



RAWALPINDI MEDICAL UNIVERSITY

CENTER FOR LIVER AND DIGESTIVE DISEASE

Audit Report 2020- 2022





وَمَا فِي السَّمَاوَاتِ وَالْأَرْضِ
إِلَّا نَصَّافٌ لِّرَبِّنَا

اور جو لوگوں کو فائدہ پہنچاتا ہے وہ روئے زمین پر قائم رہتا ہے (المرد: ۷)

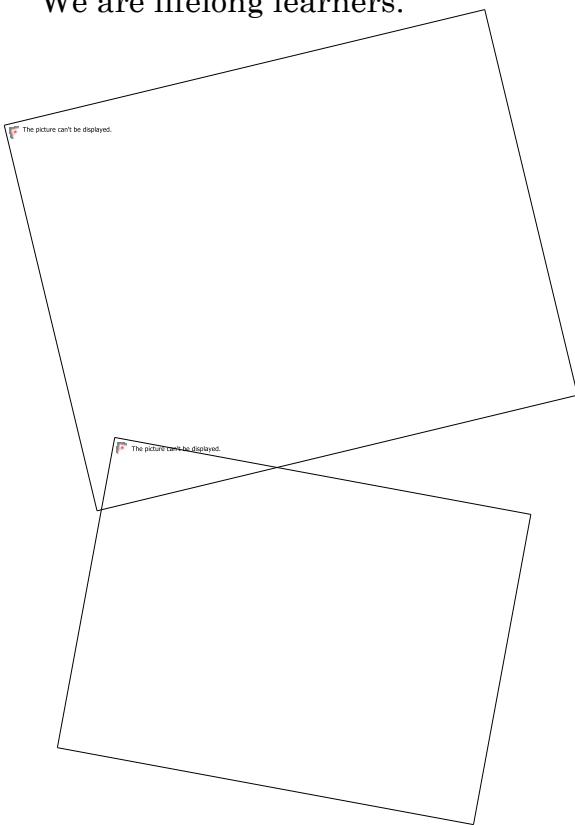
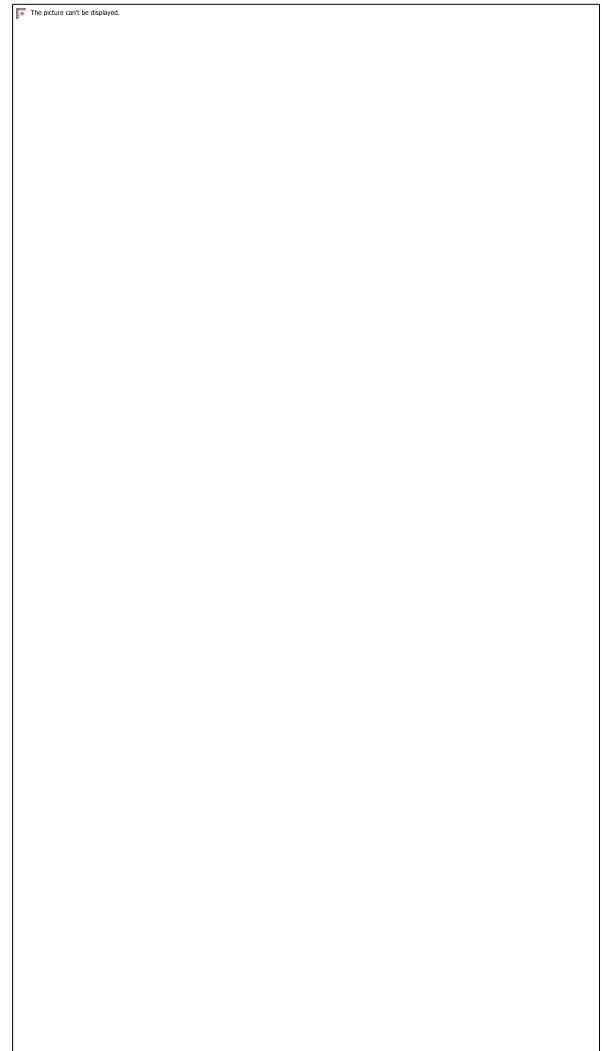
Which is for the good of mankind remains in the earth

Mission Statement

- To provide diagnosis and curative services to the patients of GI and Liver Diseases particularly Hepatopancreatobiliary Diseases and Hepaocellular Carcinoma (Liver Cancer) in the Northern part of Pakistan.
- To impart advance training to the GI Fellows and specialists in the field of Gastroenterology and hepatology.
- To establish clinical research in the field of Gastroenterology and Hepatology.
- To develop network with national and international Center and Societies of GI and Liver Diseases.

Vision and Value

- We work for excellence.
- We work as a team.
- Patient is our priority.
- We are lifelong learners.



FACULTY

Prof. Dr. Muhammad Umar

Sitara-i-Imtiaz

Vice Chancellor & CEO

Professor of Medicine

Rawalpindi Medical University

Head of Department

Centre for Liver and Digestive Disease
(CLD) Hoy Family Hospital ,Rawalpindi



Prof. Dr. Bushra Khaar
BSc, MBBS, FCPS, FRCP, FACG
Professor Emeritus of Medicine
Consultant Gastroenterologist
and Hepatologist



Dr. Tanveer Hussain

MBBS, CHPE ,FCPS, Medicine

FCPS Gastroenterology

Associate professor Center for Liver and
Digestive Disease (CLD)

Holy Family Hospital, Rawalpindi



Dr. Tayyab Saeed Akhter
MBBS, FCPS (Internal Medicine)
Senior Registrar
Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Dr. Aqsa Naseer

Senior Registrar

MBBS, FCPS

Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Dr. Anum Abbas
Senior Registrar
MBBS, FCPS
Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Dr. Sadia Ahmed

Senior Registrar

MBBS, FCPS

Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Dr. Javaria Khan
Senior Registrar
MBBS, FCPS
Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Dr. Misbah Noreen

Senior Registrar

MBBS, FCPS

Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Dr. Gul Nisar
WMO
Center for Liver and Digestive Disease
(CLD) Holy Family Hospital, Rawalpindi



Gen. Tassawar Hussain Rawalpindi

Brig. Amjad Salamat
Rawalpindi

Prof . Anwaar A. Khan
Lahore

Prof. Waseem Uddin
Wah Cantt.

International

Dr. David Carre Lock ,USA

Dr. Khalid Hassan, USA

Dr. Asif Abbas Naqvi, UK

Dr. Ali Siddiqui, USA

Dr. Nadeem Tahami, UK

Dr. Ishfaq Ahmad, UK

VISITING FACULTY

A Success story of 38 Years



1985



The success story of Establishment of Gastroenterology and Hepatology services started in 1985 when we did FCPS in General Medicine and want to do specialty Training



2008



2011



There was no specialty of gastroenterology and hepatolg in Rawalpindi region. The effort started, we visited different Centre of world like cornels university hospital. New "York USA, First Tiangin hospital China, Kings College University Hospital Uk, North West University Hospital, Chicago USA and many others finally able to established the start of center for liver and Digestive Diseases, Holy Family Hospital, Rawalpindi.

