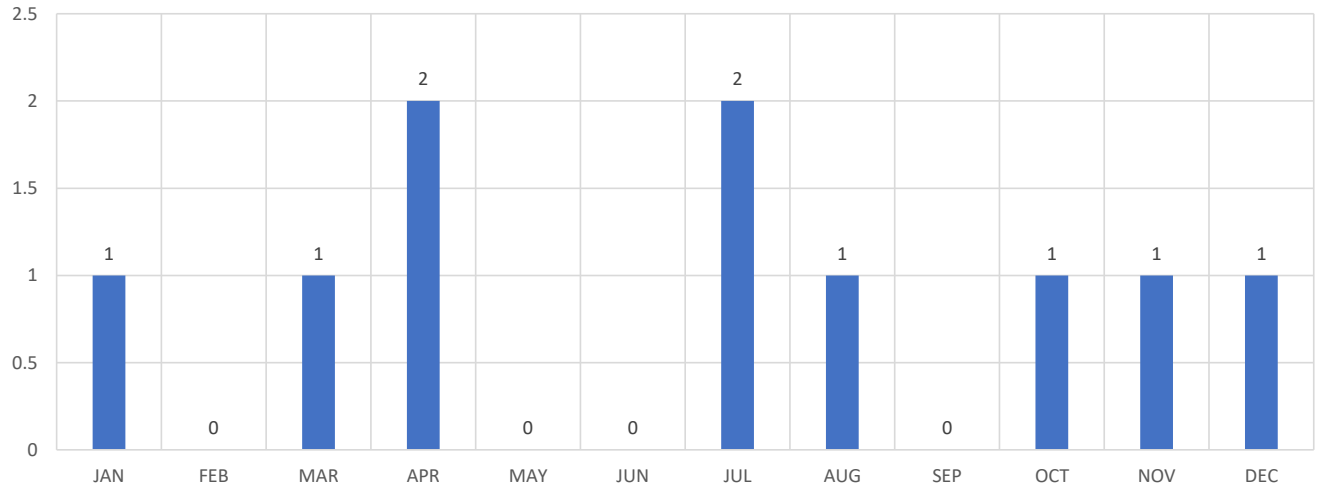
Number of patients- 41



- Patients with Hemato-Oncological Diseases usually shifted from ward with the following presentations-
  - Hemodynamic instability
  - Respiratory failure
  - Multi organ dysfunction syndrome
  - Altered sensorium
  - Sepsis
- Most common complications noticed were - cardiogenic shock, intracranial bleed, bronchopneumonia and ARDS.
- Few patients of bone marrow transplantation were admitted in very critical condition

Endocrine Disorders

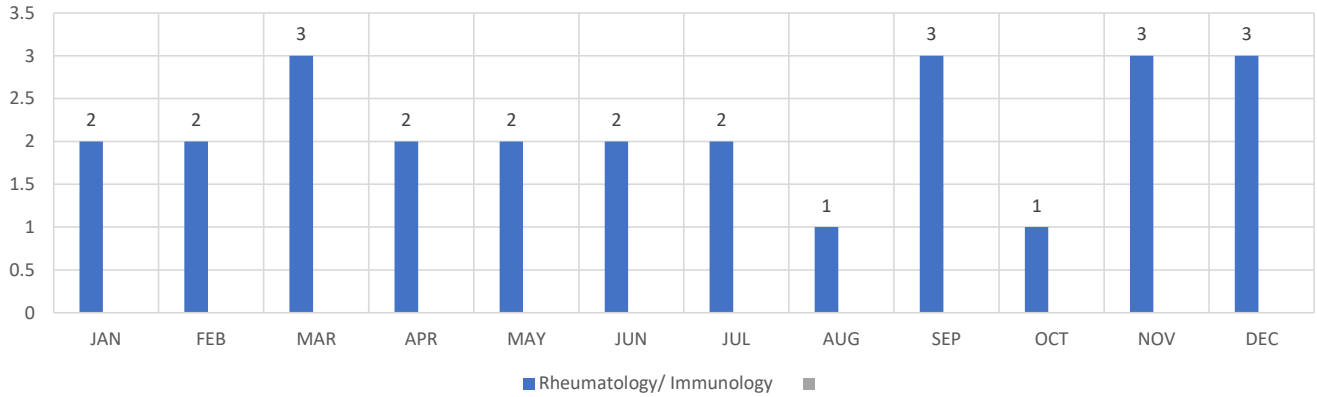
Number of patients- 10



- Patients presented with-
  - Polyuria and polydipsia
  - Tachypnea with acidotic breathing
  - Hyperglycemia or hypoglycemia
  - Electrolyte imbalance
- The most common diagnosis was Diabetic ketoacidosis (DKA).

Rheumatological/Immunological Disorders

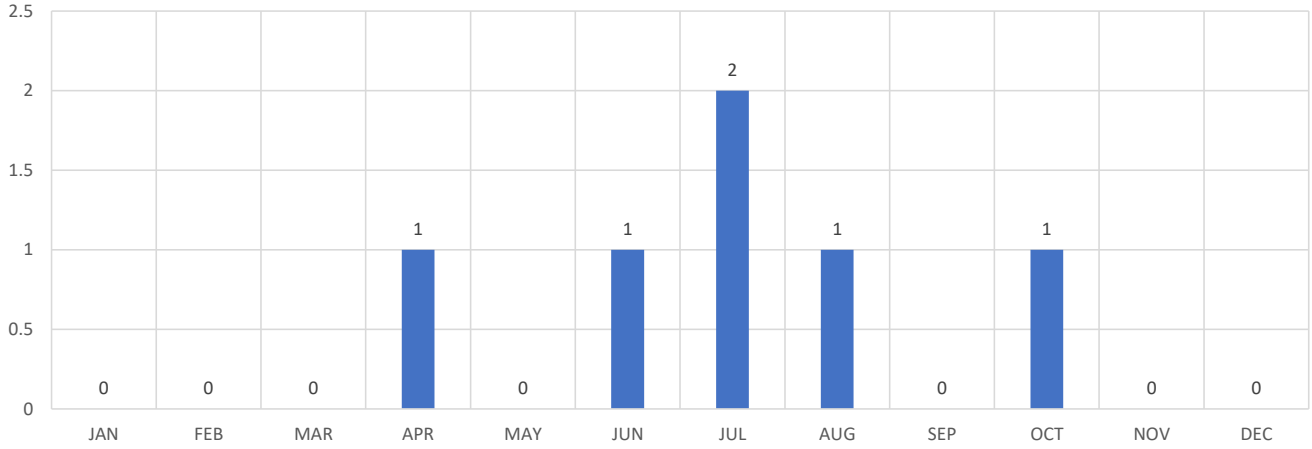
Number of patients- 26



- Patients presented with-
  - Hemodynamic instability
  - Suspected or proven sepsis
  - GI bleed, abdominal pain
  - Prolonged fever, joint swelling with respiratory distress
  - Acute Kidney Injury (AKI)
- Patients usually diagnosed as Systemic lupus erythematosus, Systemic onset juvenile idiopathic arthritis, Polyarteritis nodosa and Kawasaki disease.
- As a new entity with same spectrum of Kawasaki disease, Multisystem Inflammatory Syndrome in Children (MISC) not due to Covid infection.

Accidental Poisoning

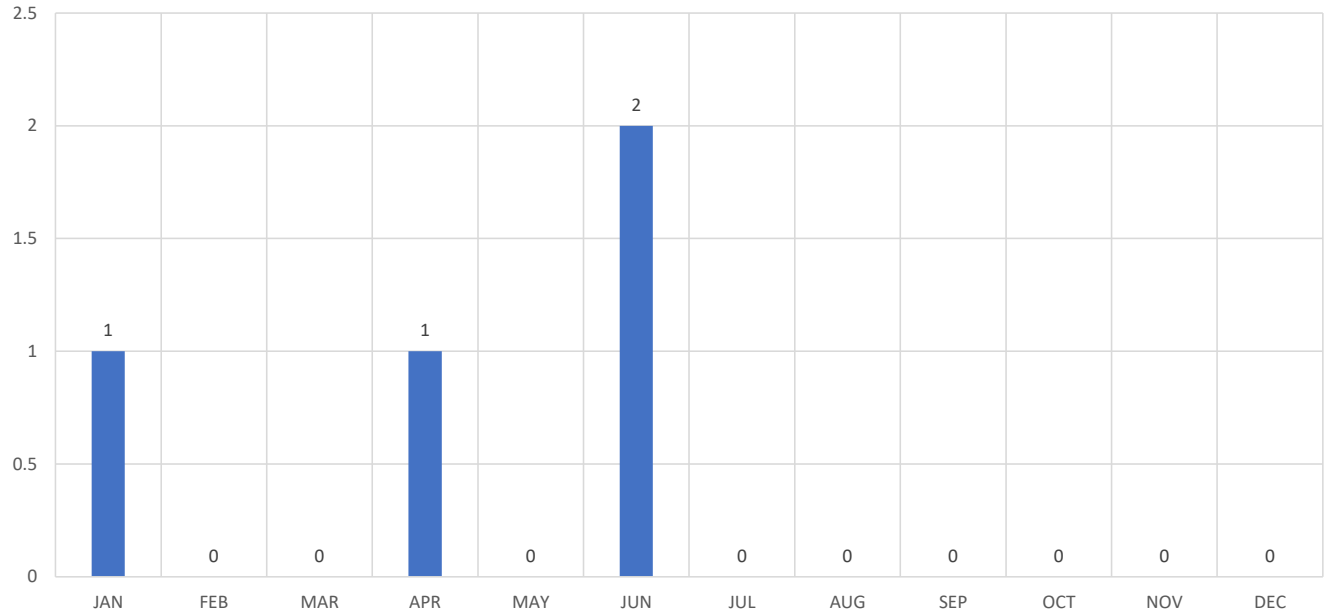
Number of patients-6



- Patients presented to us with:
  - Kerosene or other hydrocarbon intoxication
  - Organophosphorus poisoning
  - Paracetamol poisoning
  - Arbus precatoricus seed poisoning
  - Camphor poisoning
- Toddlers outnumbered other age groups.

Snake Bite Envenomation

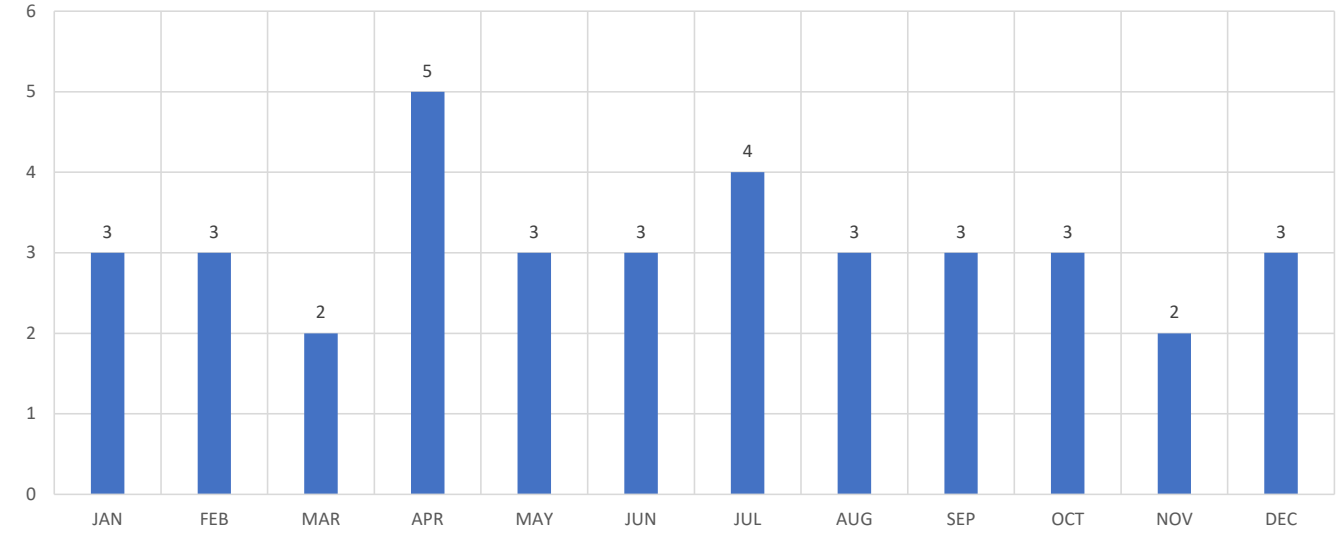
Number of patients-4



- We encountered Cobra, Krait and Viper envenomation.
- All these patients were from village back ground and were older children and adolescents

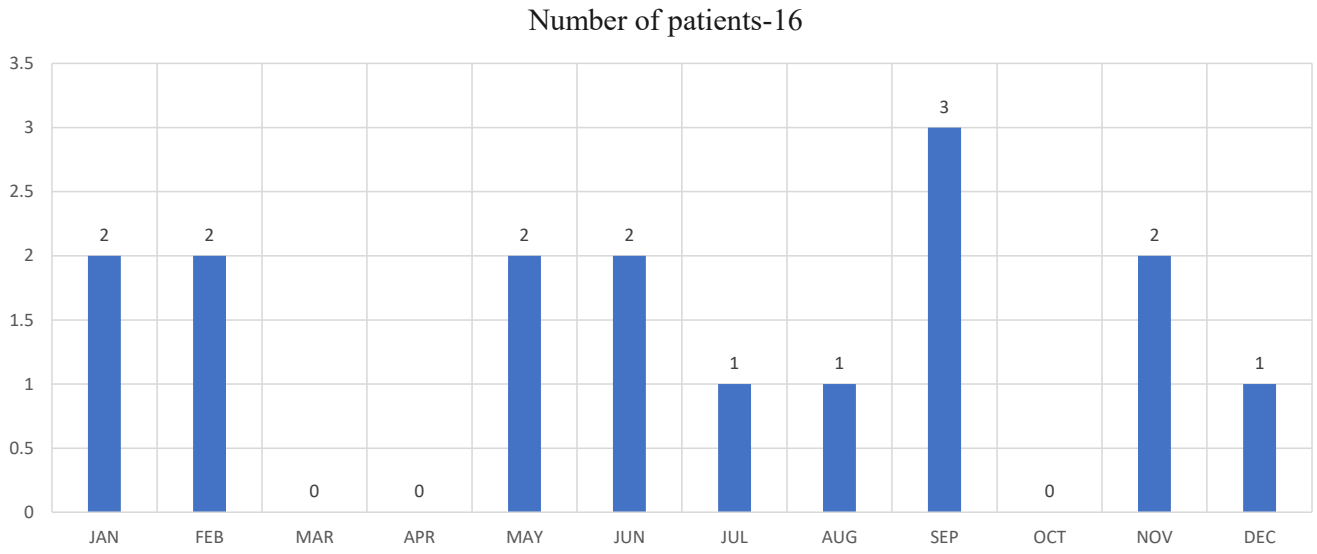
Primary Sepsis/Infectious Disease

Number of patients-37



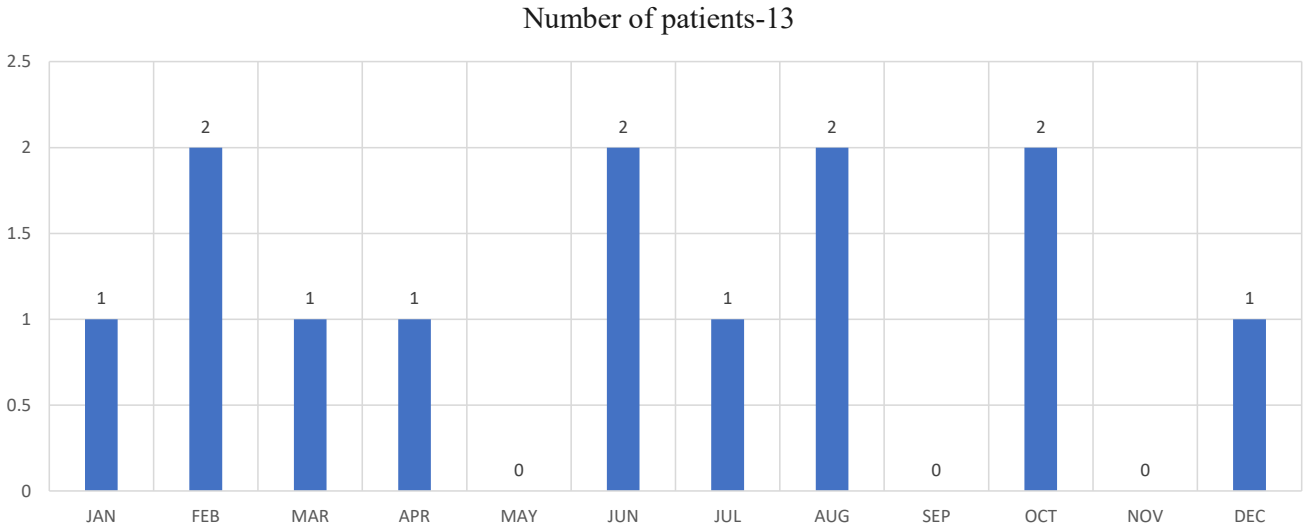
- Spectrum of manifestations of sepsis included severe sepsis, septic shock and Multi Organ Dysfunction Syndrome (MODS)

Tuberculosis



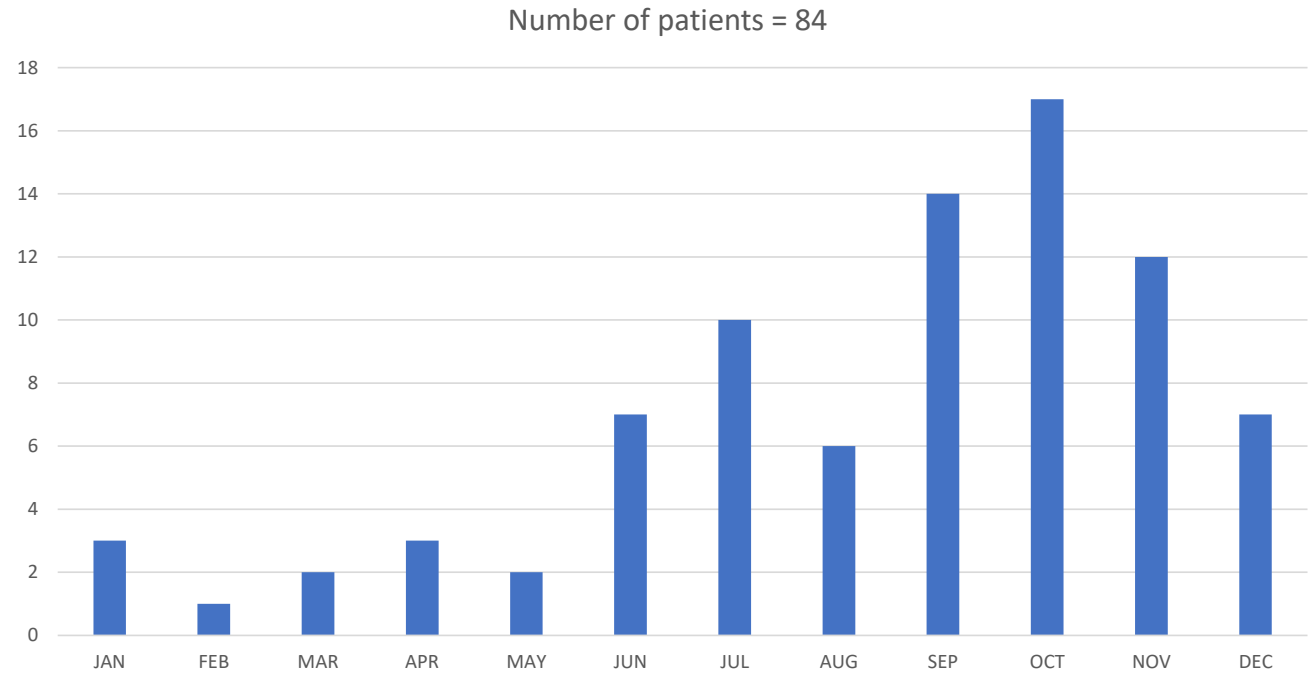
- 16 children with tuberculosis were admitted to PICU in critical condition.
- Pulmonary tuberculosis was commonest followed by central nervous system, lymph node, Pott's spine, Cardiac (pericardium).