Facilities

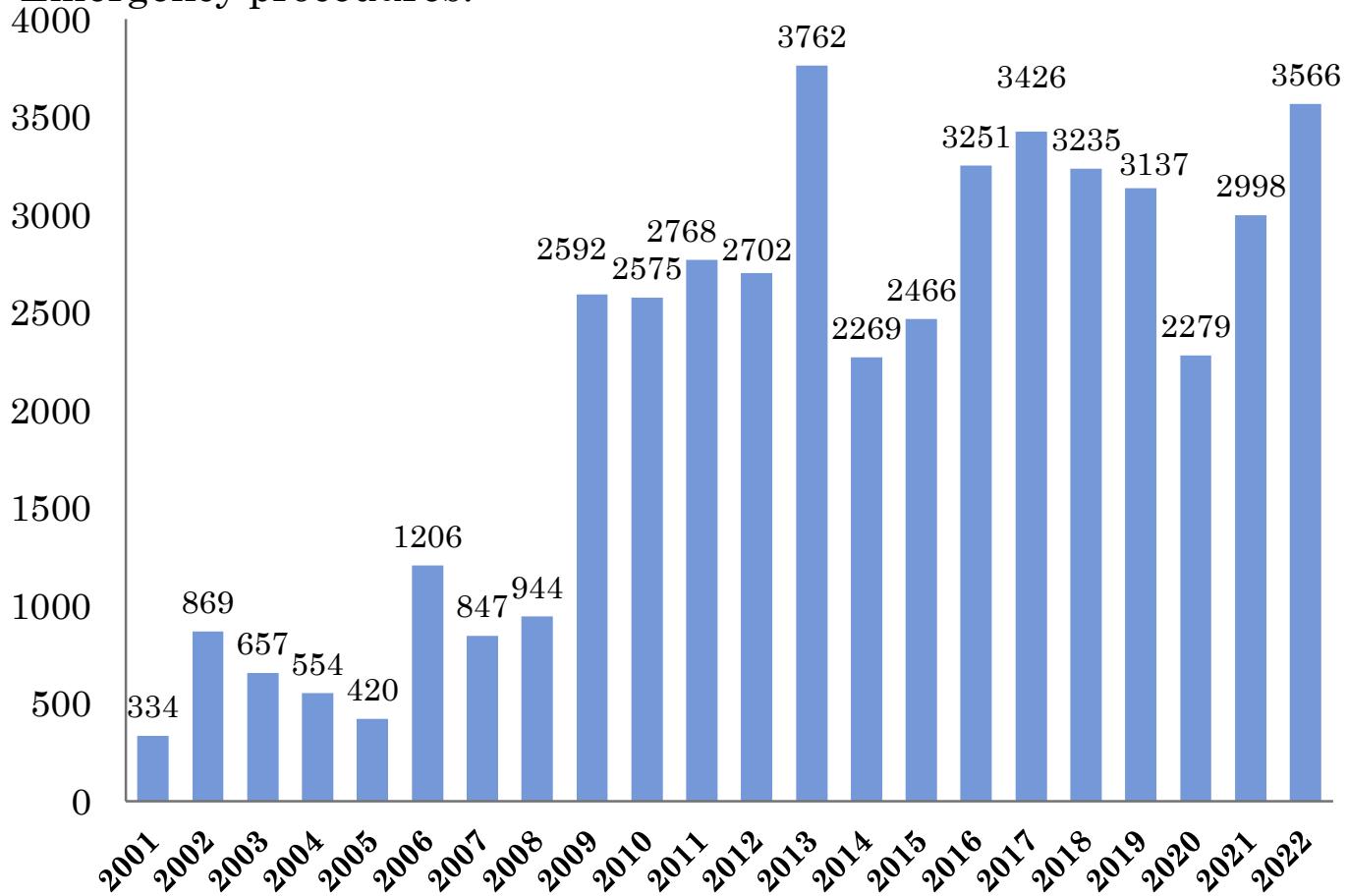
- Endoscopic Retrograde Cholangiopancreatography (ERCP)
- Endoscopic Ultrasound (EUS)
- Radiofrequency Abalation (RFA)
- Transcatheter Arterial Chemoembolization (TACE)
- Transjugular intrahepatic portosystemic shunt (TIPS)
- Argon Plasma Coagulation (APC)
- Variceal Band Ligation
- Gastric Glue Injection
- Endo Loop
- Polypectomy
- Endoscopic Mucosal Resection (EMR)
- Polypectomy
- Esophageal & Duodenal Stenting
- Percutaneous Endoscopic Gastrectomy (PEG)
- Endoscopic Mucosal Resection (EMR)
- Endoscopic Cyst Drainage



Endoscopy Audit

Holy Family Hospital is providing basic upper GI Endoscopic services for more than 20 years. With the establishment of Center Liver and Digestive Diseases services as further evolved not only to worlds to patients benefits but also improved training services for the health care community.

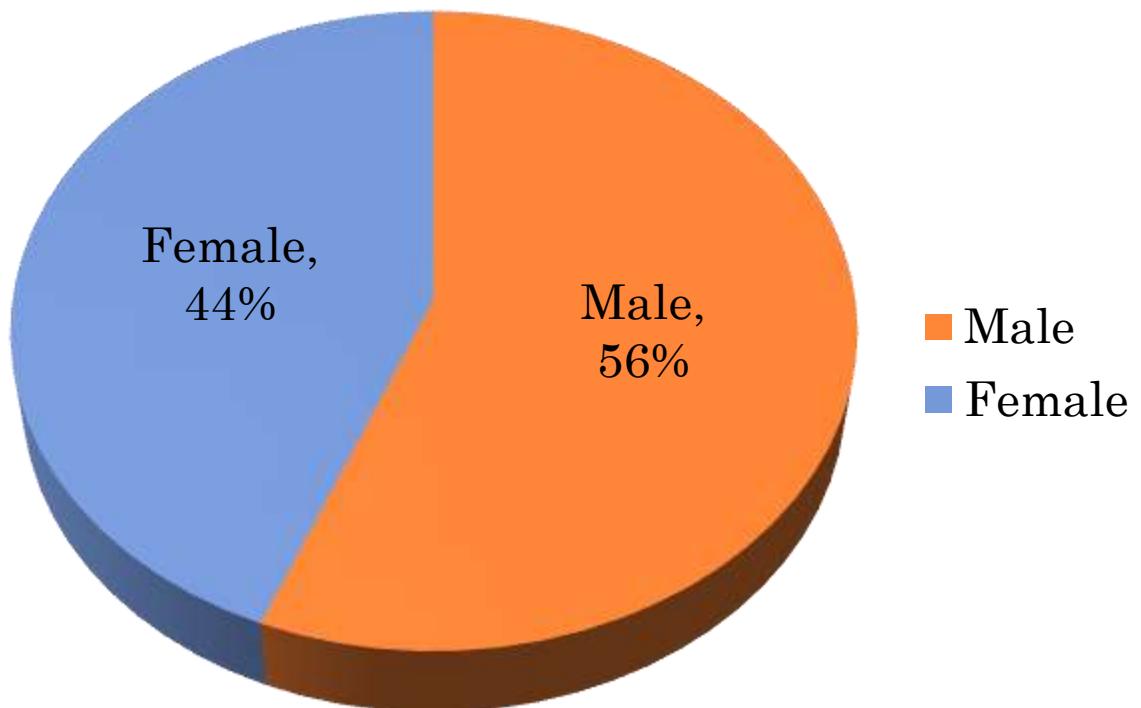
The center has set a bench mark by introducing the first of its kind Endoscopy Diploma Courses for Doctors and Nursing Staff. About 2200 procedures have been performed in 2020, 3000 in 2021 and more than 3500 cases including diagnostic as well as therapeutic UGI Endoscopies have been performed in the year 2022 respectively. The center provides its UGI endoscopic services 6 days a week and on call team is available round the clock, 24/7 for Emergency procedures.



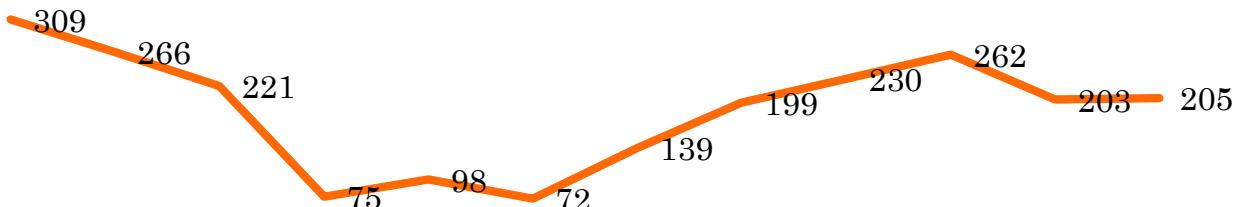
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

| | |
|-----------------------------|-------------|
| Total No of Patients | 2279 |
| Male | 1278 |
| Female | 1001 |

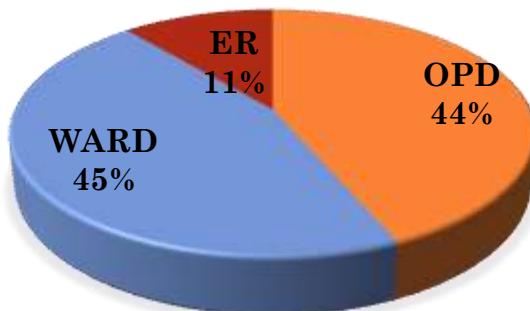


MONTHLY DISTRIBUTION.