Metabolic/Genetic Disorders



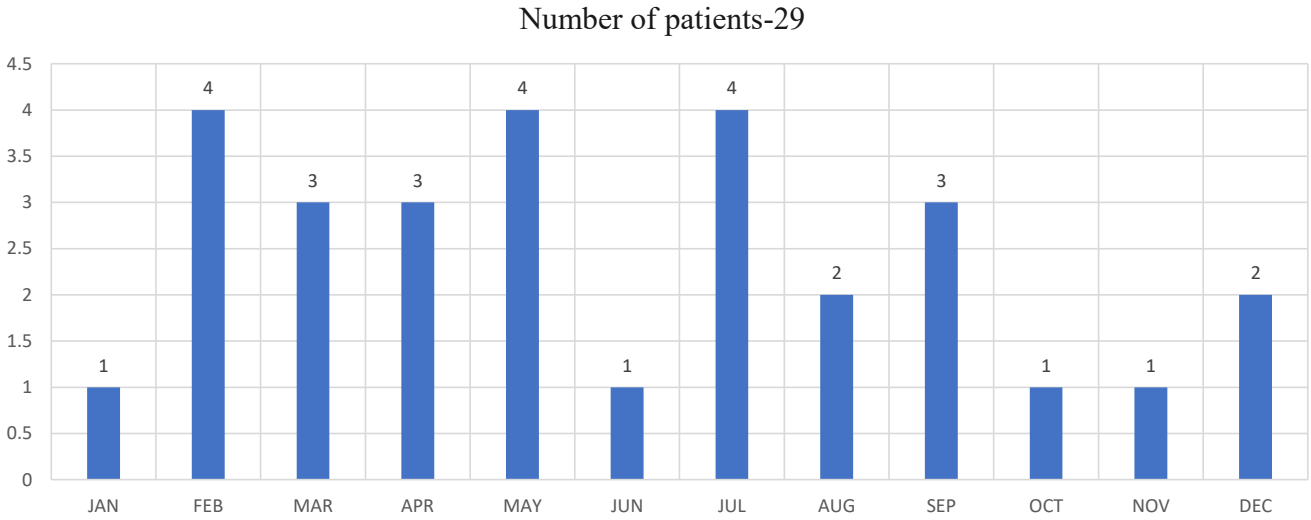
- These patients presented to us with
  - Acidotic breathing
  - Altered sensorium
  - Jaundice
  - Hypoglycemia
  - Seizures
- Majority presented as sepsis spectrun at admission

Tropical Diseases



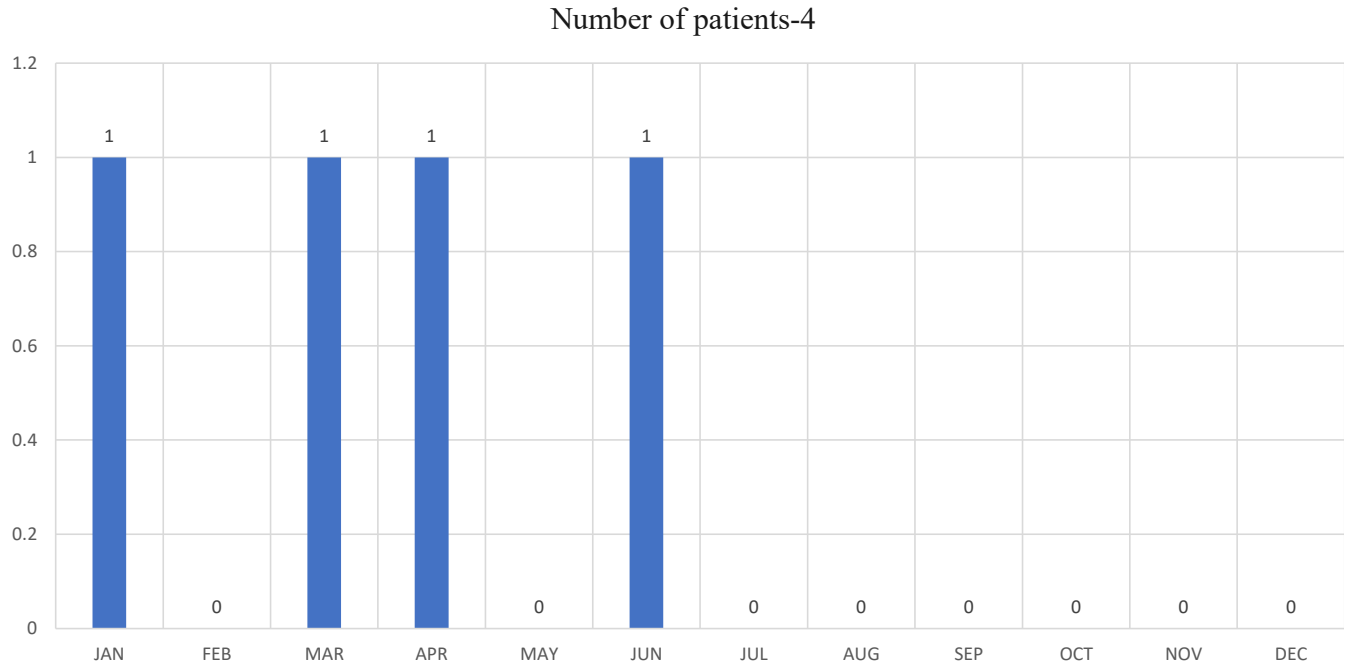
- Among the tropical diseases Dengue Fever, Enteric Fever and Scrub Typhus were predominant.
- Maximal surge of patients with Dengue Fever was seen in June to November.
- These patients presented to us with - Shock, respiratory failure, ARDS and MODS.
- Patients with Co-morbidities were at higher risk of complications.

Traumatic Injury



- There was a surge noticed in Road traffic accidents as compared to last few years.
- Commonest modes of injury were road traffic accident and fall from height .
- Treatment modalities in critically ill patients were mechanical ventilation, management of shock and sometimes decompressive craniotomy
- Traumatic Brain Injury, blunt abdominal trauma and polytrauma were prominent traumatic injuries.

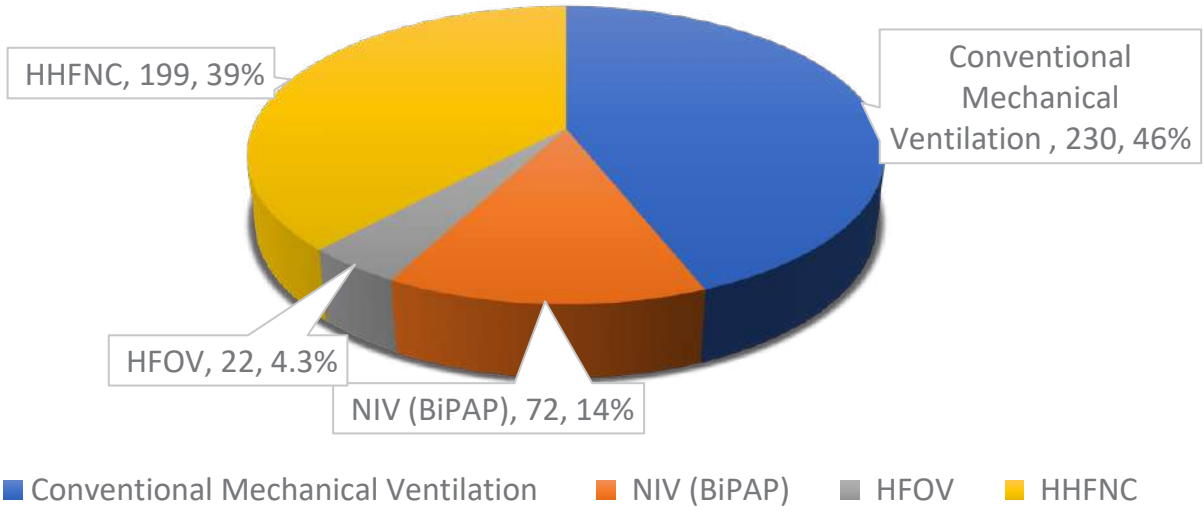
Burn Care



We managed 4 patients with second degree burns with 30% , 20% ,15% and 15% body surface involvement with a separate isolation PICU facility.

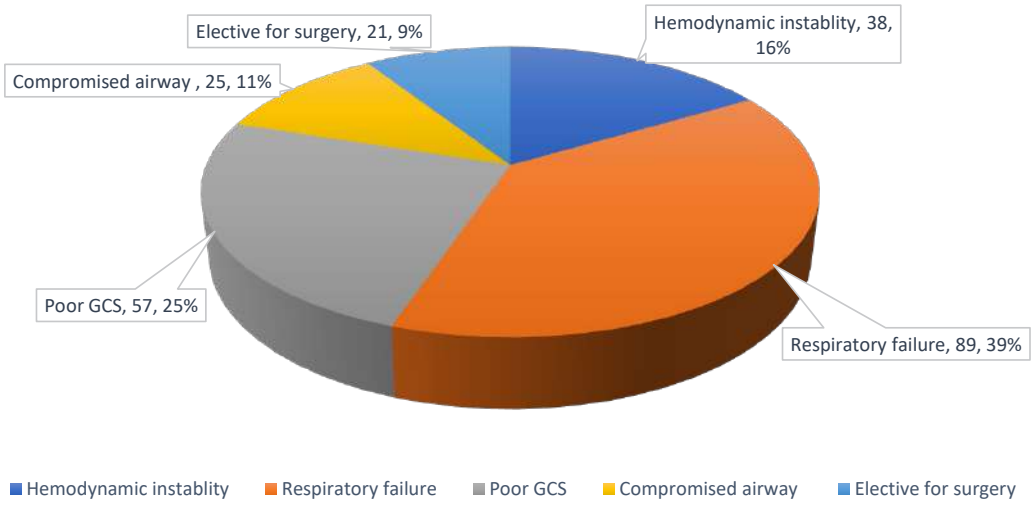
RESPIRATORY SUPPORT

Respiratory Assist Devices



- Total 523 (61%) patients required high flow respiratory support out of 857 patients admitted to the PICU in 2023.
- Non invasive modalities like Non – invasive ventilation (NIV) and High flow nasal cannula (HFNC) were used in 271 (54%) children.
- Use of non invasive modes of ventilation has progressively increased in our ICU over past few years.
- High frequency oscillation was needed in 22 patients (4.3%).

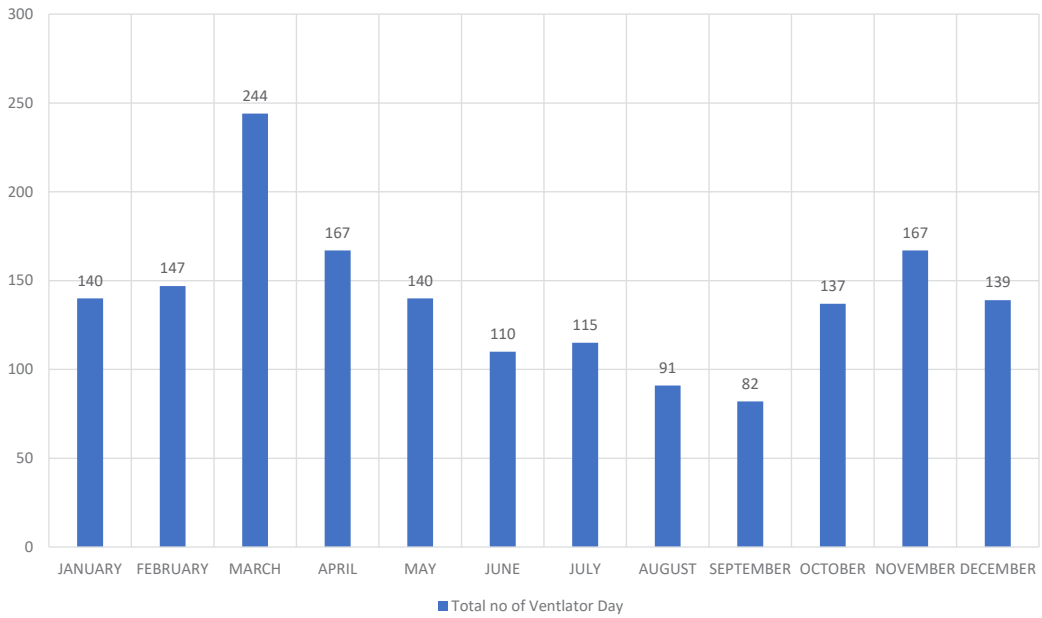
Indications of Invasive Mechanical Ventilation



Indications of mechanical ventilation in year 2023:

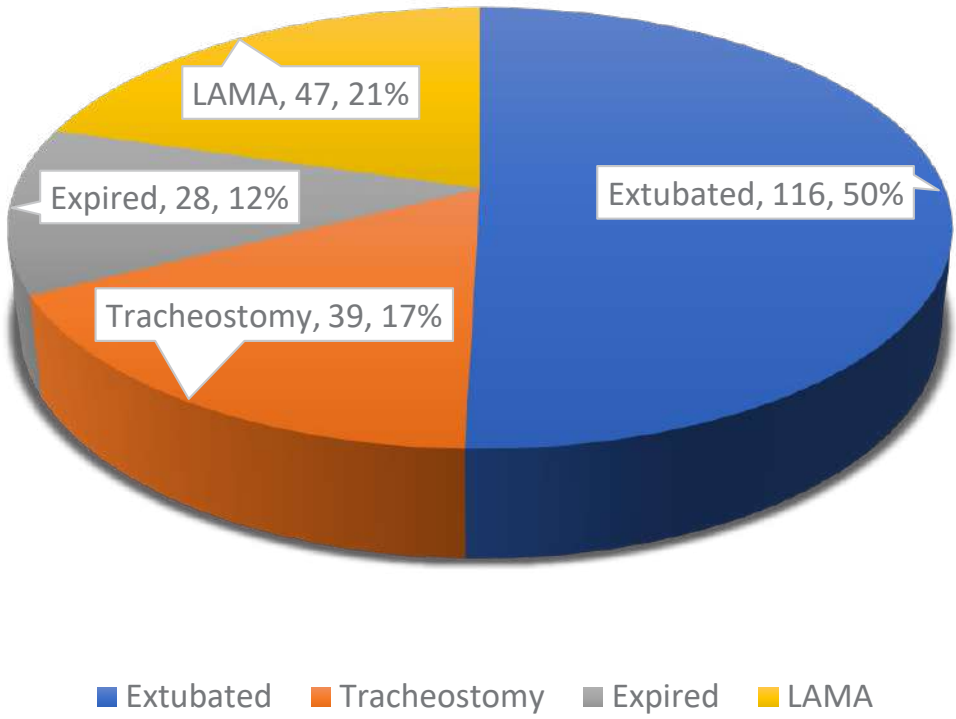
1. Respiratory Failure	39%
2. Altered level of consciousness	25%
3. Compromised Airway	11%
4. Hemodynamic Instability	16%
5. Elective for surgery	9%

Duration of Ventilation Days/Month



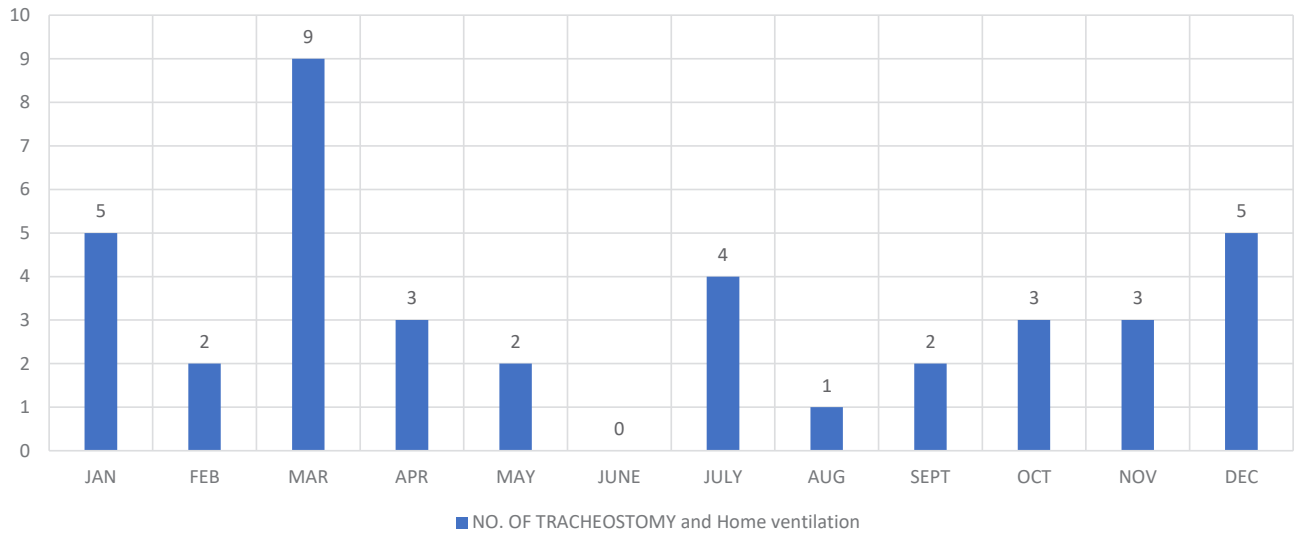
- The average ventilatory days in the year 2023 were 139.92 days per month.

Outcome of Mechanically Ventilated Patients



- Traceostomy was needed in 17% of patients, who were invasively ventilated during their PICU stay in the year 2023.

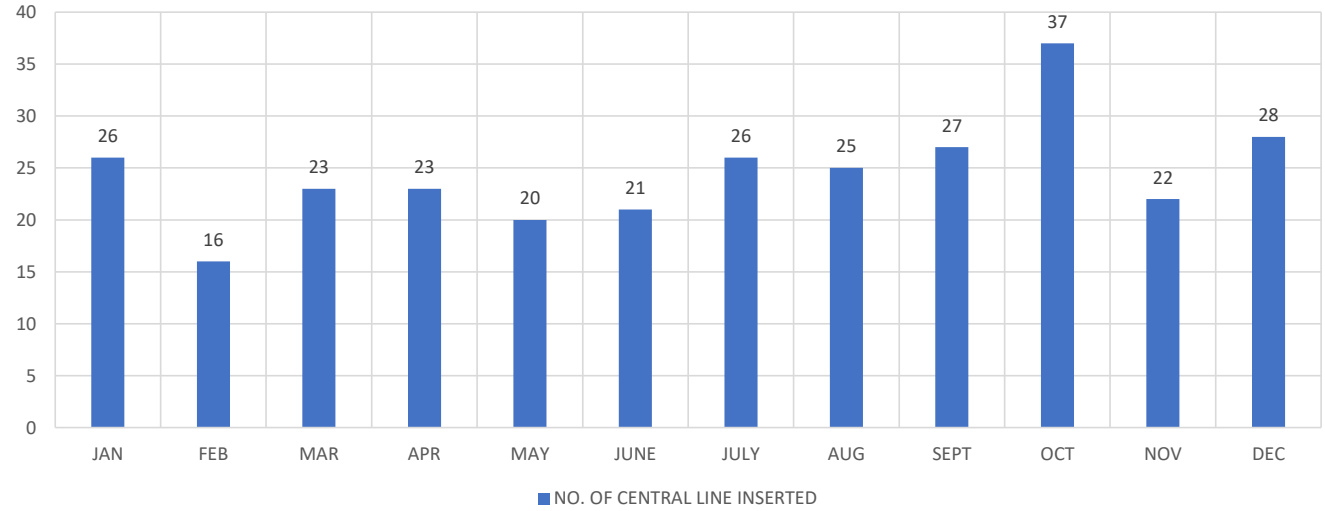
Tracheostomy and Home Ventilation



- 39 children out of 230 who required invasive ventilation needed tracheostomy.