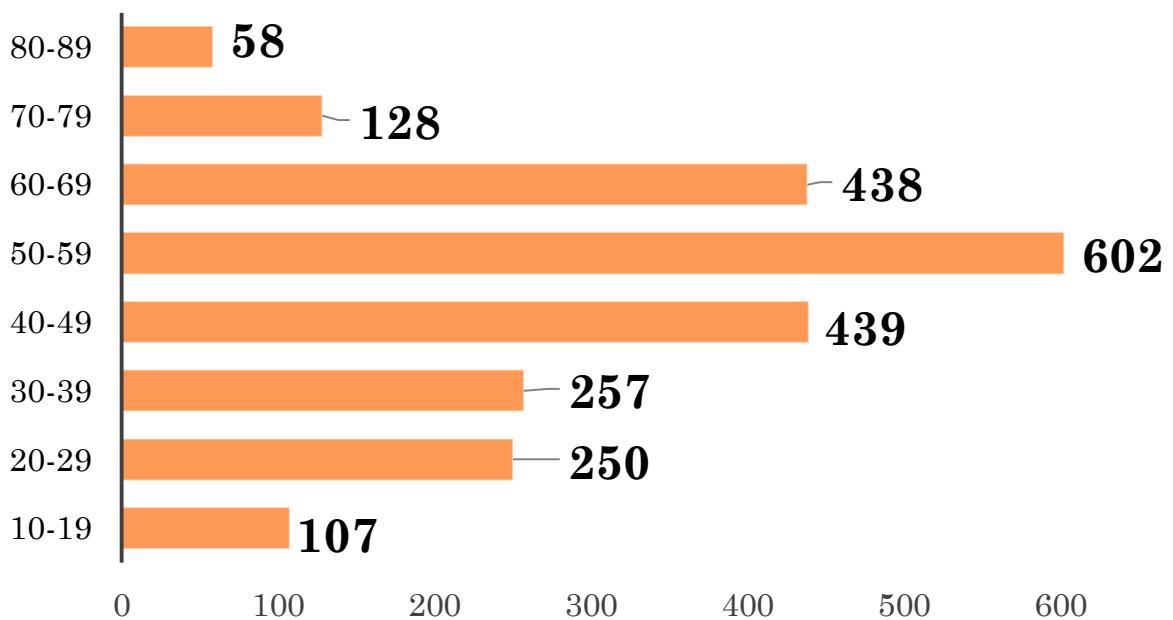


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

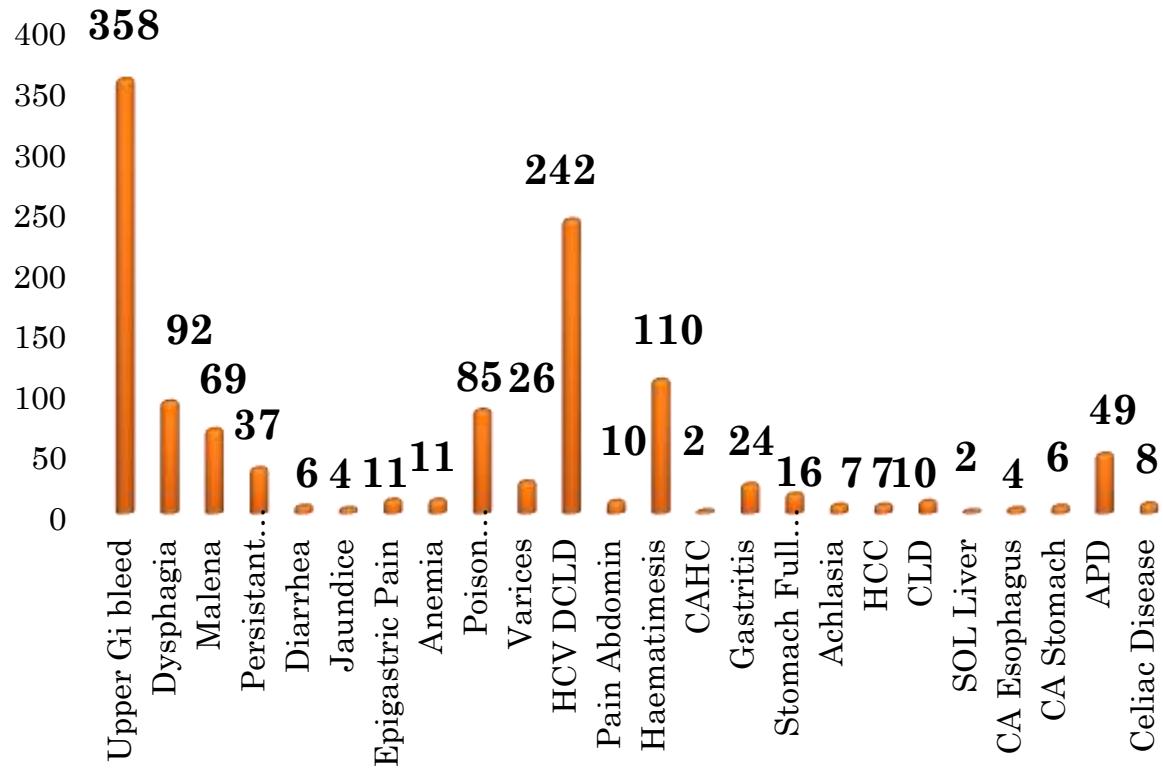
OPD/WARD/ER



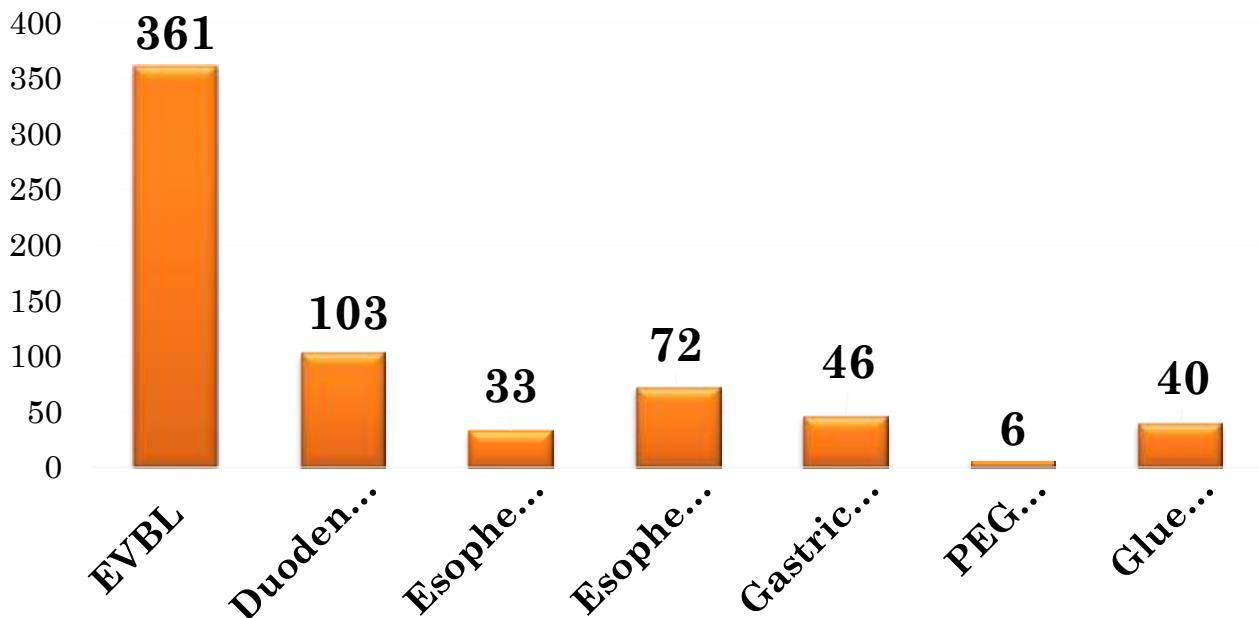
AGE WISE DISTRIBUTION



ENDOSCOPY INDICATIONS

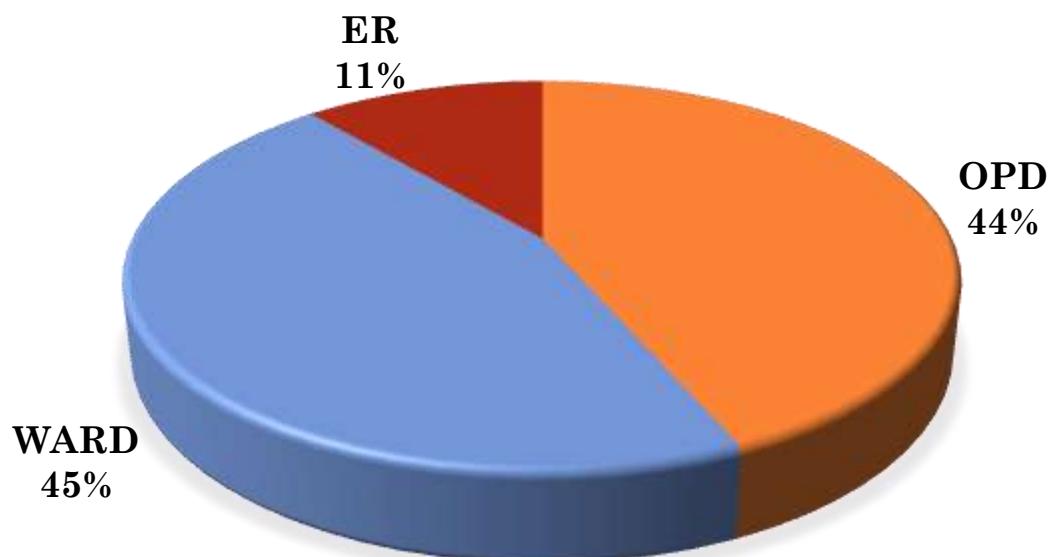


ENDOSCOPY INTERVENTIONS

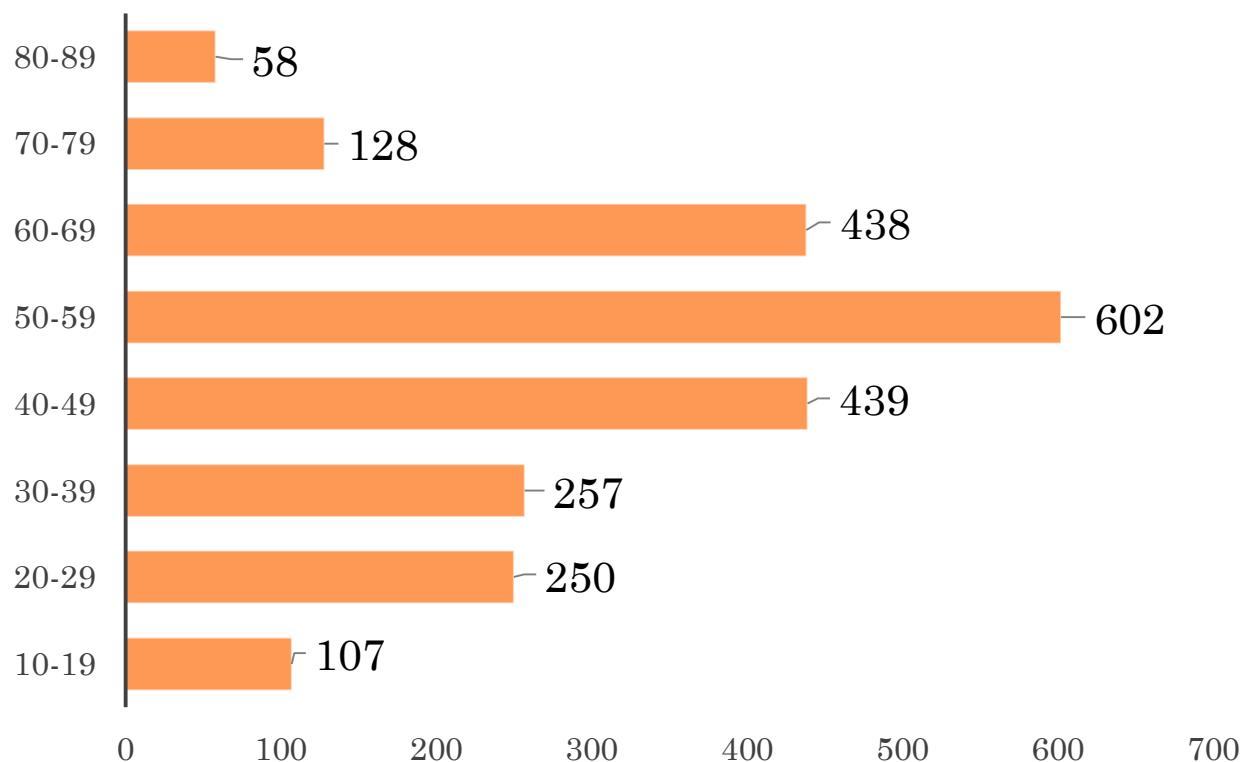


2021

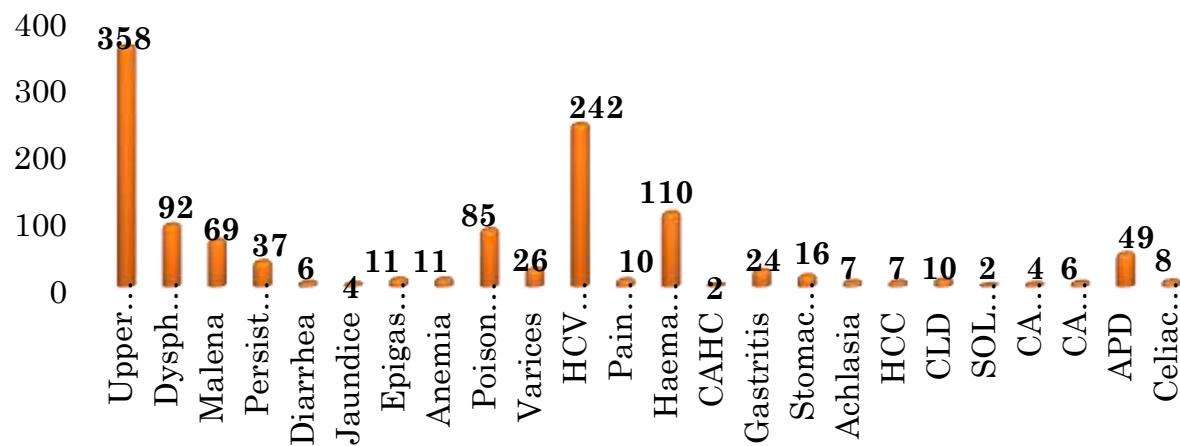
OPD/WARD/ER



AGE WISE DISTRIBUTION



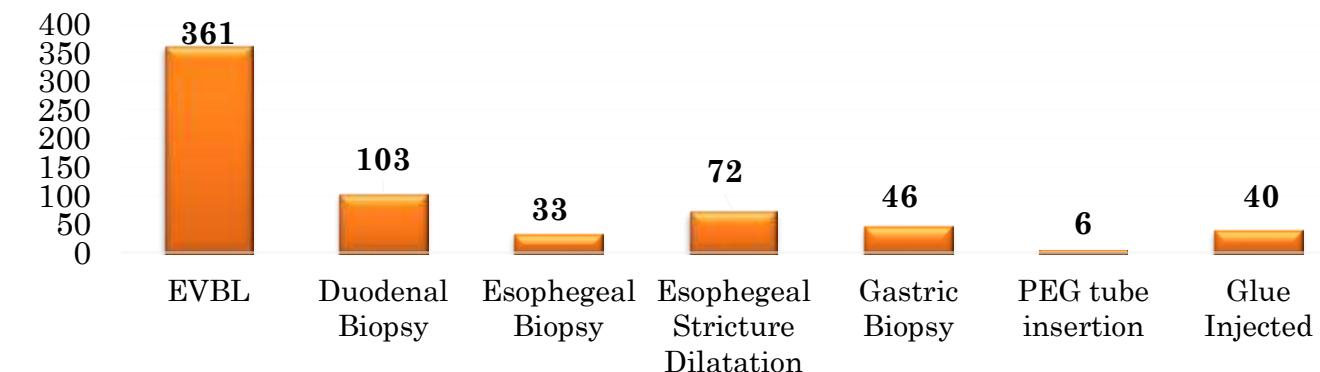
ENDOSCOPY INDICATIONS



ENDOSCOPY FINDINGS

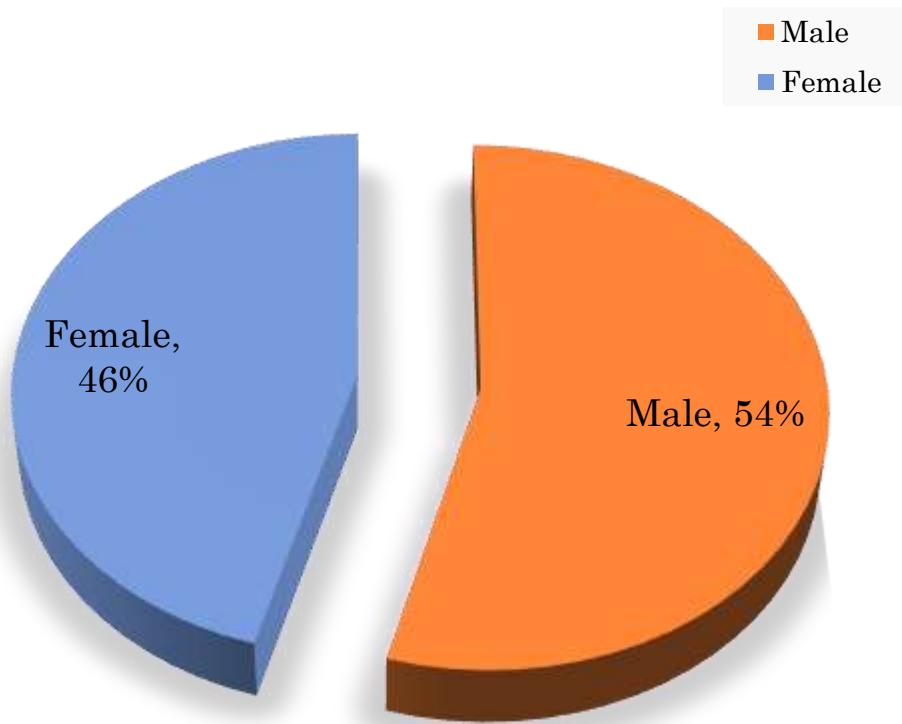


ENDOSCOPY INTERVENTIONS