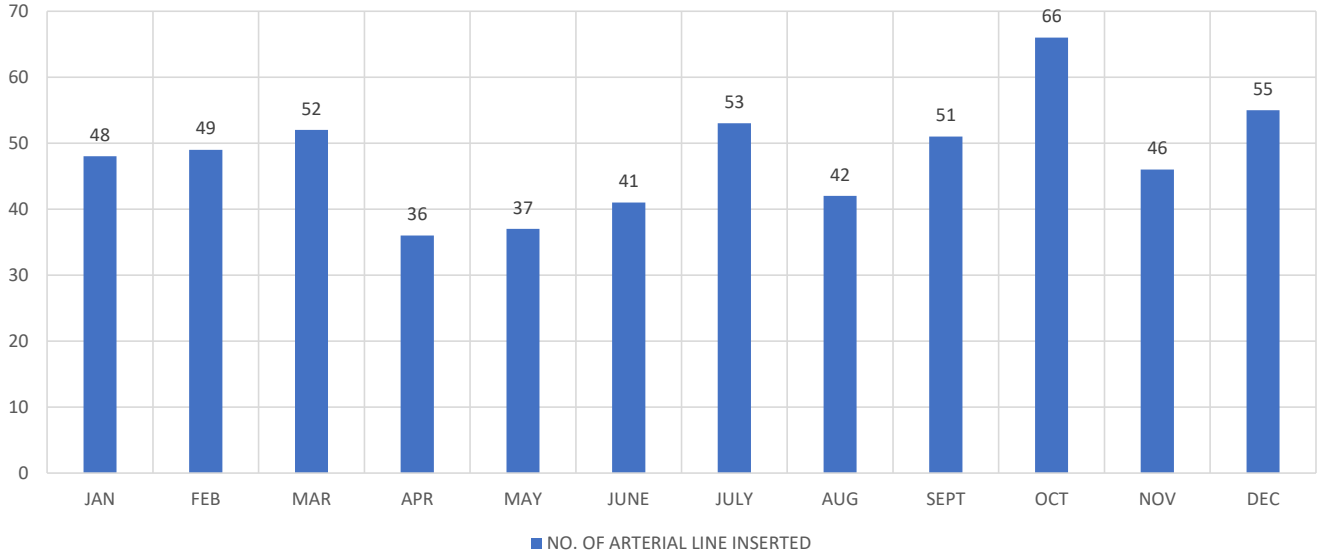
PROCEDURES

Central Venous Cathetor (CVC) Insertion



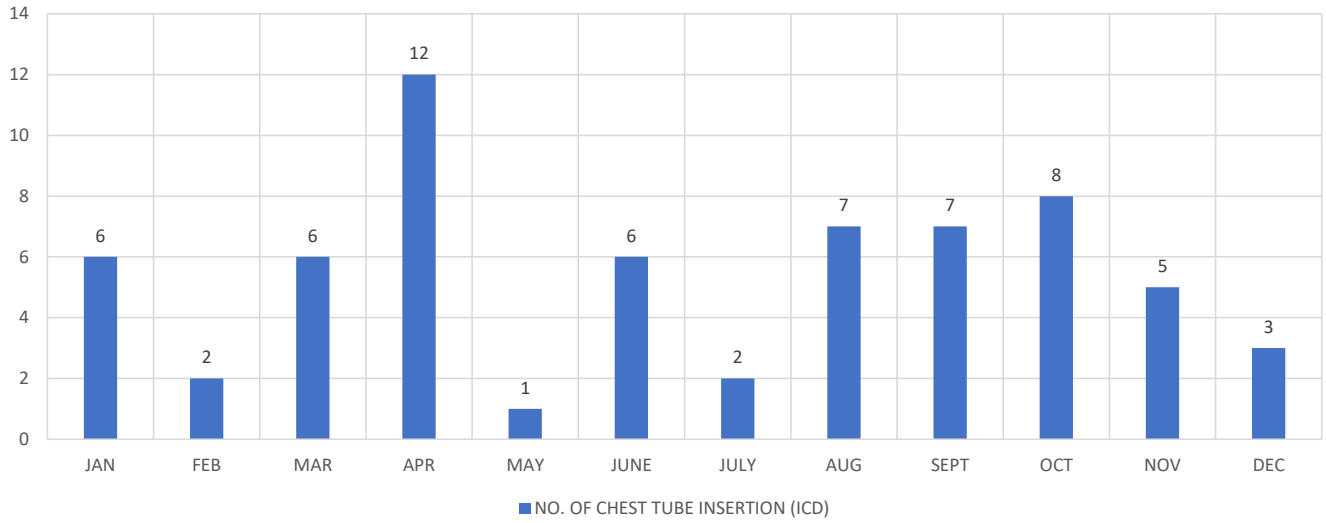
- Total number of CVC inserted- 294
- Three sites are commonly used for pediatric central venous catheter (CVC) placement: -
  - Femoral CVC
  - Internal Jugular CVC
  - Subclavian CVC
- We prefer to use internal jugular vein for central line insertion.
- Triple lumen CVC is used in very sick patients requiring multiple ports.

Arterial Line Insertion



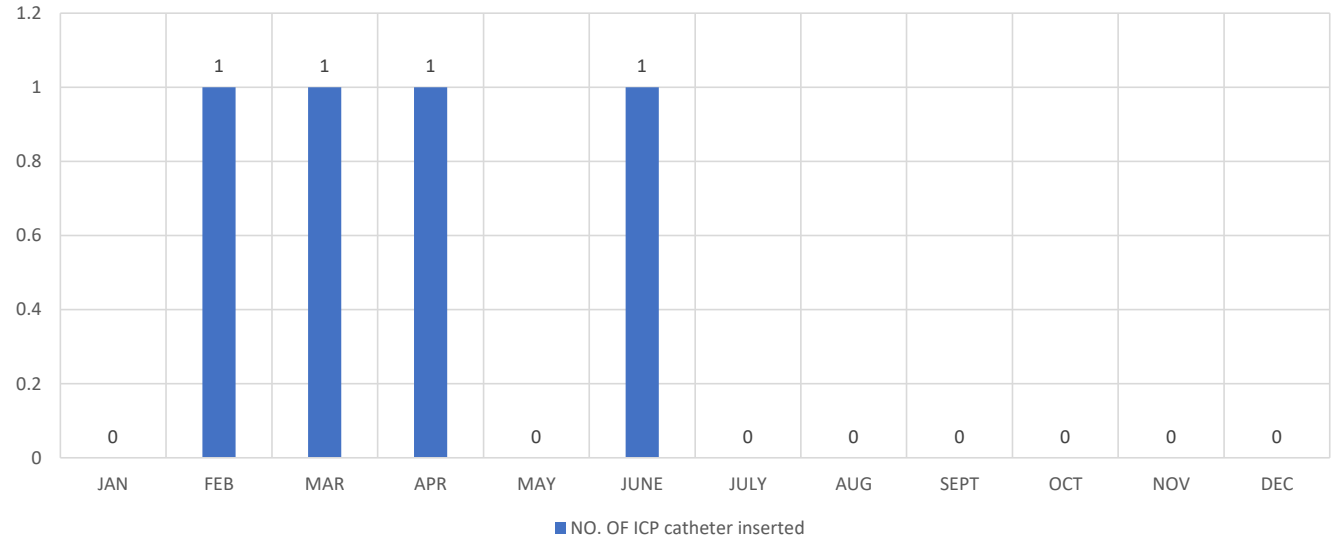
- Total number of arterial lines secured - 576
- Sites commonly used for pediatric arterial line placement: Radial, Ulnar, Dorsalis pedis, Posterior tibial, Femoral artery.

Chest Tube Insertion



- Total number of chest tube inserted-65
- Indications for Chest tube insertion 1) Tension pneumothorax
  2) Pleural effusion
  3) Empyema

Intracranial Pressure (ICP) Monitoring

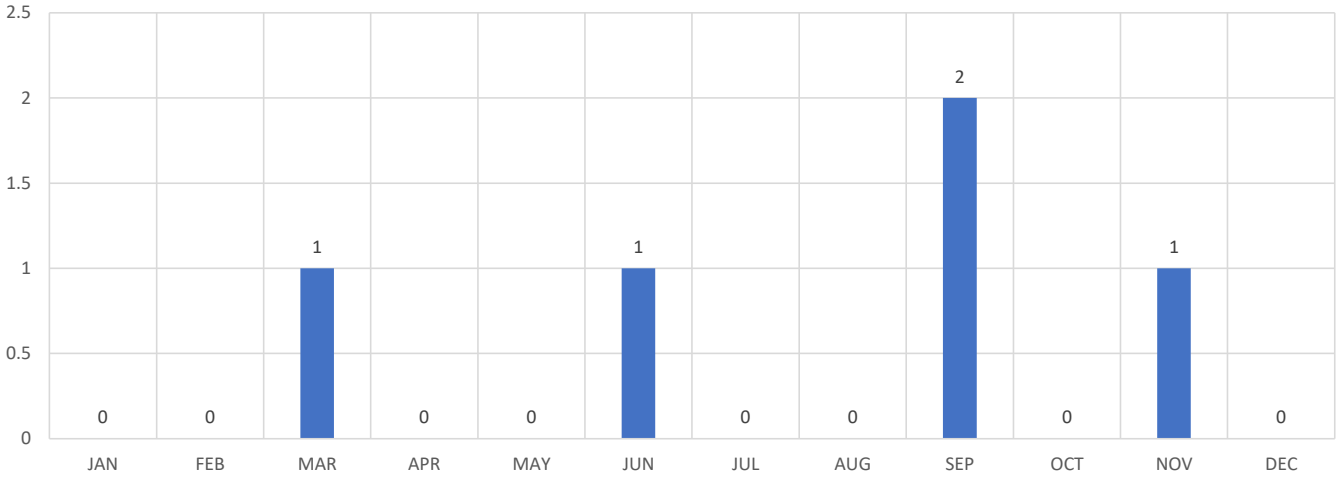


- ICP monitoring was done for 4 children in PICU, with severe traumatic brain injury with raised ICP who recovered and discharged home.
- Intraparenchymal Codman catheter was used for ICP monitoring.

DIAGNOSTICS

Airway Foreign Body

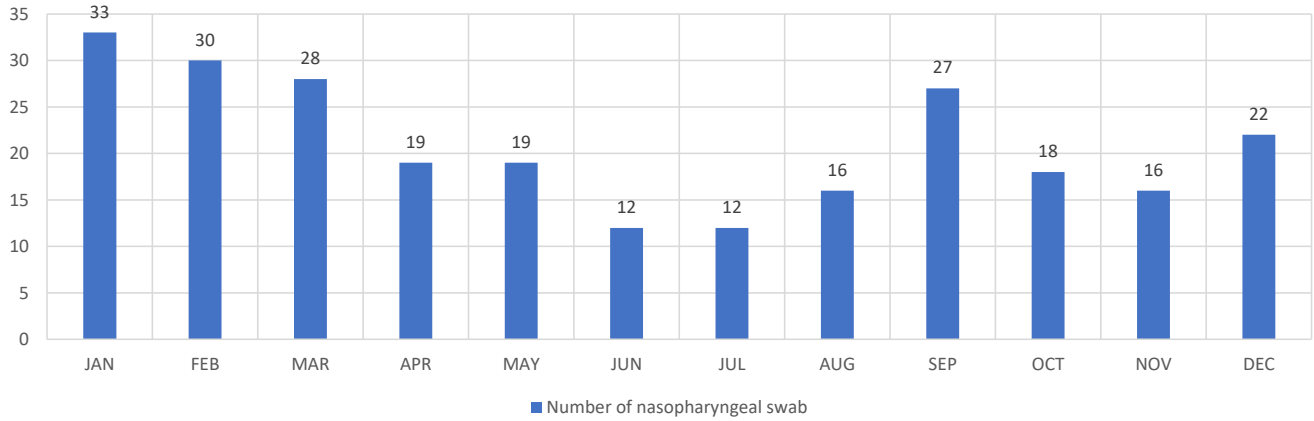
Number of patients-5



- Cases were admitted for primary respiratory failure with suspected foreign body.
- Diagnosed on flexible fibre optic bronchoscopy in PICU.
- Later FB removed by rigid bronchoscopy.
- Toddlers predominantly presented with FB.

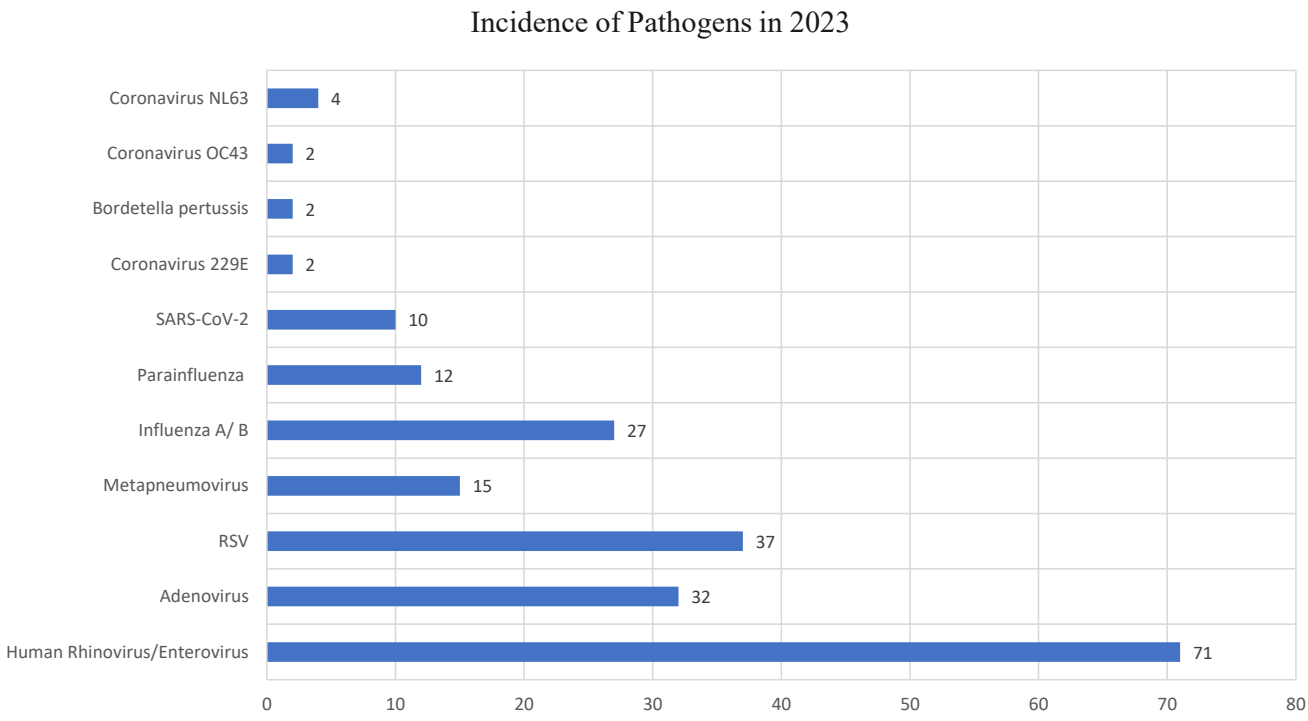
Respiratory Biofire

Respiratory Biofire samples sent-252

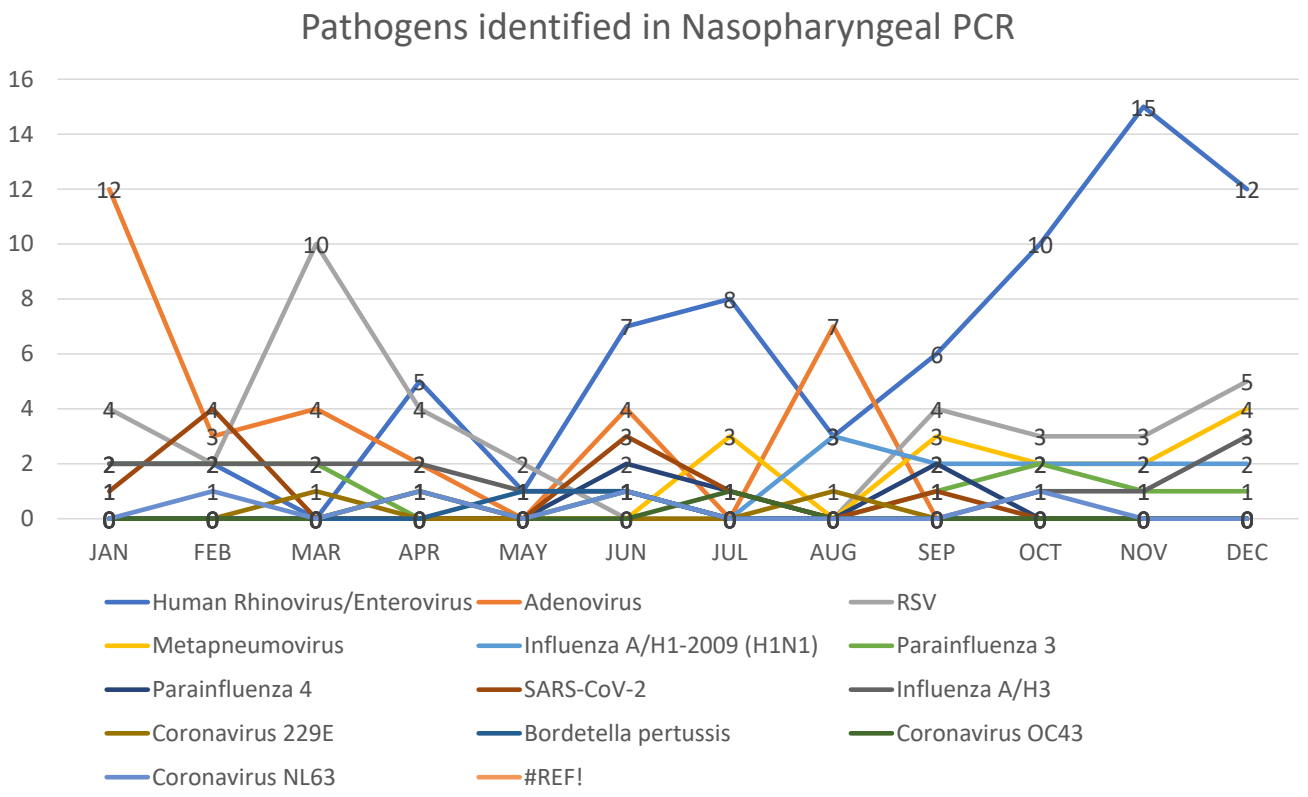


- Biphasic seasonal pattern of suspected respiratory infections
- The BioFire RP2.1-EZ Panel (EUA) uses a syndromic approach to quickly identify SARS-CoV-2, along with 18 additional viral and 4 bacterial pathogens.
- This PCR test provides results in about 45 minutes. (FDA approved for emergency use)
- As a healthcare provider, our patients received the right treatment (antiviral) from the beginning and improved antimicrobial stewardship.

Pathogens Identified with Respiratory Biofire

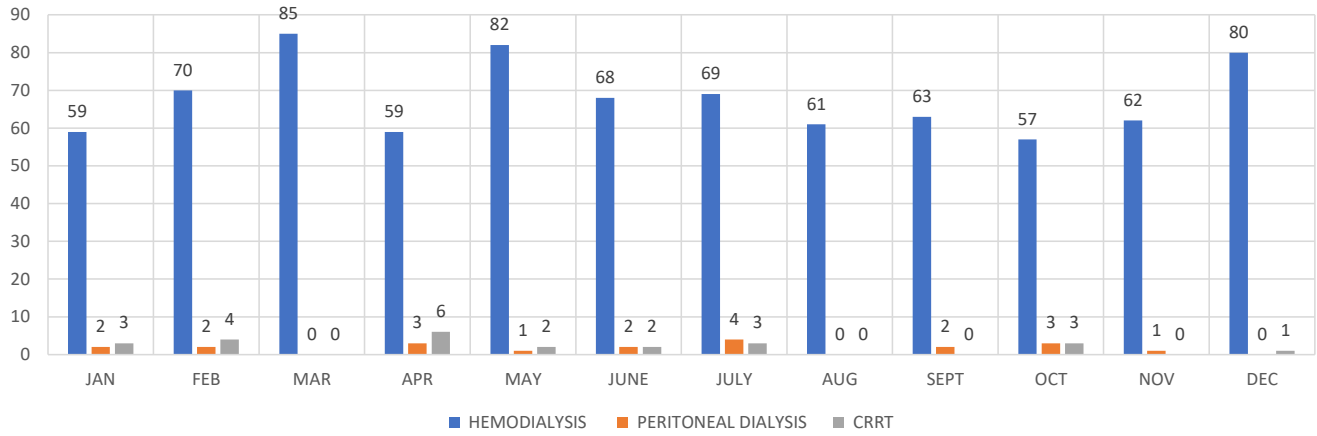


Seasonal pattern of Pathogen Respiratory Pathogens



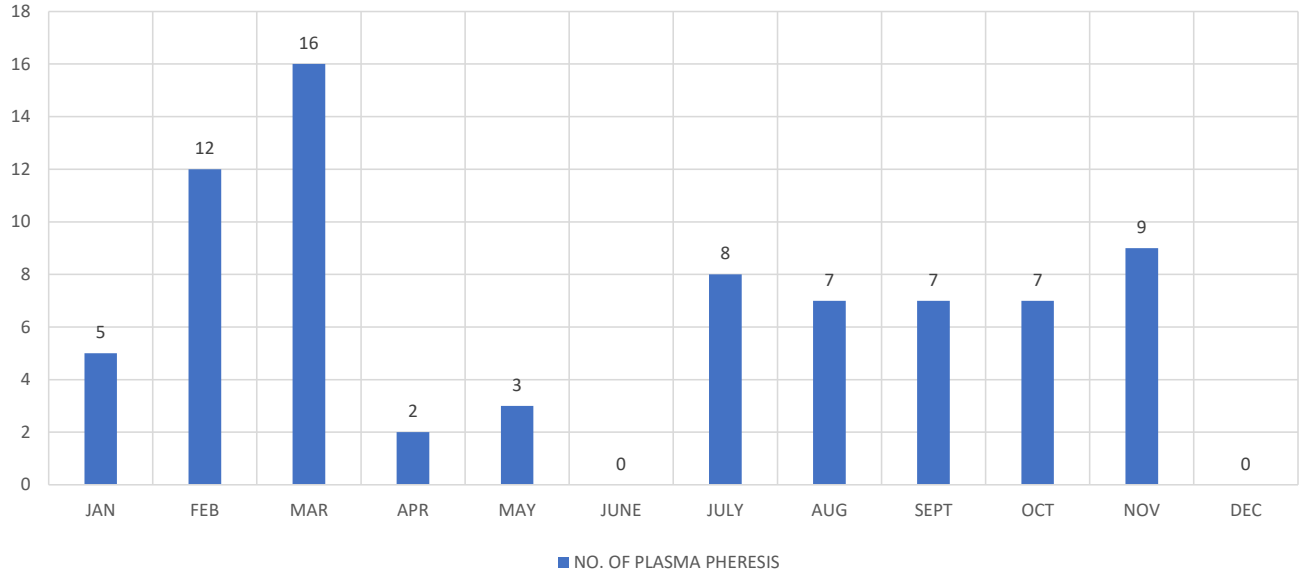
THERAPEUTICS

Renal Replacement Therapy (RRT)



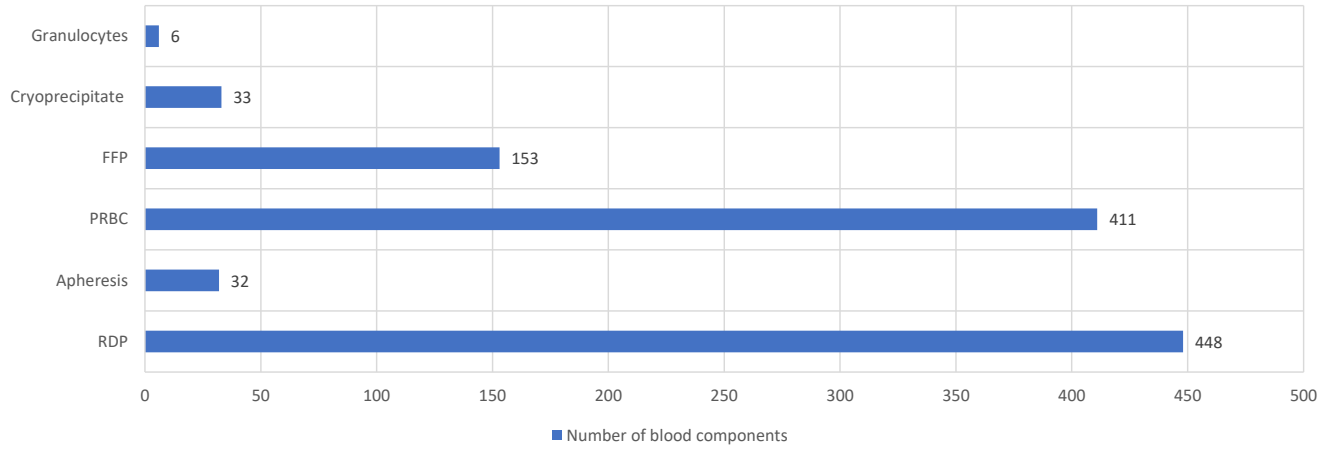
- We performed total of 24 CRRT, 805 HD and 20 PD in 2023
- We commonly use RRT for patients with acute and chronic renal failure.
- CRRT is modality of choice in patients with hemodynamic instability, sepsis and acute liver failure.

Plasmapheresis



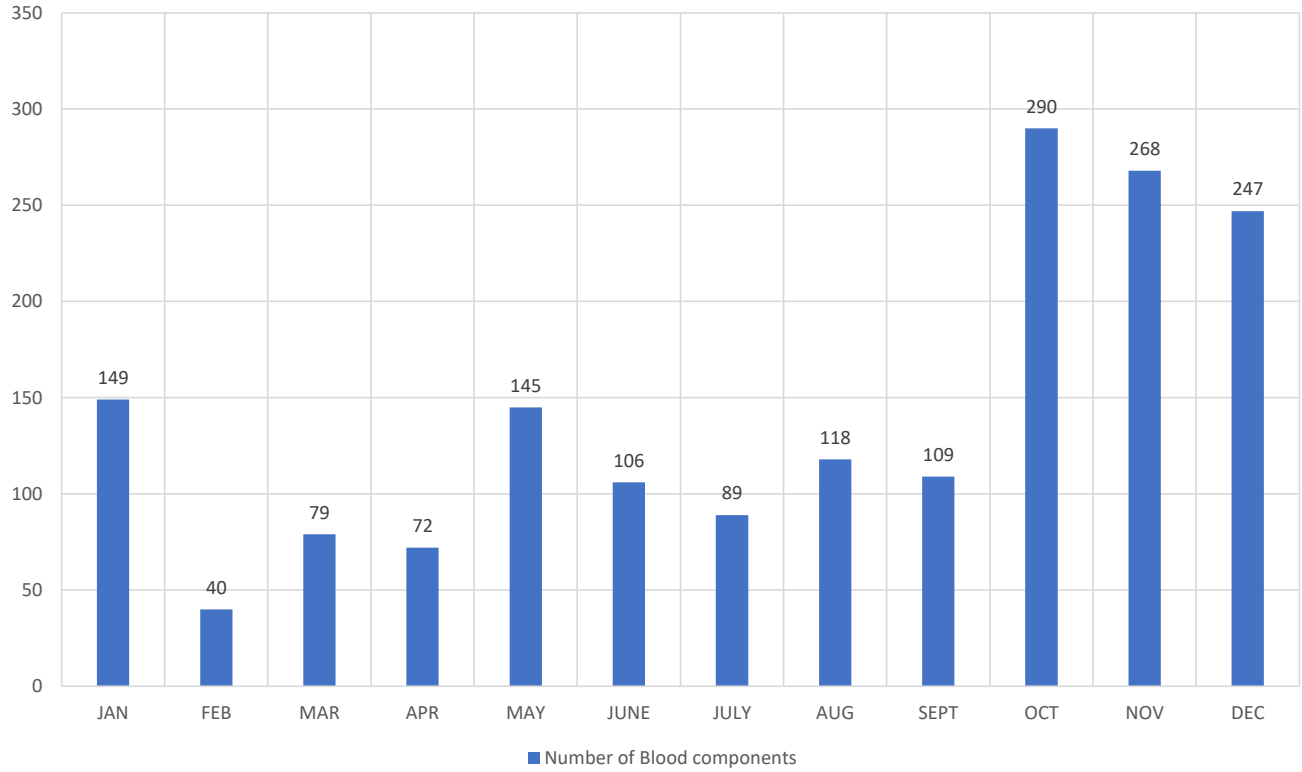
- We performed total of 76 sessions plasma exchange in 2023.
- Indications were Autoimmune hepatitis with ALF, D negative Haemolytic uremic syndrome, Refractory autoimmune encephalitis, Autoimmune transverse myelitis.

Number of Blood Transfusions in PICU



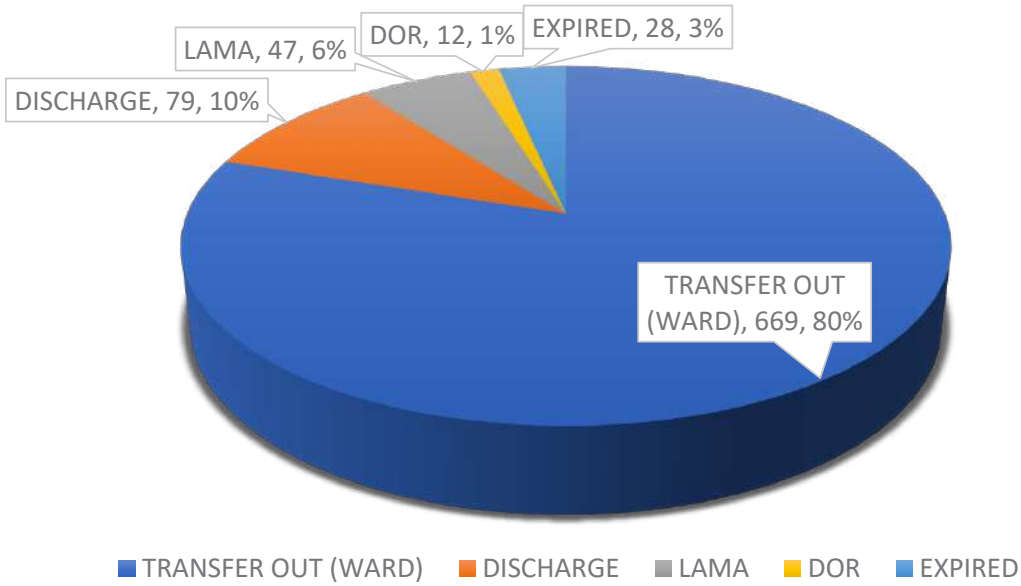
- Blood components therapy used for sick children were Random donor platelets (448), Packed red blood cell (411), Fresh frozen plasma (153) and cryoprecipitate (33).
- Granulocytes transfusion was used for refractory febrile neutropenic patients.
- Patients with Sepsis, Dengue fever, fulminant hepatic failure and other comorbidities (Pediatric hemato-oncological and Rheumatological disease) presenting with DIC, required frequent transfusion with RDP, FFP, Cryoprecipitate, Apheresis and PRBC.

Monthly distribution of Blood Transfusion



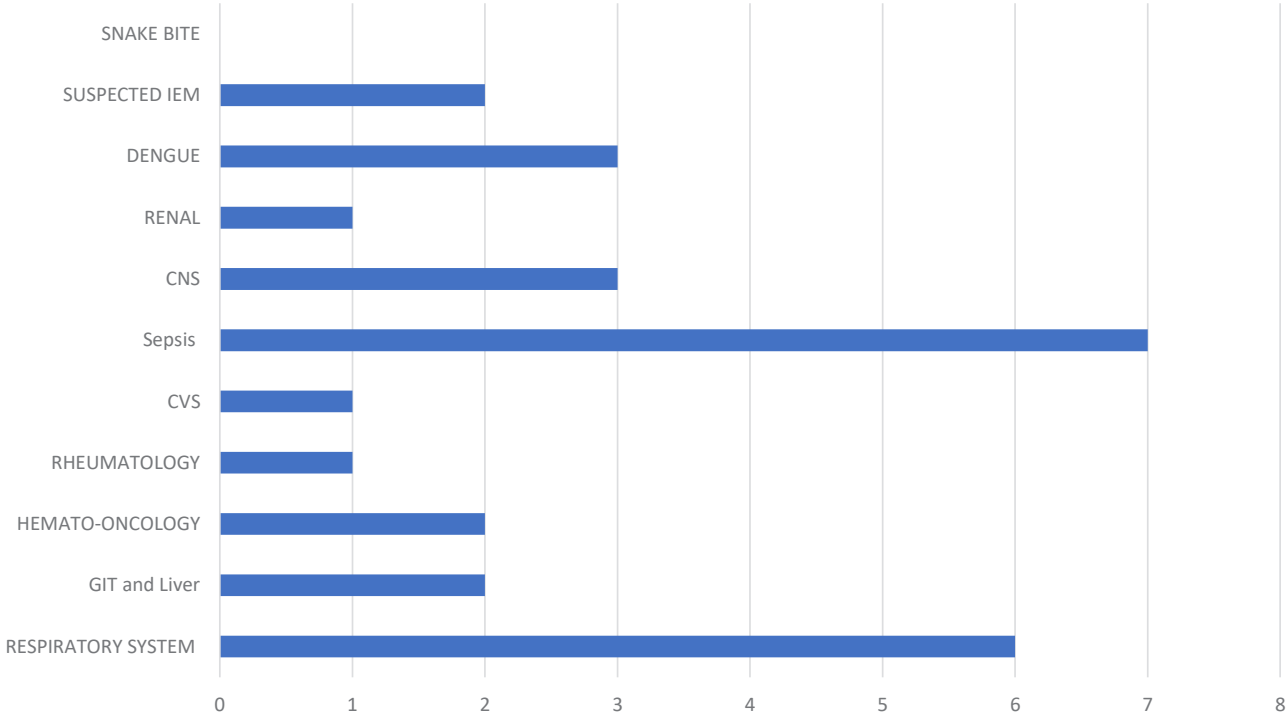
PICU OUTCOME

Patient Outcomes in 2023

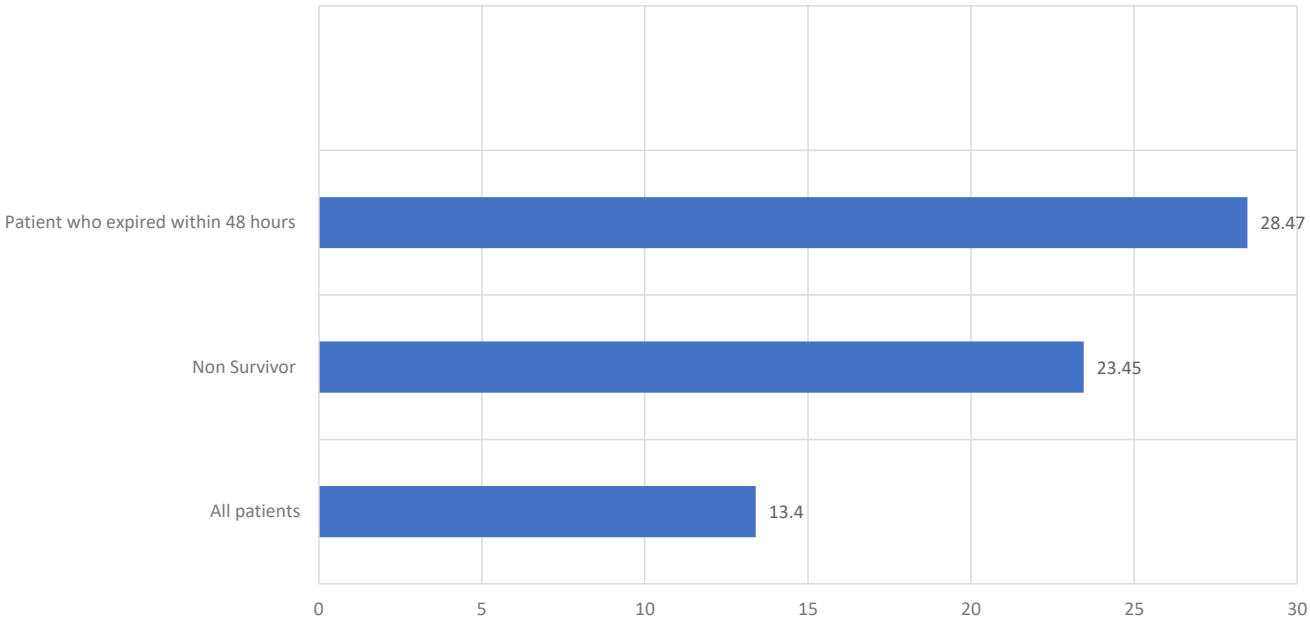


- Out of 857 admitted patients, majority (80%) of patients were shifted to wards for further care and 79 patients were discharged directly from the PICU.
- 28 (3%) patients expired.
- Overall survival rate was 97% in our PICU

Primary System Affected in Expired Patients



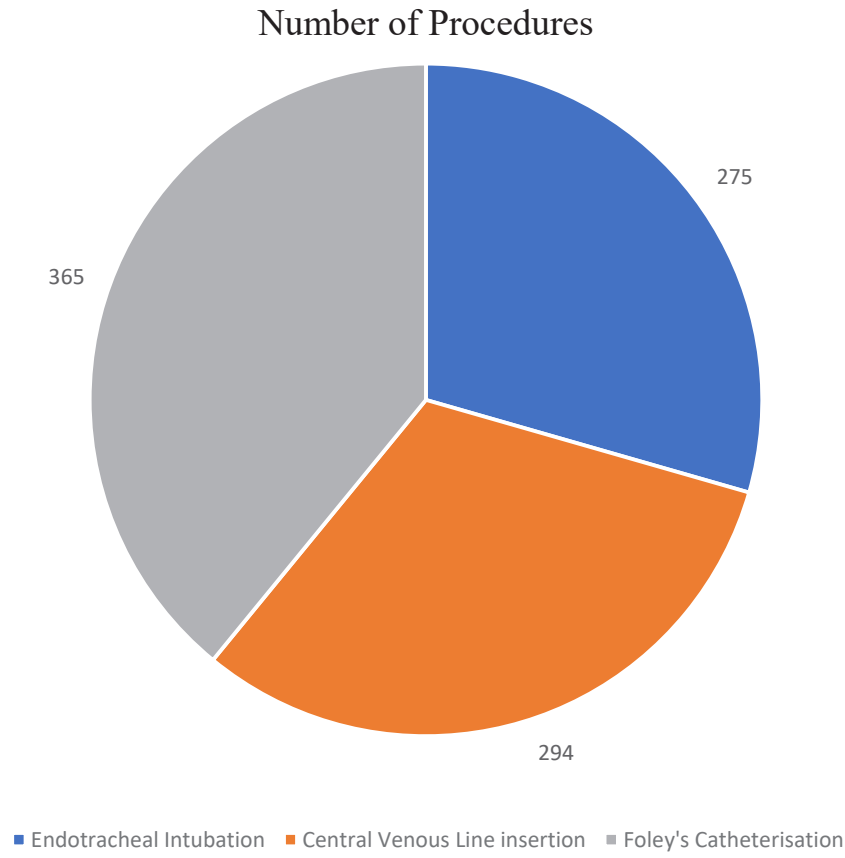
Correlation of PRISM 24 Score with Outcome

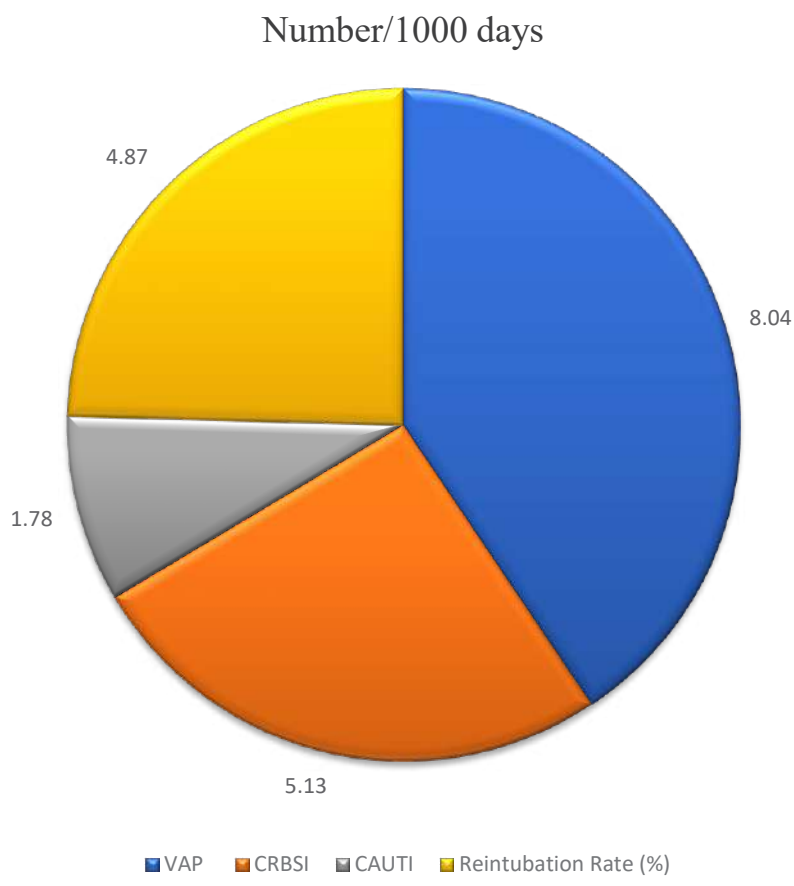


- Higher PRISM 24 score was associated with increased mortality rates.
- Mortality rates were even higher in patients with PRISM Score >20.