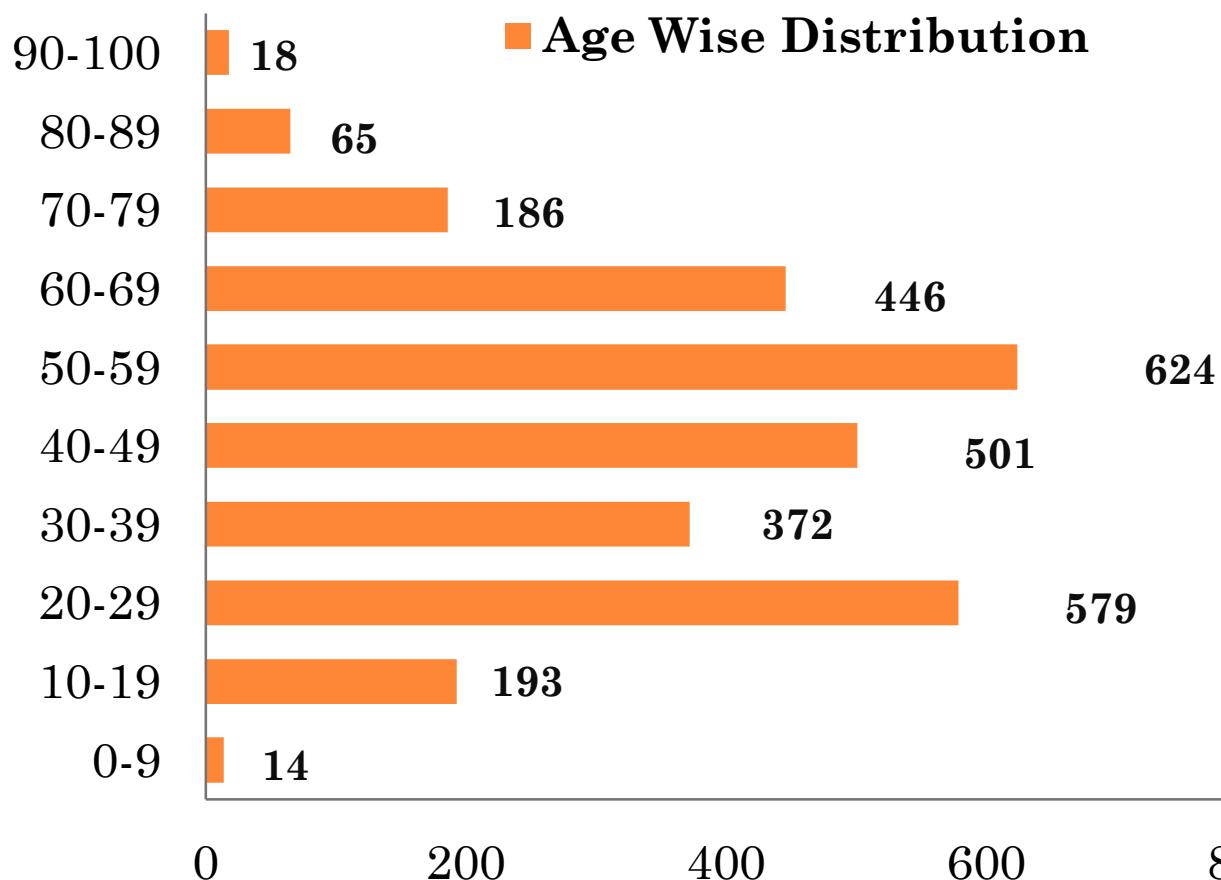
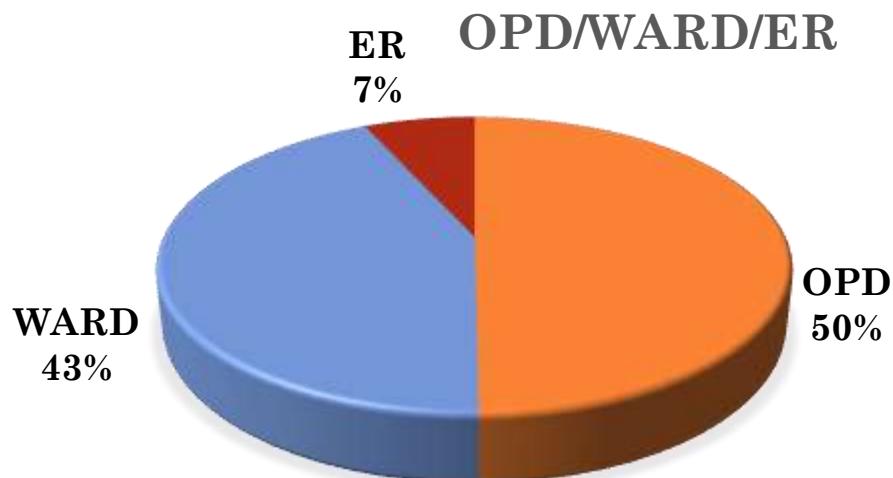


TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

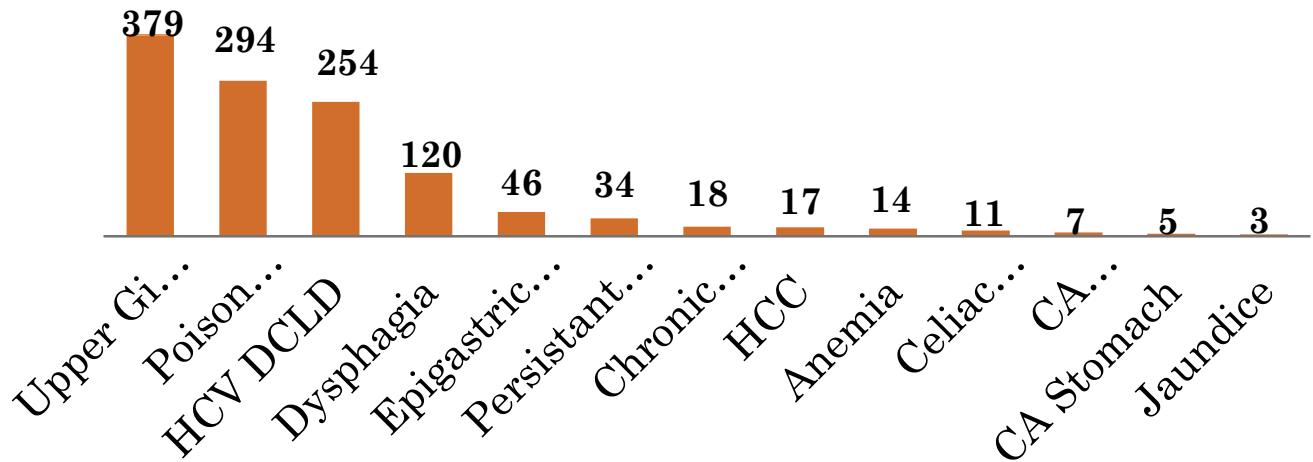
| | |
|----------------------|------|
| Total No of Patients | 2998 |
| <i>Male</i> | 1632 |
| <i>Female</i> | 1366 |