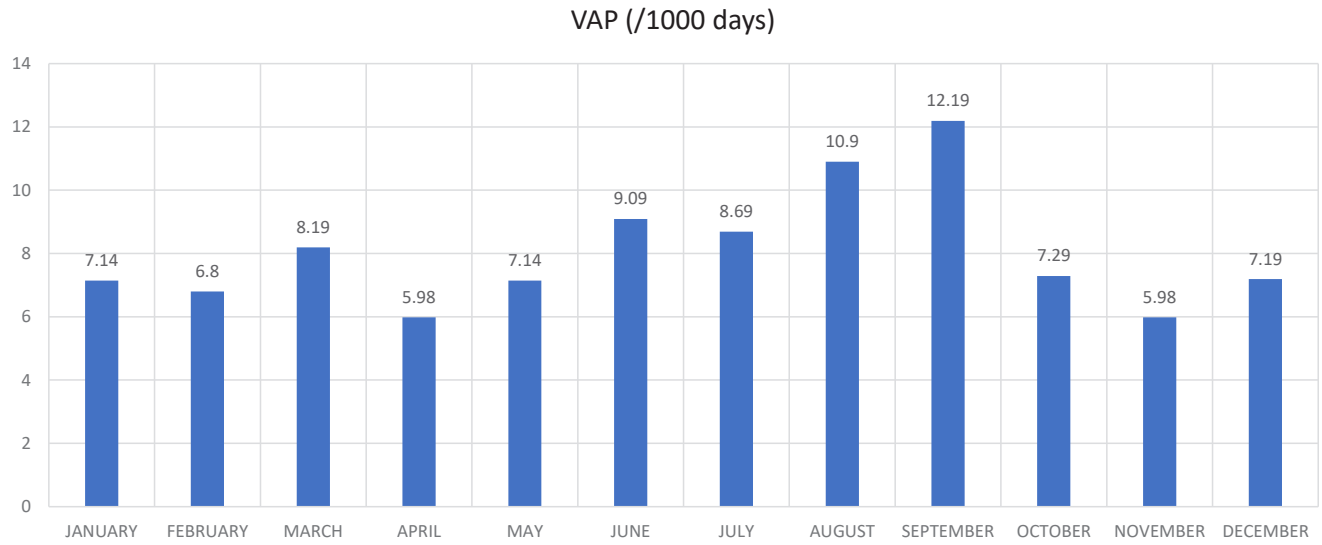
QUALITY INDICATORS

Quality Indicators



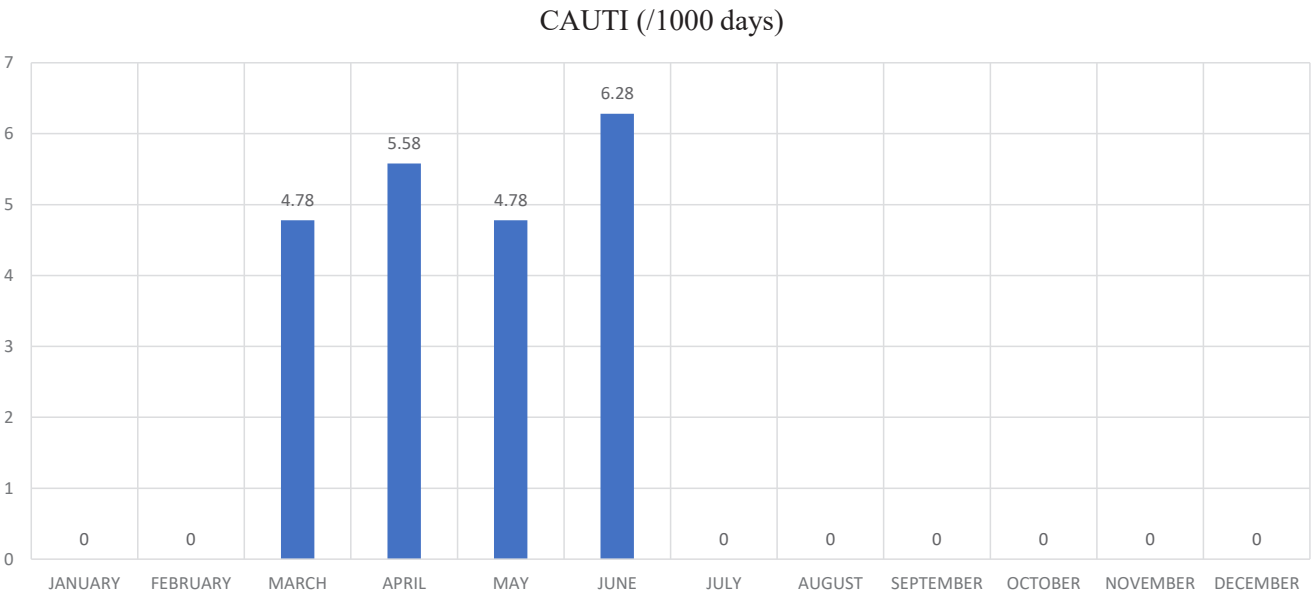


Incidence of VAP



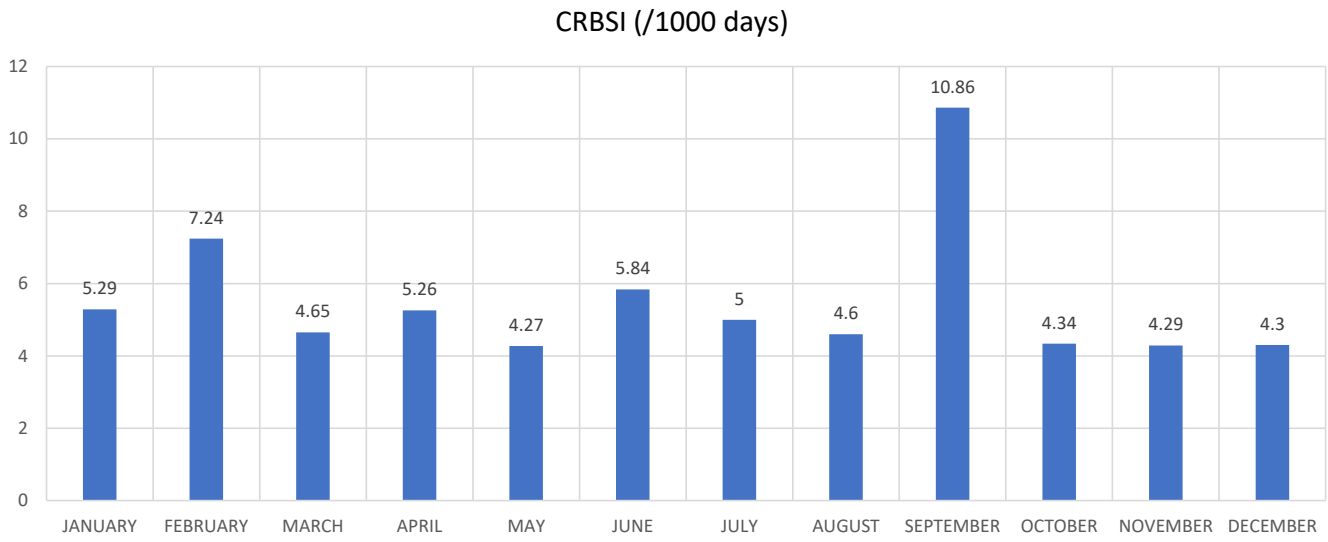
- Most common organisms responsible for Ventilator associated Pneumonia (VAP) in the PICU were Acinetobacter baumanii, Klebsiella pneumonia, and Pseudomonas spp.
- We are working towards further reduction in VAP incidence in our ICU.

Incidence of Catheter associated UTI



- Incidence of CAUTI in our PICU was very low.

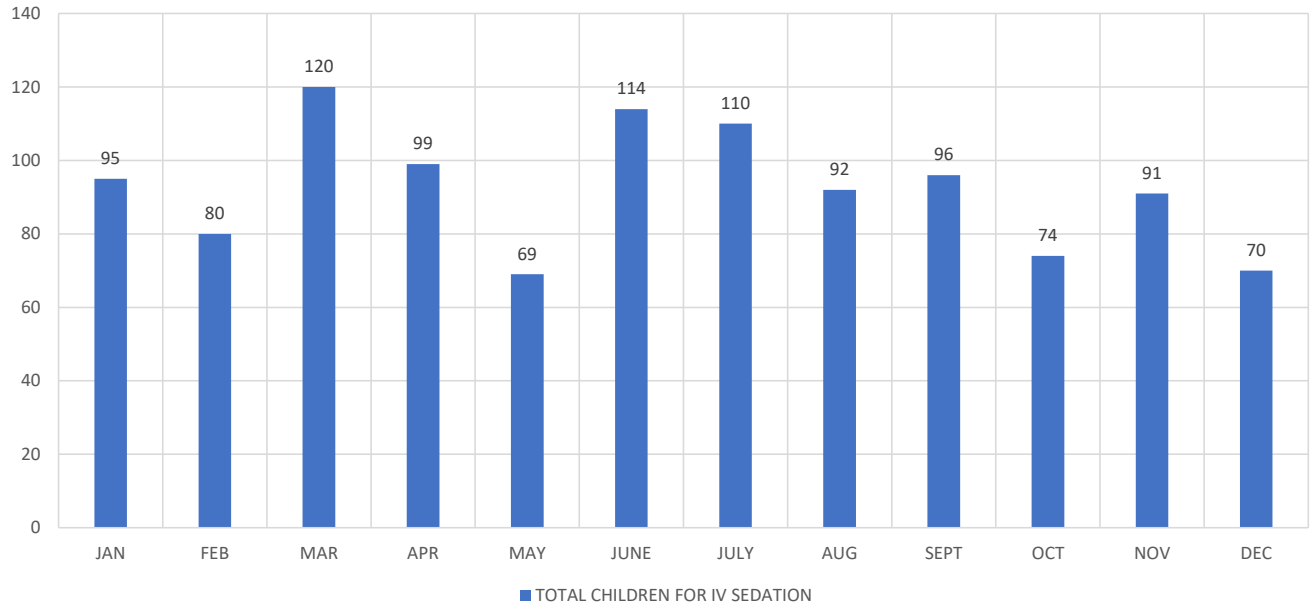
Incidence of Catheter related Blood Stream Infection CRBSI



- Nosocomial CRBSI had emerged as a major killer all over the world.
- Mean incidence of CRBSI was 5.5 per 1000 central line days in 2023.
- Common organisms responsible for CRBSI were- Pseudomonas aeruginosa, E. coli, Klebsiella pneumoniae, Strenotrophomonas maltophilla.

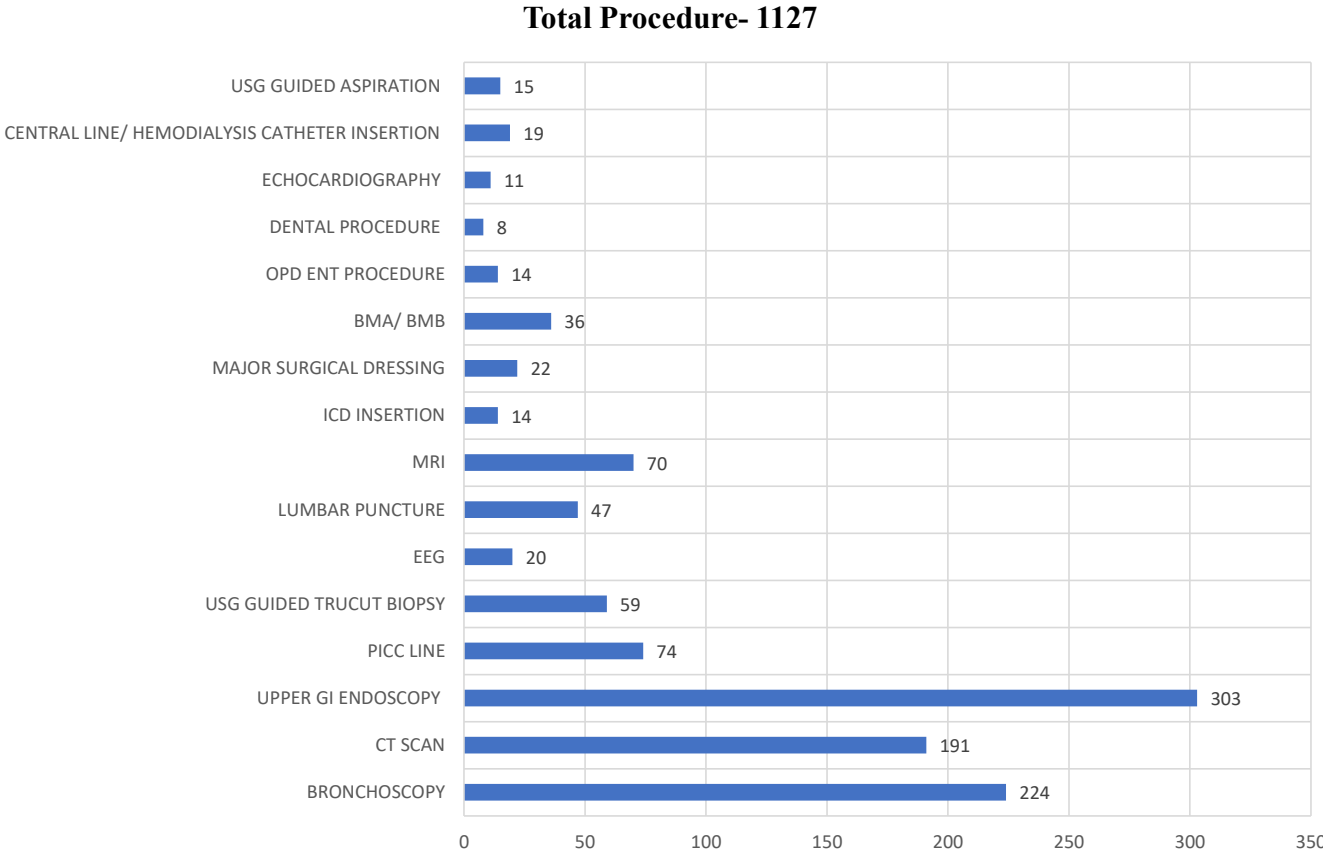
Pediatric Sedation Services

Monthly distribution of non-ventilated children needing intravenous sedation for any procedure



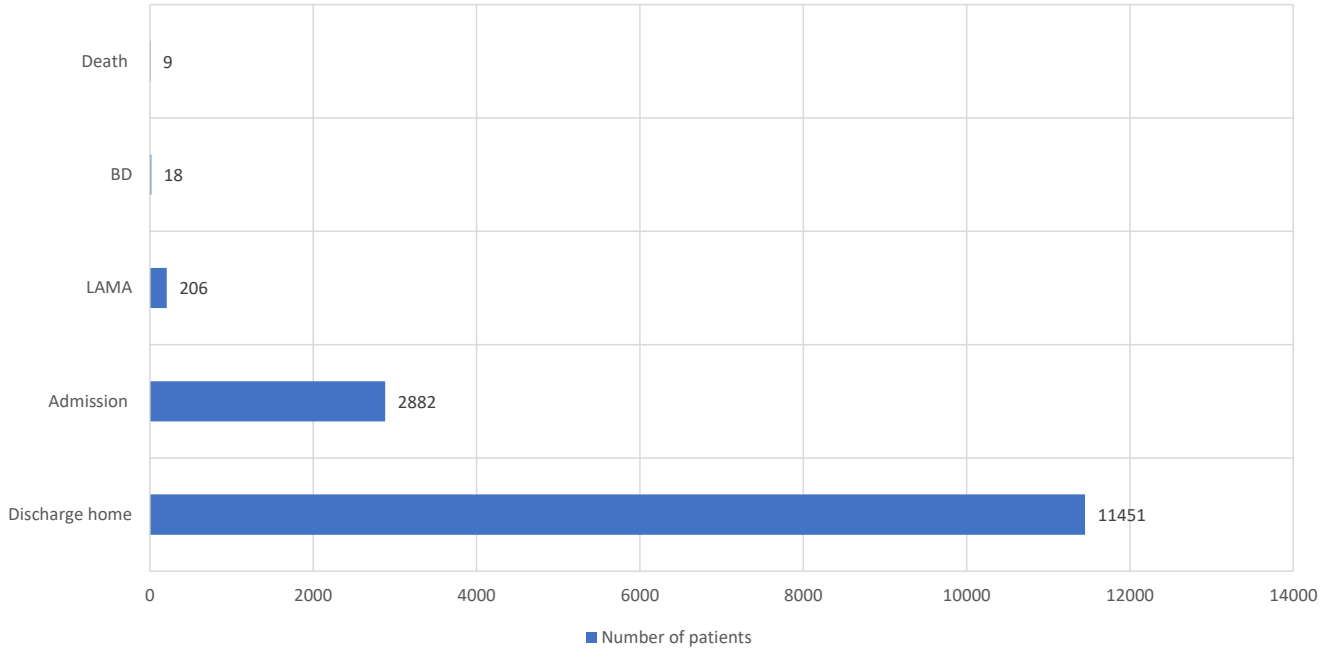
Total number of patients given sedation for various OPD/IPD procedures- 1110

Intravenous Procedural Sedation



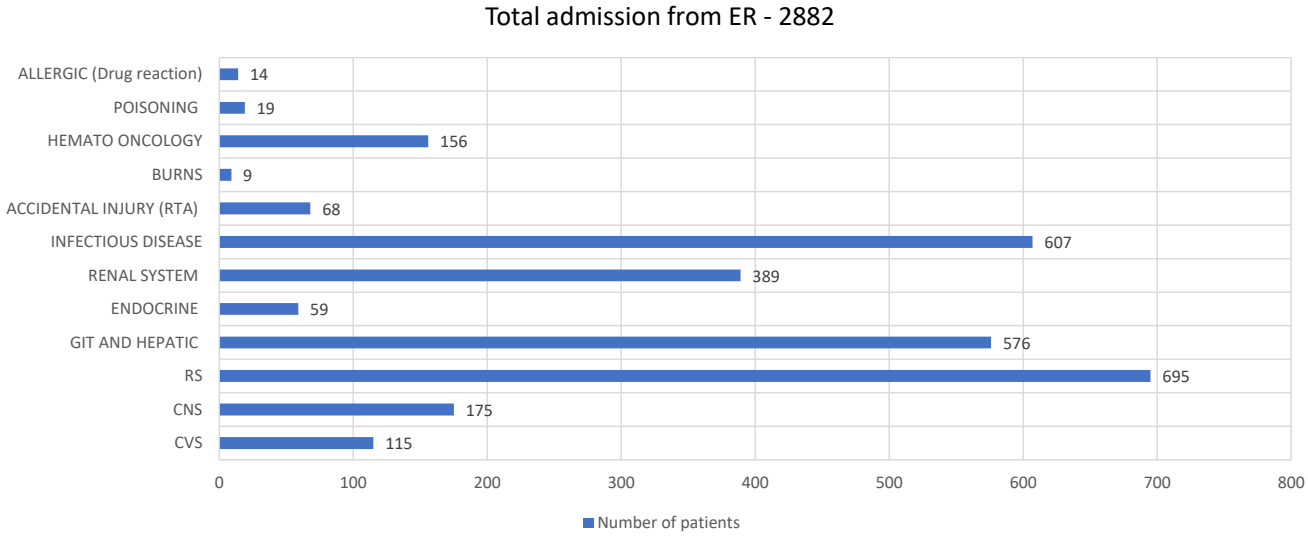
Pediatric Emergency

Pediatric ER census



- Total 14566 patients attended Pediatric Emergency Room in 2023, out of which 2882(19.7%) patients were admitted.
- Another 206 patients were advised admission but refused.

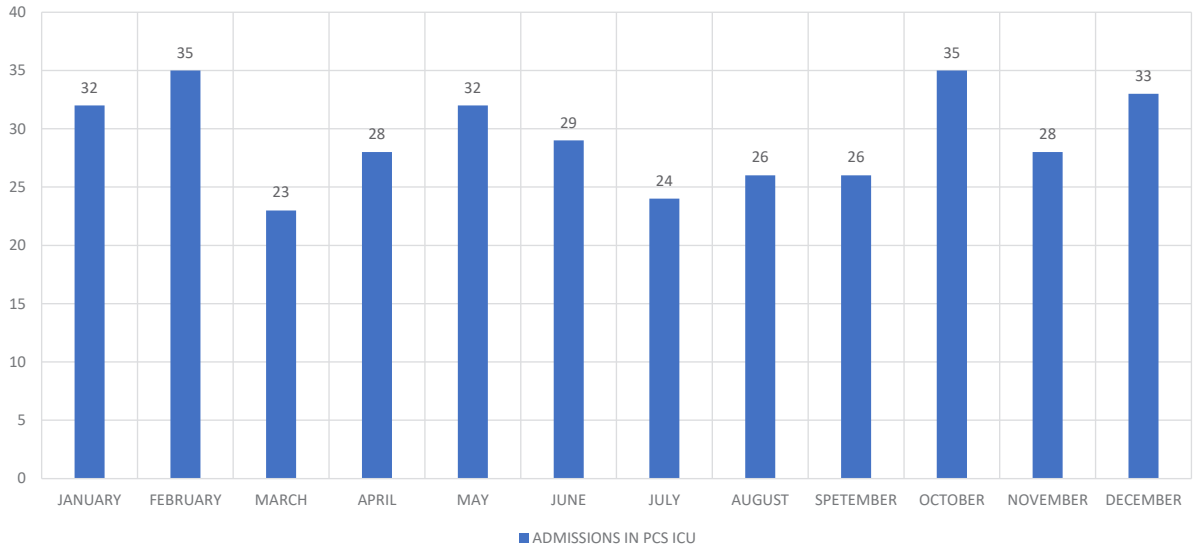
Primary System Affected in Children Presented to ER



- Out of 2882 admissions, 857 (29.7%) were admitted in PICU in 2023.
- Maximum patients admitted with respiratory symptoms (702) followed by infectious disease (539), gastrointestinal disorder (450), Accidental injuries (79), renal (368), Hemato–Oncological (140), cardiovascular (102), Central Nervous System (150), Endocrinological (56) symptoms and patients with Burn Injury (2).

Pediatric Cardiac Sciences

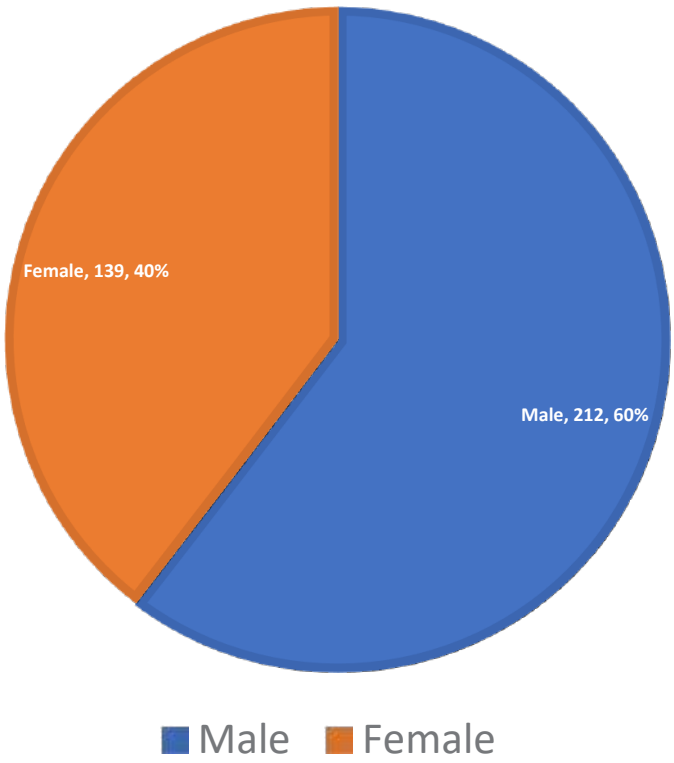
Patients Admitted in Pediatric Cardiac Sciences (PCS) ICU



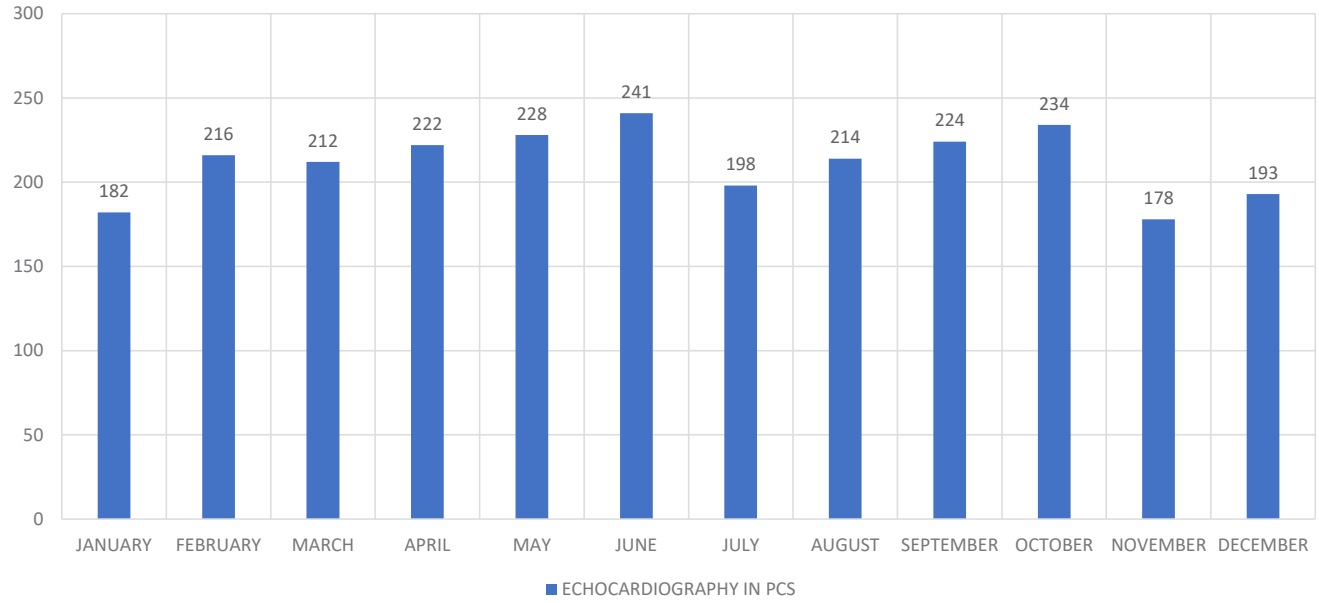
Total admissions- 351

- Average number of admissions per month in PCS ICU – 29.25/ month for 2023.

Gender Distribution of Patients Admitted Under PCS

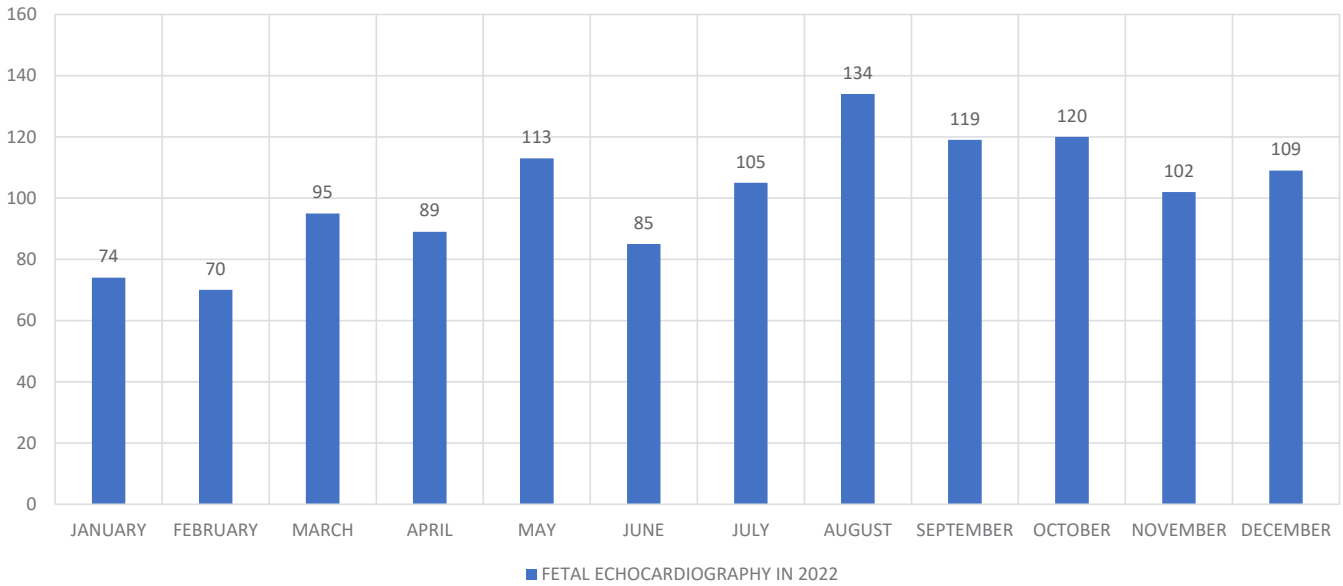


Pediatric Echocardiography performed



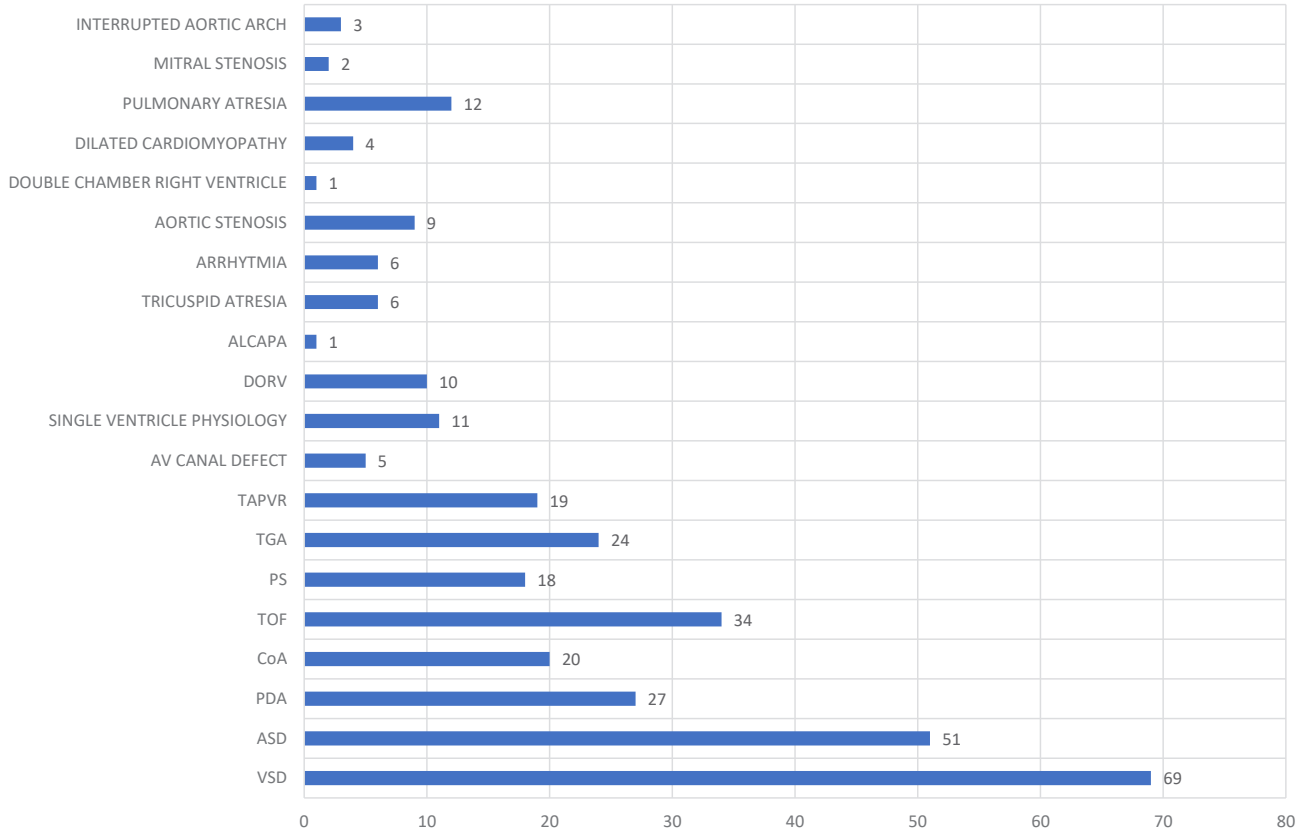
➢ 2542 ECHOs were performed in PCS in 2023.

Fetal Echocardiography

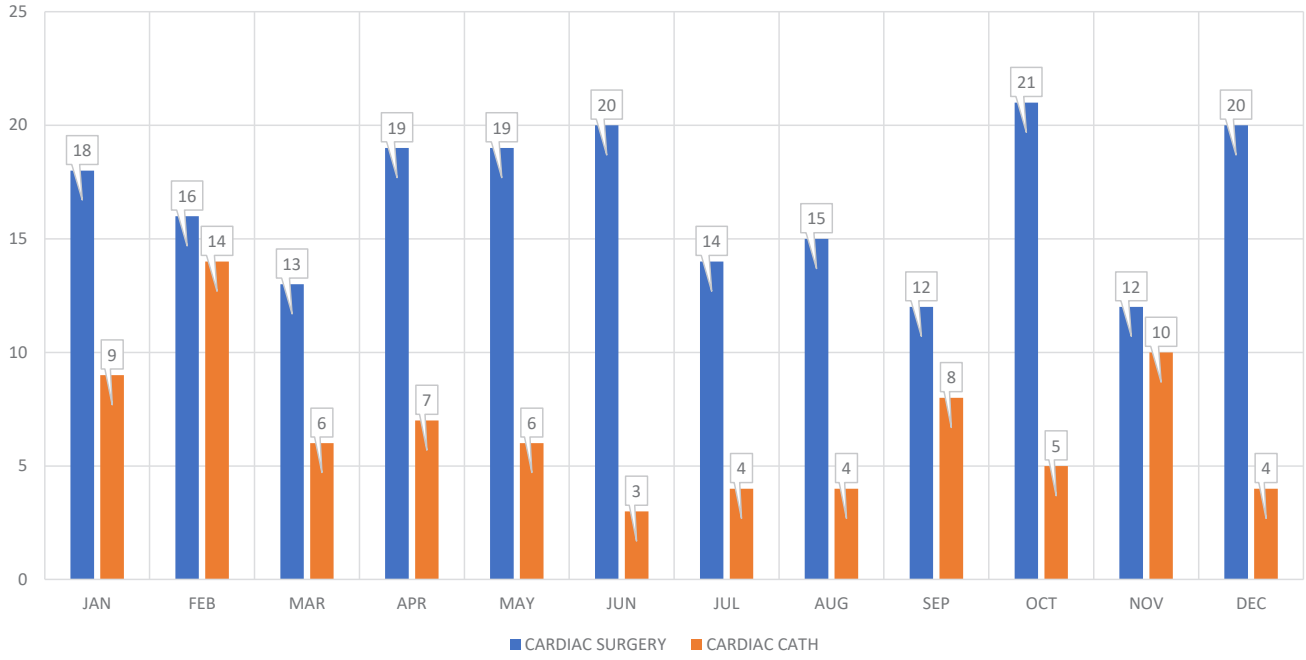


➢ 1215 Foetal ECHOs were done for antenatal cardiac assessment in Pediatric cardiac OPD.

Diagnosis of Children Admitted for Cardiac Procedures

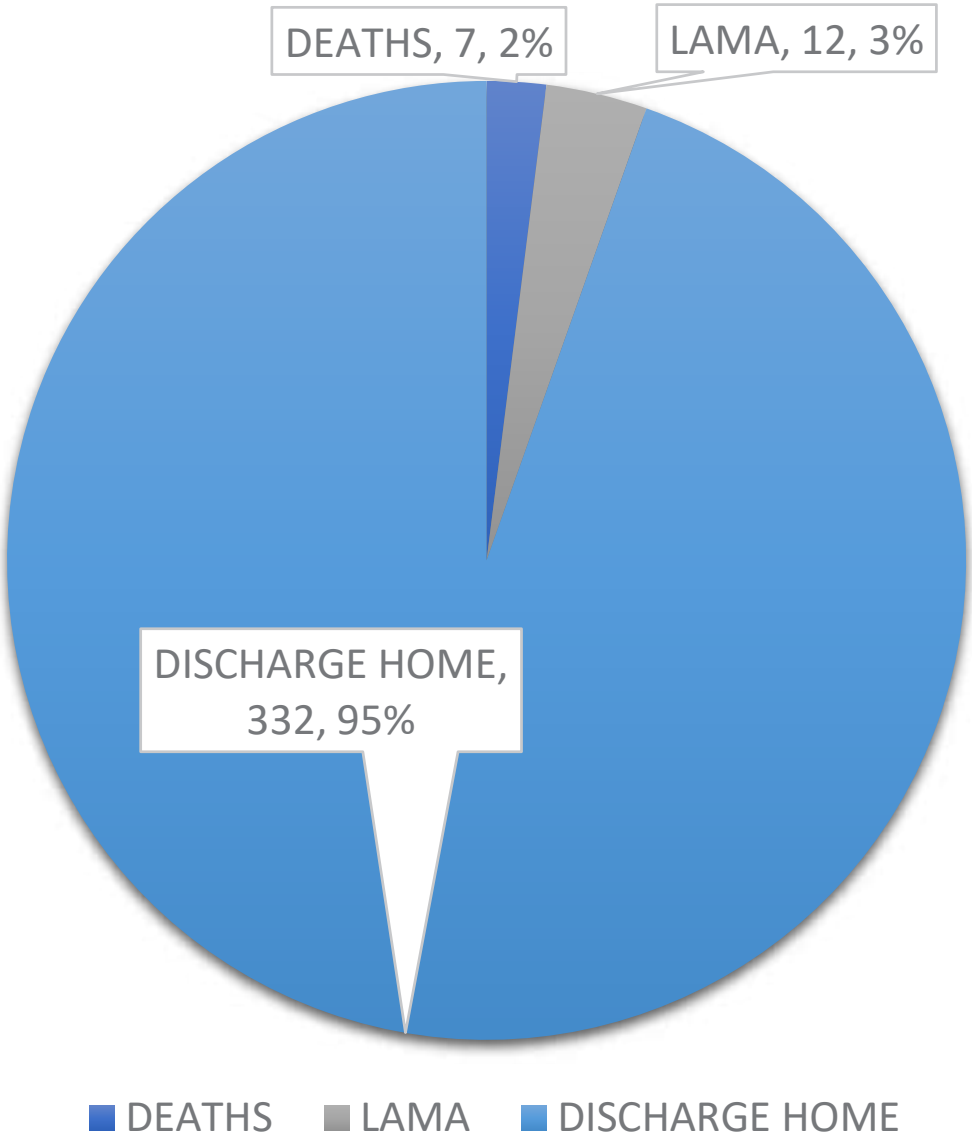


Month-Wise Distribution of Cardiac Procedures

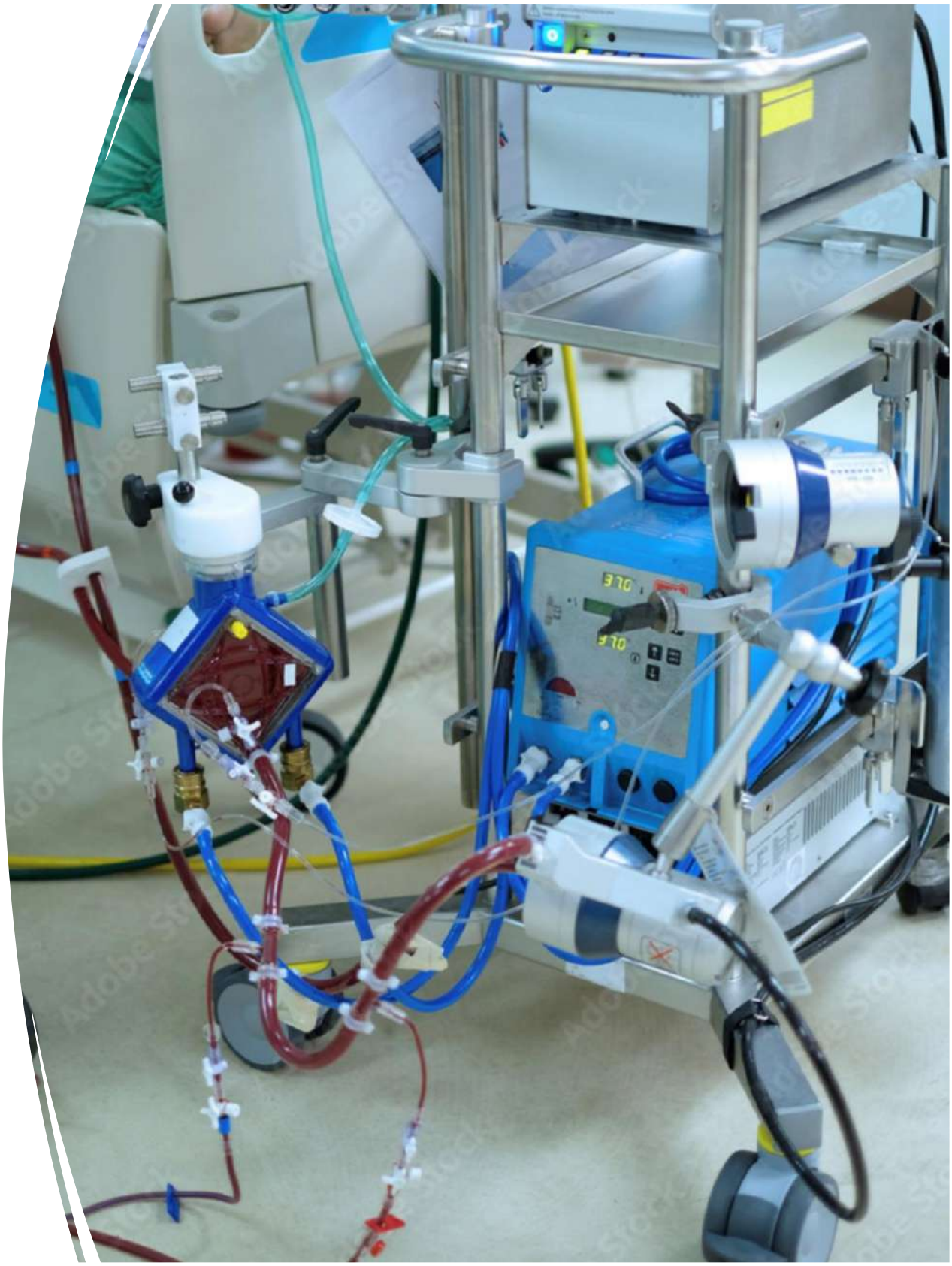


➢ A total of 199 cardiac surgeries and 80 cardiac catheterization procedures were done.

Outcome of Children Admitted in PCS ICU

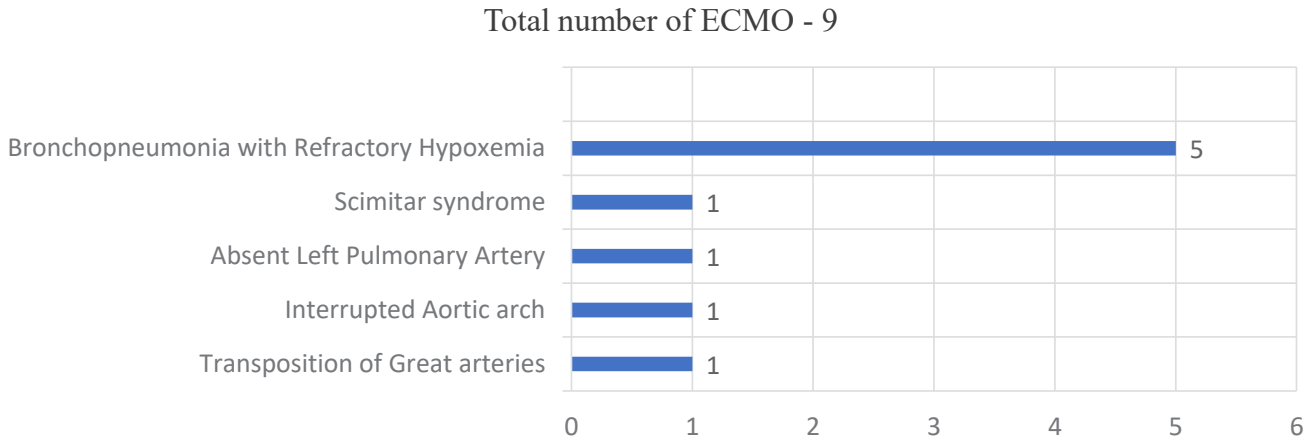


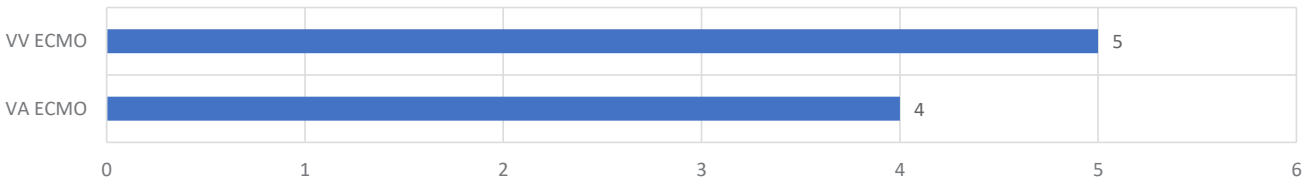
- Out of 351 patients admitted in our cardiac ICU, 95 % patients were discharged home after successful treatment.



ECMO Support

ECMO Support in 2023

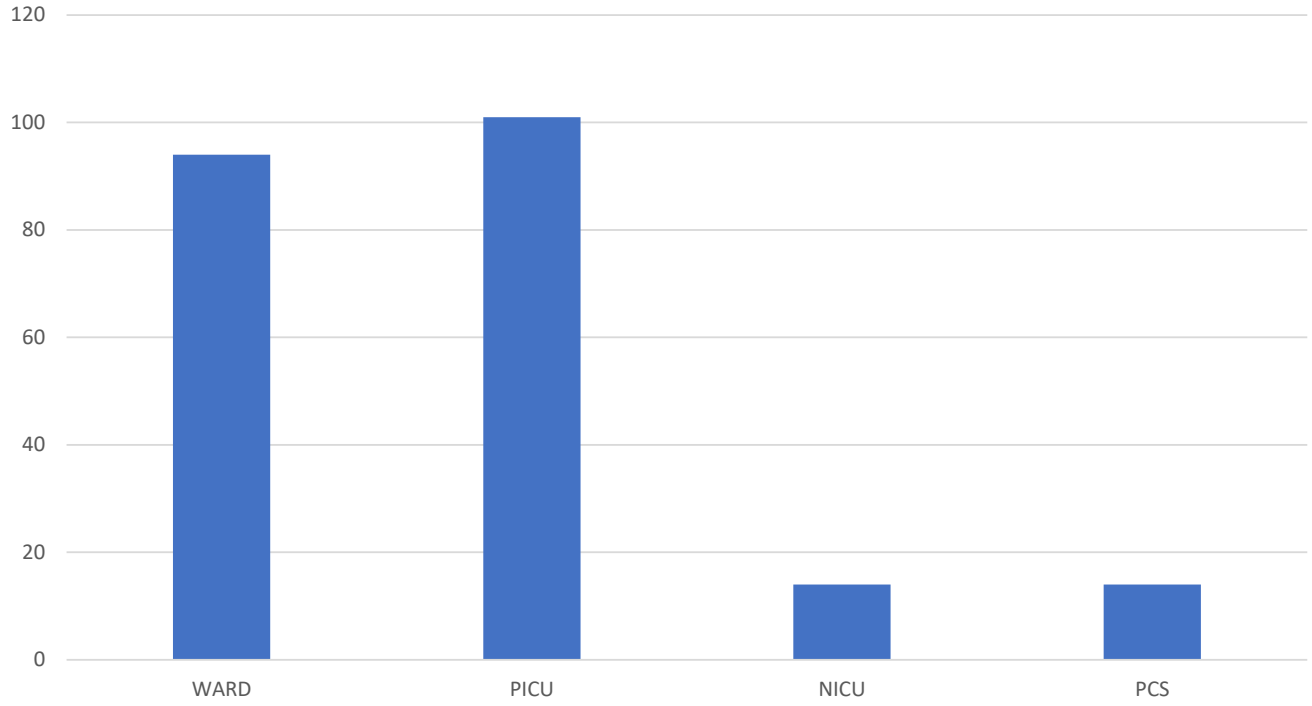




- 5 VV ECMO was done for refractory hypoxemia due to ARDS in PICU with 100% survival

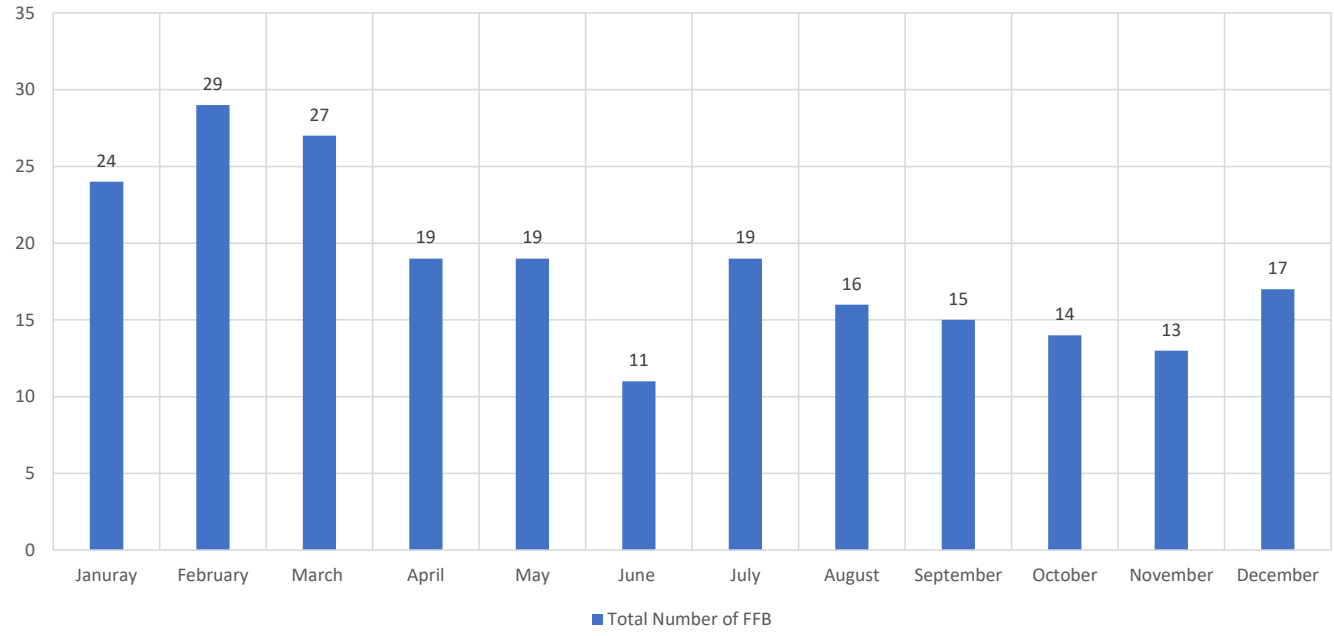
Pediatric Pulmonology Services

Total Flexible Fiberoptic Bronchoscopy

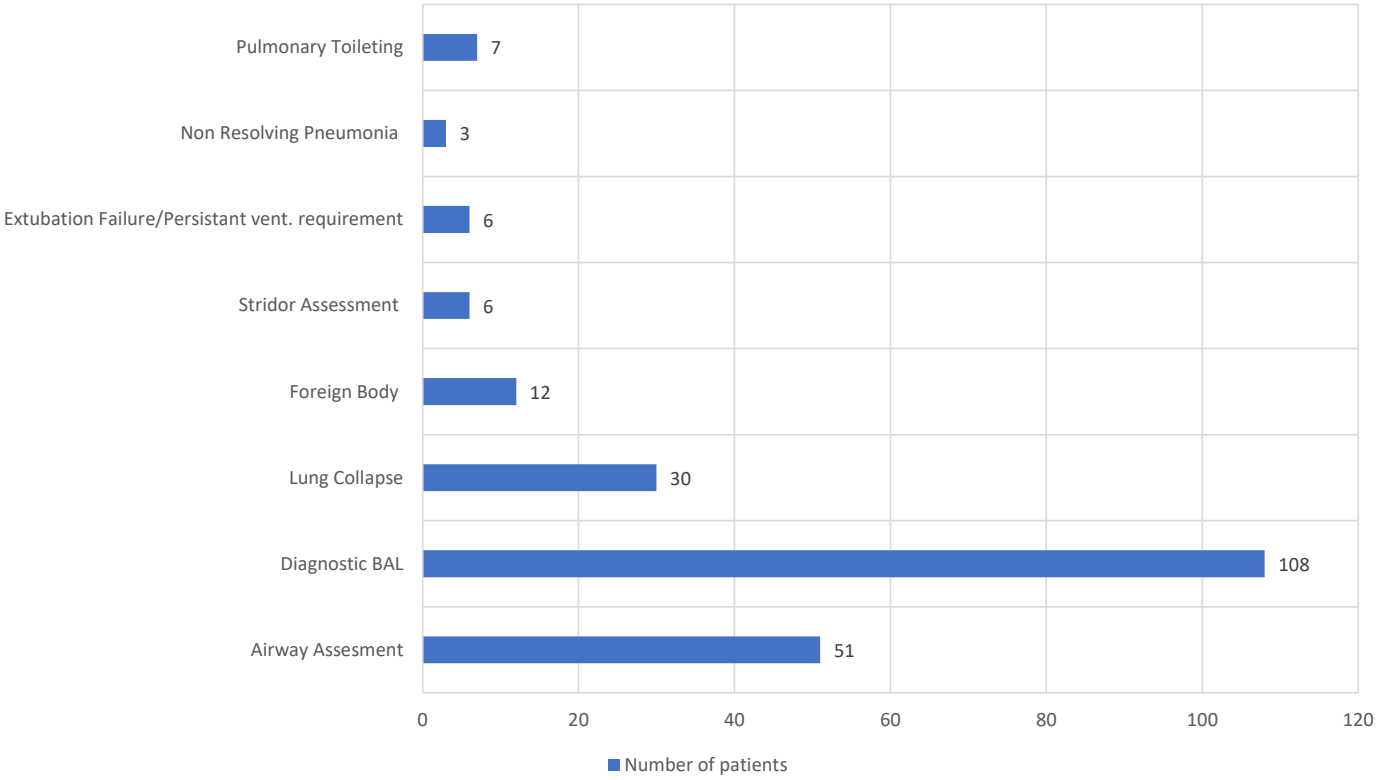


- Total No of FFB done were 223 in year 2023 for varied clinical indications. 101(45.2%) bedside FFB were performed on ventilated and non-ventilated children in the PICU.

Month- wise Distribution

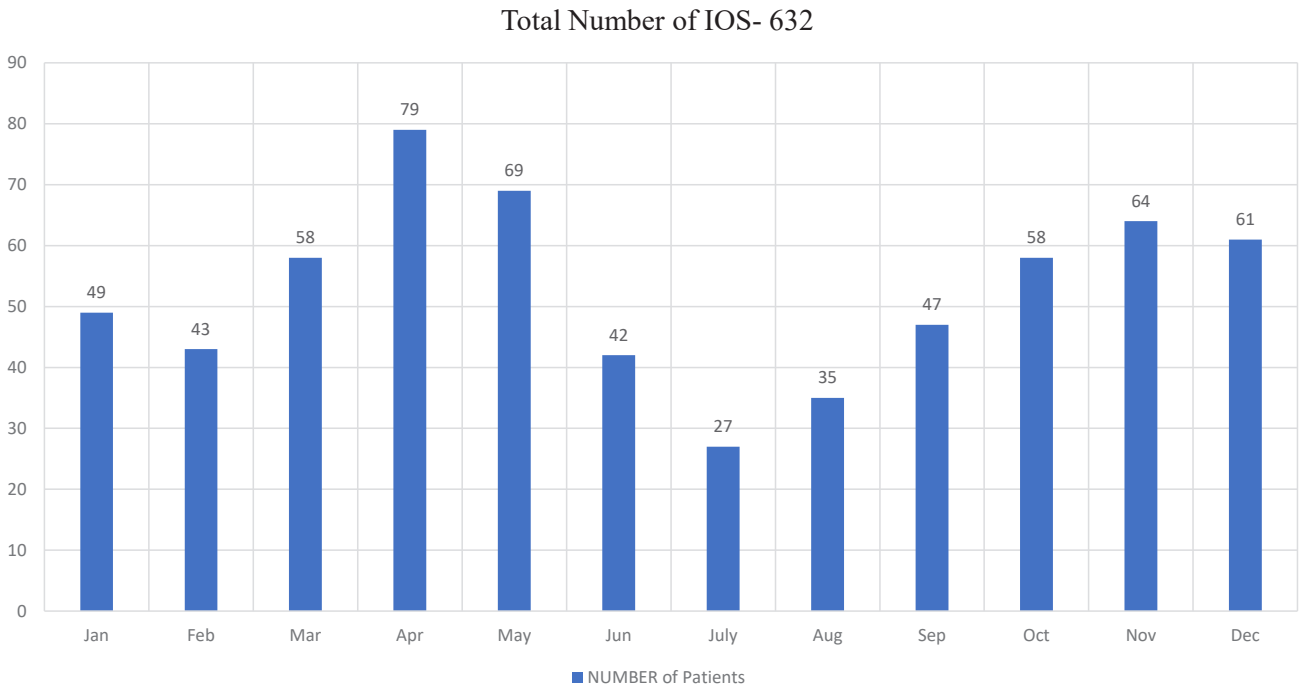


Indications of FFB

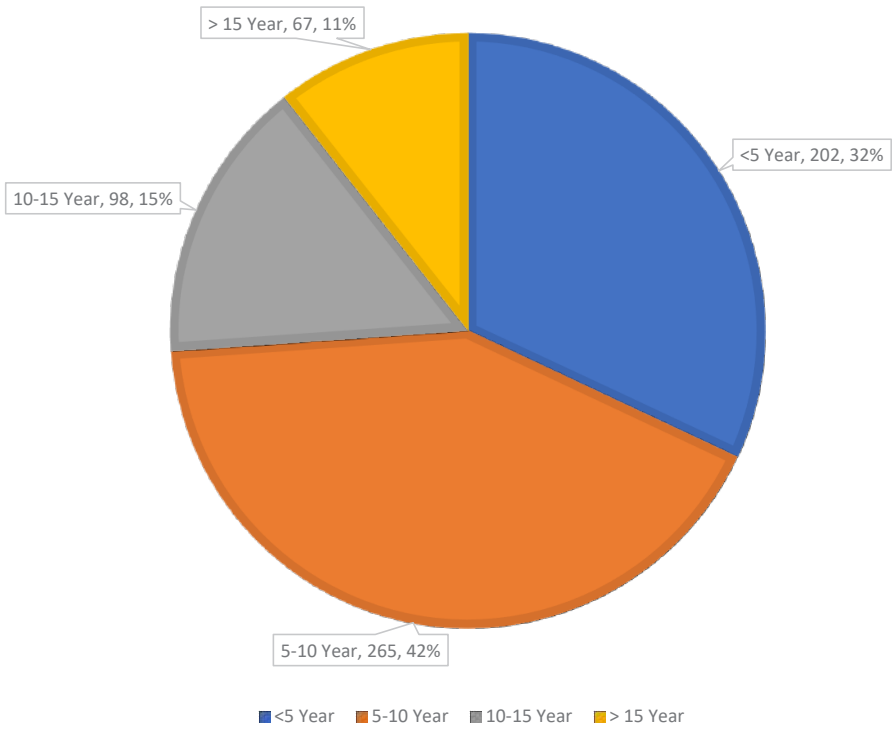


IMPULSE OSCILLOMETRY SYSTEM (IOS) – A Newer Technique For Pulmonary Function Test

Impulse Oscillometry (IOS) done in 2023

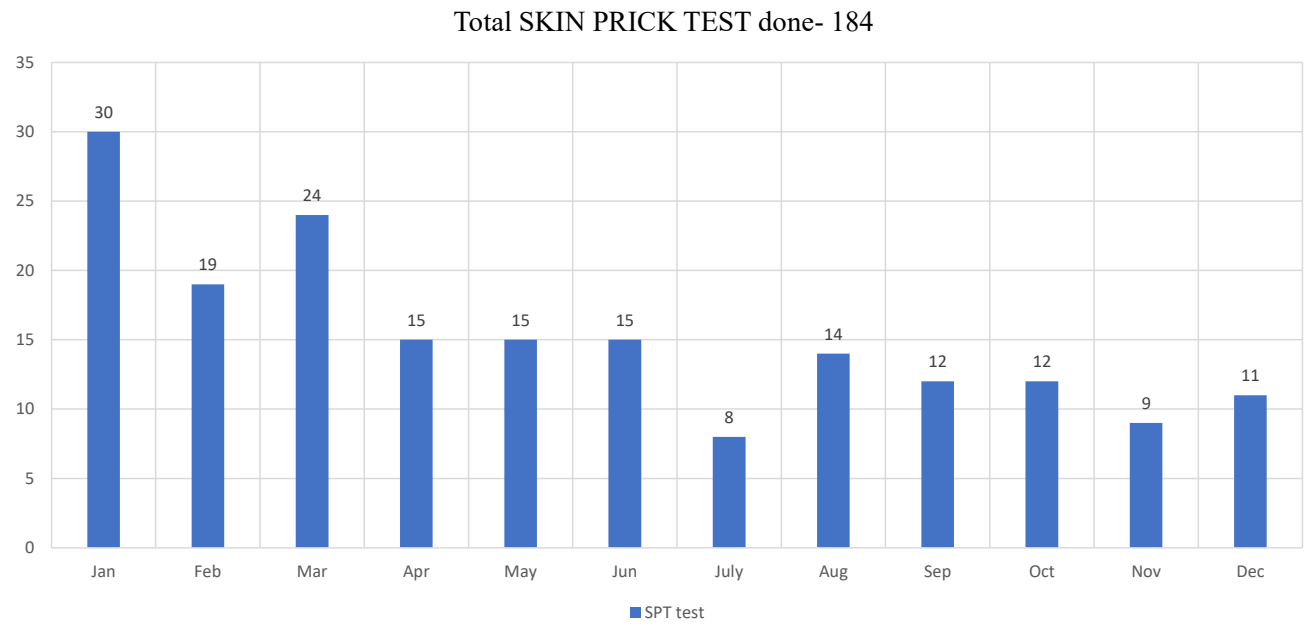


Age Distribution of IOS performed



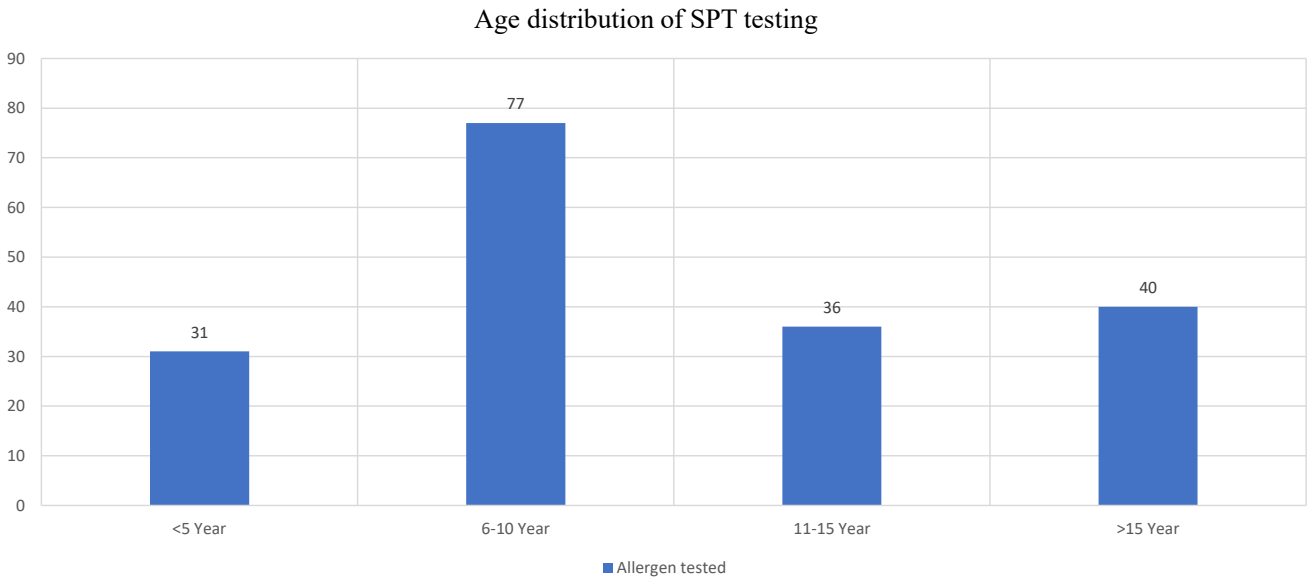
Pediatric Allergy Services

Allergy Testing in 2023

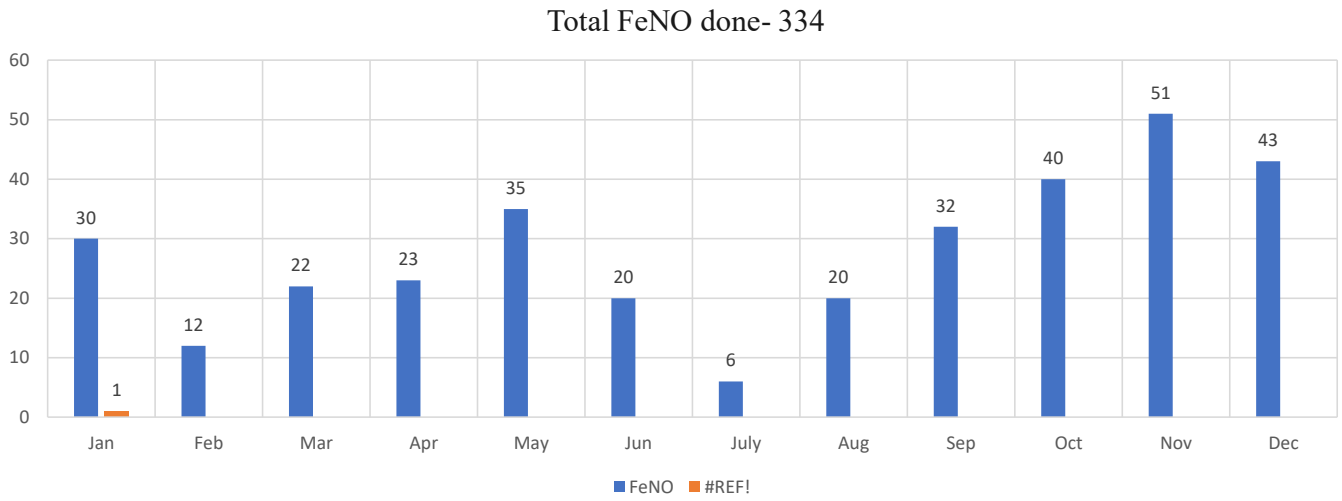


➢ 130 children were tested with skin prick test (SPT) for various types of allergies.

Age- wise Distribution of Children Undergoing SPT

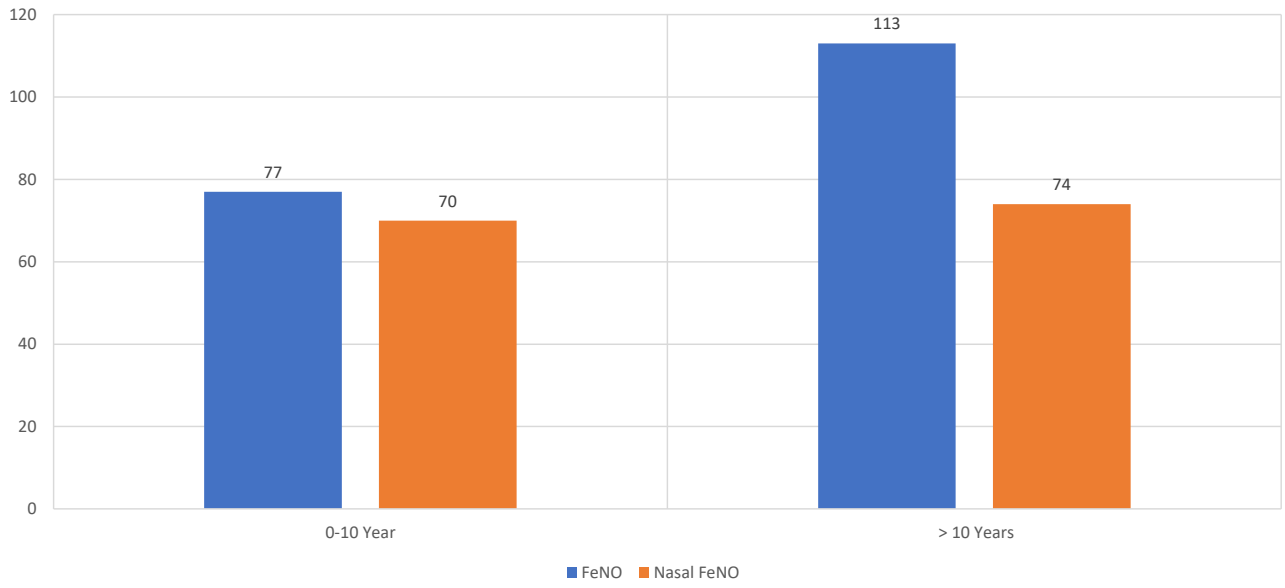


FeNO Performed in 2023



- A FeNO (Fractional exhalation of nitric oxide) test or exhaled nitric oxide test, in patients with allergic or eosinophilic asthma, is a way to determine how much lung inflammation is present and how well inhaled steroids are suppressing this inflammation.
- It can be performed via nasal and oral route.
- A total of 334 FeNO were done.

Age wise Distribution of FeNO Procedure Performed



Research and Academic Activities

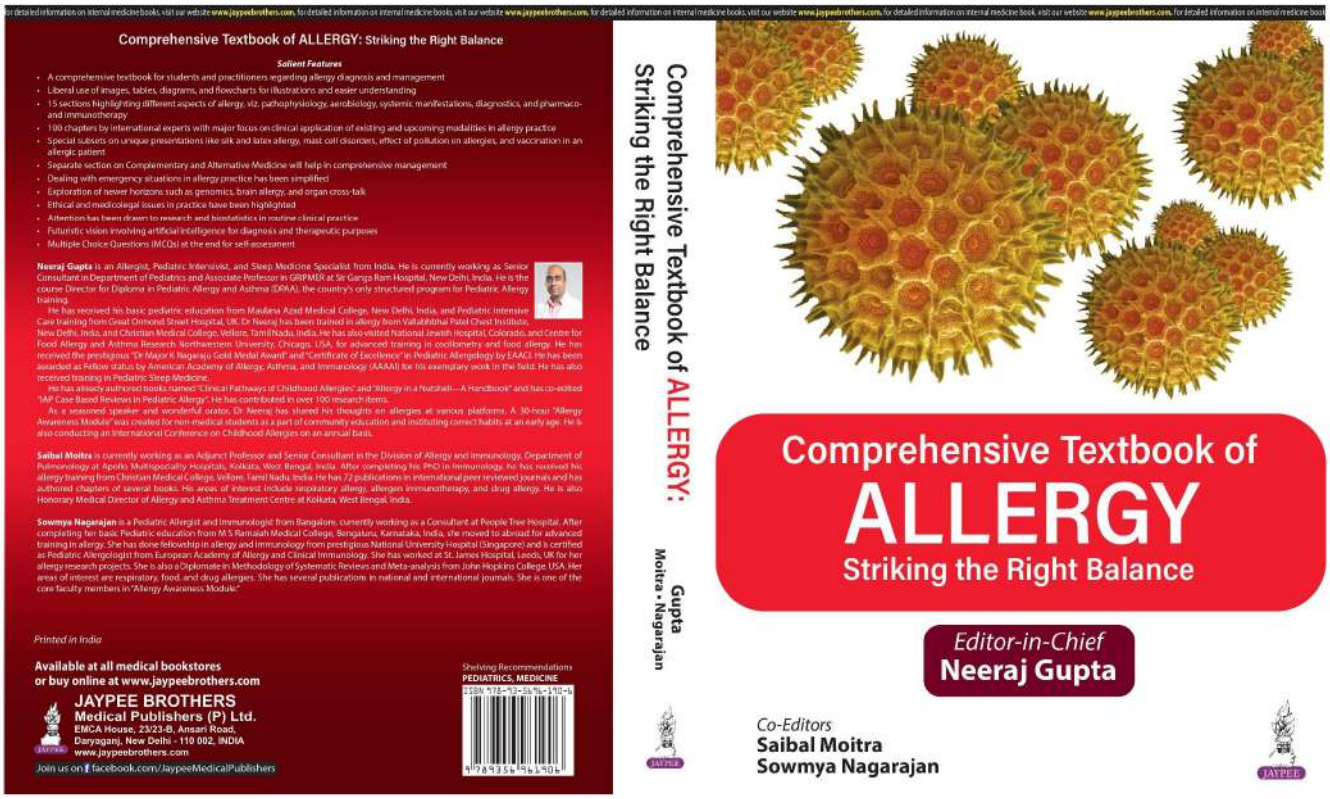
Published Research Papers in 2023

- Use of positive end-expiratory pressure titration and recruitment maneuvers in pediatric intensive care unit – A narrative review
- Mechanistic and protective approach to ventilator induced lung injury: A narrative review
- Quality of life assessment in children and their caregivers suffering from allergic rhinitis and/or asthma.
- Short-term outcomes of pediatric hematology oncology and BMT patients admitted in pediatric intensive care unit: Retrospective observational study from tertiary care centre in North India.
- Continuous versus intermittent mask use by nurses in COVID times (CIMNIC) -A CUSUM study.
- Flexible Fiberoptic Bronchoscopy in Non-ventilated Children in Pediatric Intensive Care Unit: Utility, Interventions and Safety
- Formula milk companies and allergy healthcare professionals in India
- Allergen sensitivity profile among symptomatic children: A descriptive study from North India published in Indian Journal of Allergy, Asthma and Immunology
- Role of Allergy Testing in the Evaluation of Atopic Dermatitis and Urticaria
- Latex allergy in healthcare workers: A review
- Functional evaluation of a child with hypoplastic lung using oscillometry
- Allergy testing in lower middle income countries

Scientific Oral paper and/or poster presentation in National and International Conference

- Correlation of intraabdominal pressure with lung mechanics among ventilated children: a prospective observational study
- Short-term outcomes of pediatric hematology oncology and bmt patients admitted in pediatric intensive care unit: retrospective observational study.
- The predictive ability of mechanical power for mortality in children on mechanical ventilator Poster (pedicriticon 2023)
- Effect of Flexible Fiberoptic Bronchoscopy on Hemodynamic and Lung Mechanics in ventilated children.
- Utility of multiple Flexible Fiberoptic Bronchoscopy in tertiary level pediatric critical care unit.
- Time to normalization of microcirculatory parameters in children with septic shock- A prospective observational study.
- Veno- Venous ECMO with bi caval catheter : a case series

Book Release



A comprehensive textbook for students and practitioners regarding allergy diagnosis and management. Liberal use of images, tables, diagrams, and flowcharts for illustrations and easier understanding. 15 sections highlighting different aspects of allergy, viz. pathophysiology, aerobiology, systemic manifestations, diagnostics, and pharmaco-and immunotherapy. 100 chapters by international experts with major focus on clinical application of existing and upcoming modalities in allergy practice. Special subsets on unique presentations like silk and latex allergy, mast cell disorders, effect of pollution on allergies, and vaccination in an allergic patient. Separate section on Complementary and Alternative Medicine will help in comprehensive management. Dealing with emergency situations in allergy practice has been simplified. Exploration of newer horizons such as genomics, brain allergy, and organ cross-talk Ethical and medicolegal issues in practice have been highlighted. Attention has been drawn to research and biostatistics in routine clinical practice. Futuristic vision involving artificial intelligence for diagnosis and therapeutic purposes. Multiple Choice Questions (MCQs) at the end for self-assessment.

LAURELS

Lifetime Achievement Award
to Dr Anil Sachdev

Dr Anil Sachdev, Director Pediatric Emergency, Critical Care, Pulmonology and Allergic Disorders and Vice-Chairman Department of Pediatrics, Institute of Child Health at Sir Ganga Ram Hospital has been honoured with 'Lifetime Achievement Award' by International Asthma Services, Colorado, USA for his exmeplary services in the field of Pediatric Pulmonology and Critical care.

Shishu Rakshaka Prashasti Award

to Dr Suresh Gupta

Dr Suresh Gupta, Senior Consultant and Co-Director at Division of Pediatric Emergency, Critical Care, Pulmonology and Allergic Disorders, Department of Pediatrics Sir Ganga Ram Hospital received Shishu Rakshaka Prashasti Award.

Young Researcher Award
to Dr Neeraj Gupta

Dr Neeraj Gupta, Consultant Allergist, Pediatric Intensivist and Sleep Specialist at Sir Ganga Ram Hospital has been awarded with 'Young Researcher Award' for the pioneer work in the country on 'Nasal Oscillometry in patients with Allergic Rhinitis'. He was honoured by Indian Academy of Pediatrics during their annual National Conference at Kochi.

Special Recognition Award

to Dr Neeraj Gupta

Dr Neeraj Gupta, Consultant Allergist, Pediatric Intensivist and Sleep Specialist at Sir Ganga Ram Hospital has been honoured by International Asthma Services, Colorado, USA with a 'Special Recognition Award' for his exemplary work in the field of Allergy and Immunology.

Allergy Dept. at Sir Ganga Ram Hospital

World Allergy Organization – Centre of Excellence

In a country's first event, Department of Pediatric Allergy, Institute of Child Health at Sir Ganga Ram Hospital has been designated as 'Centre of Excellence' by World Allergy Organization.

For any update or suggestions
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