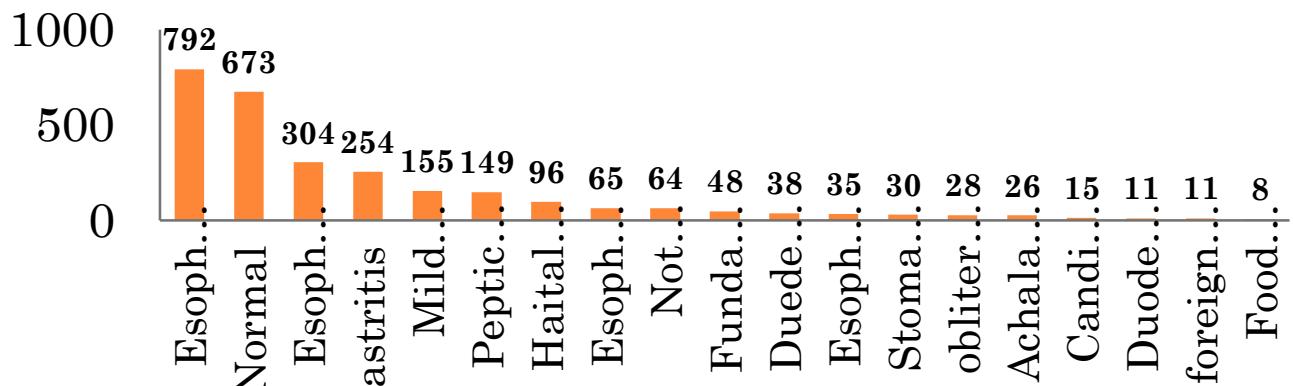
PATIENT WITH AGE WISE DISTRIBUTION



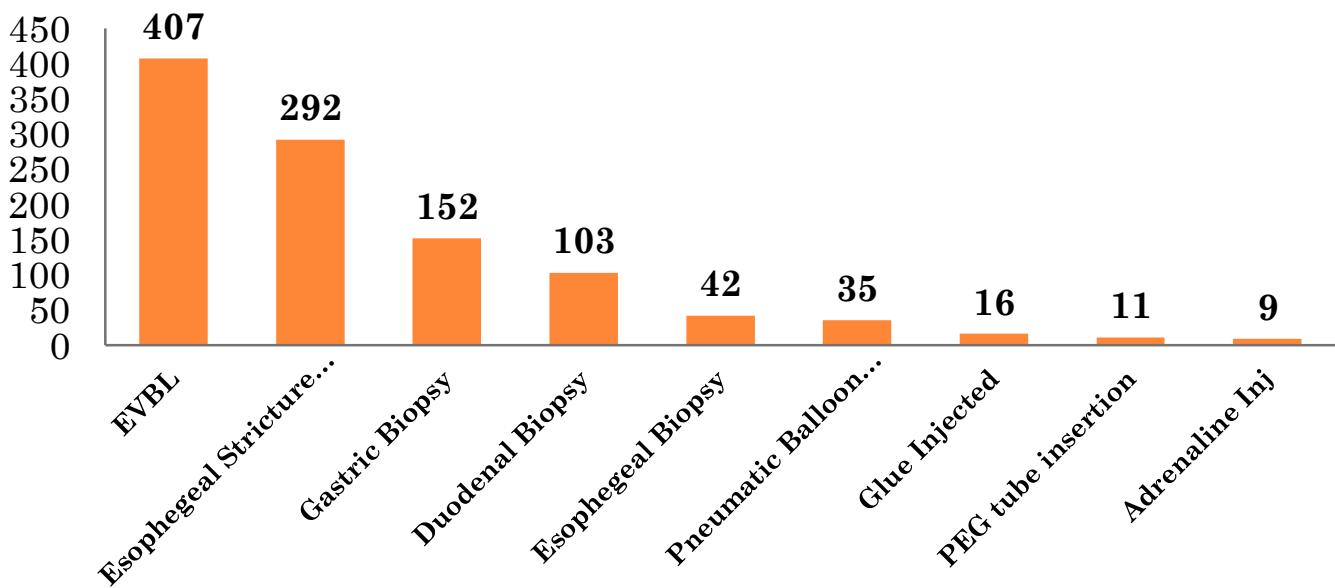
ENDOSCOPY INDICATIONS



Endoscopy Findings



ENDOSCOPY INTERVENTIONS

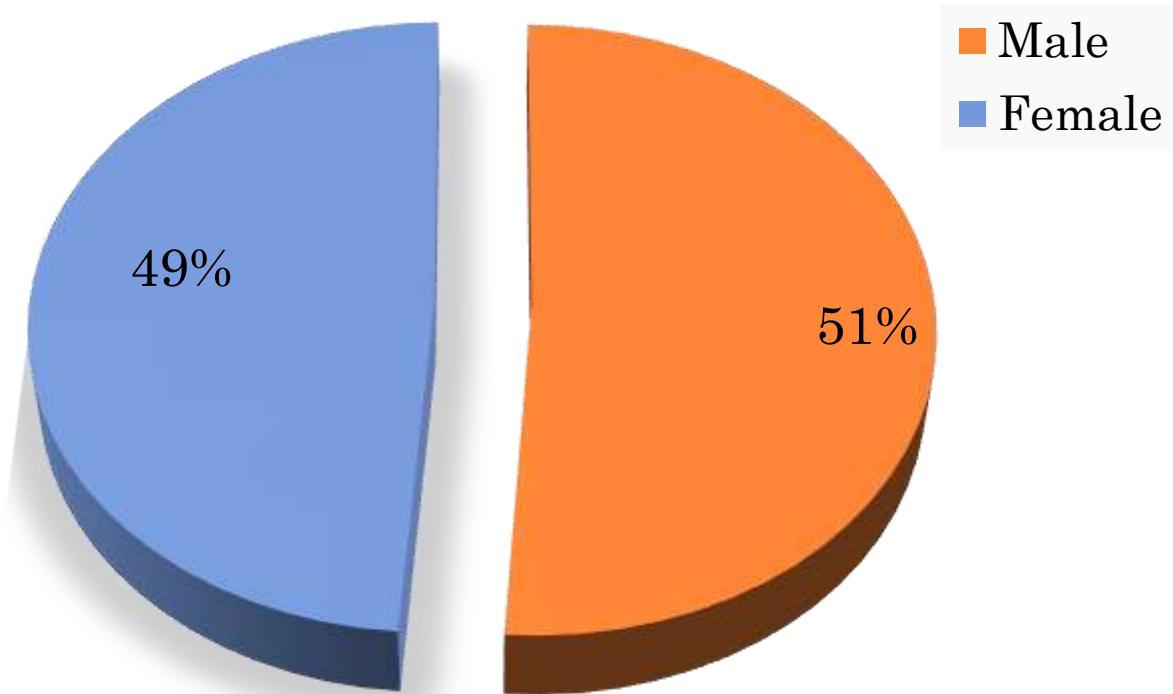


2022

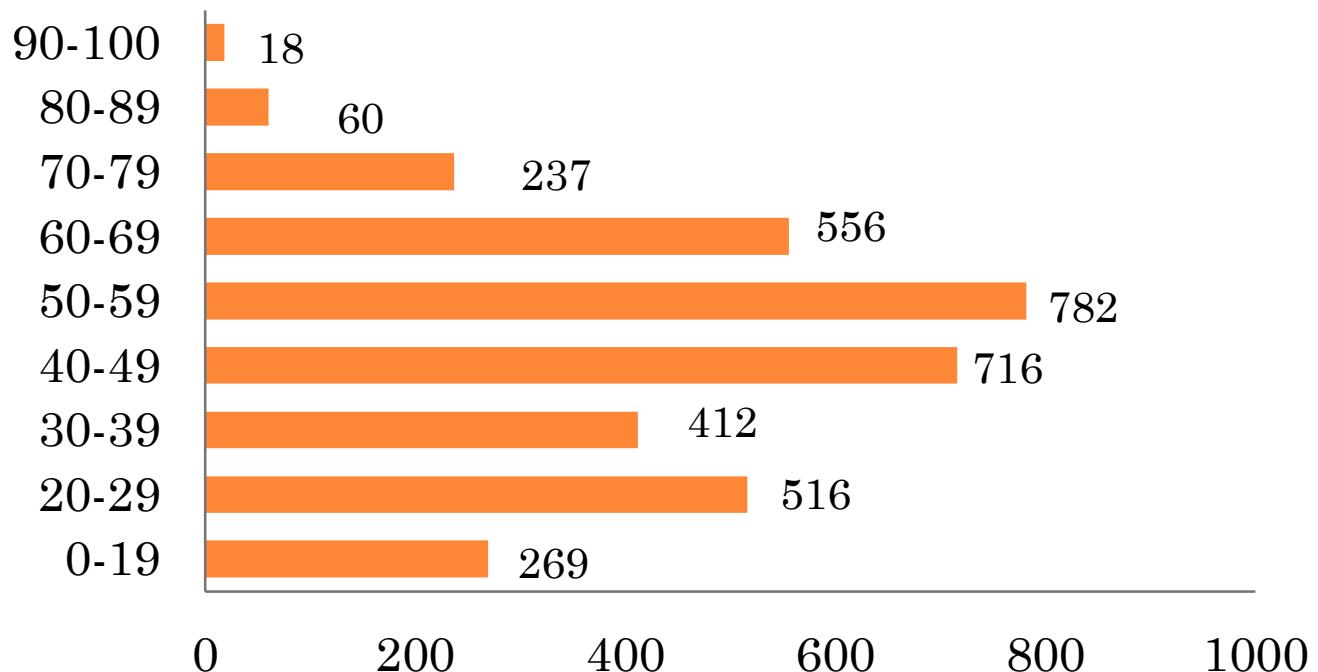
TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

| | |
|----------------------|------|
| Total No of Patients | 3566 |
| Male | 1824 |
| Female | 1742 |

Gender

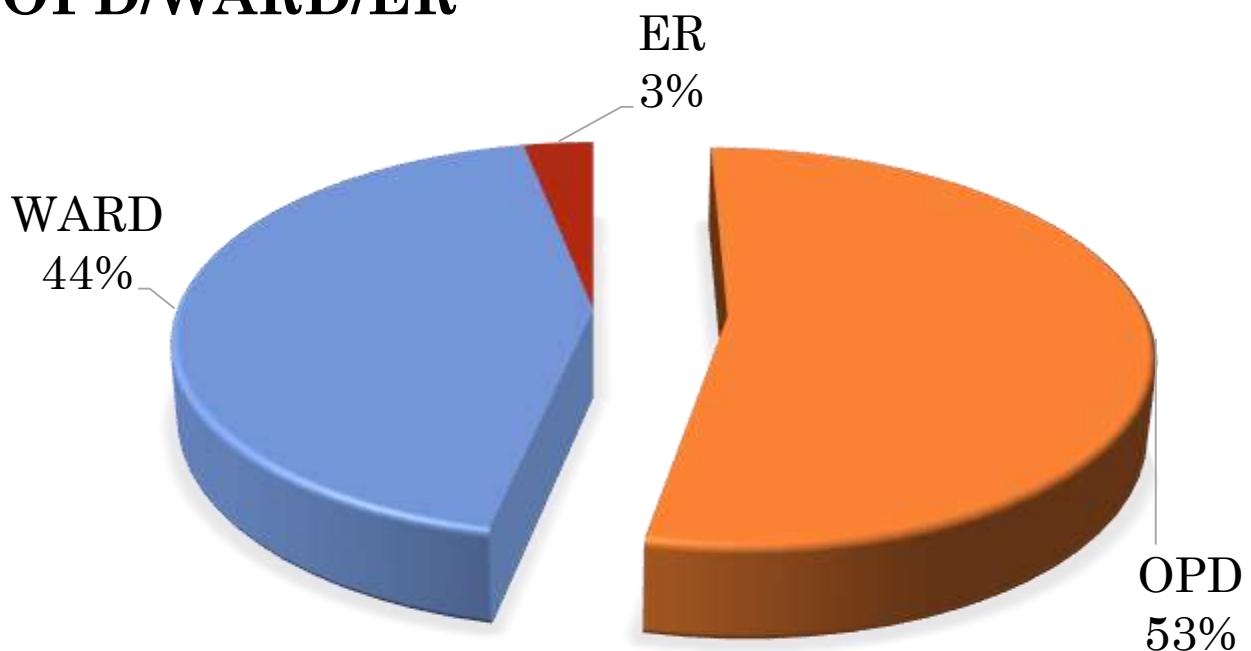


PATIENT AGE DISTRIBUTION

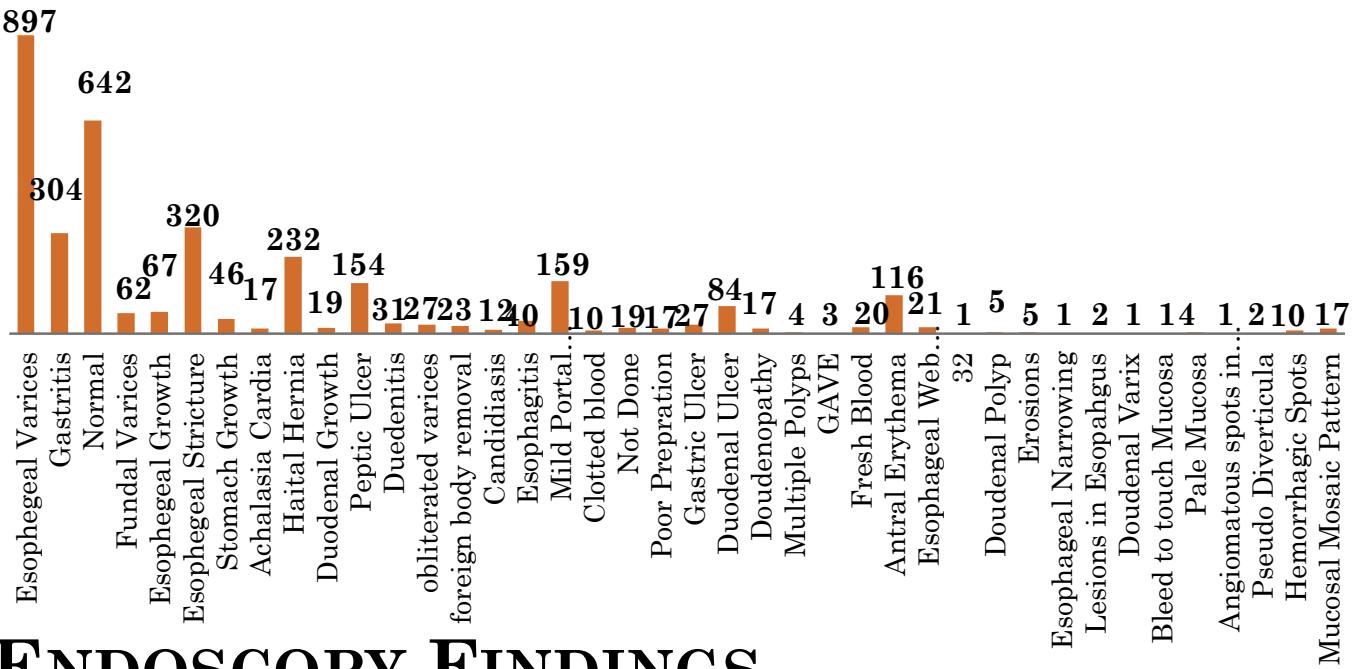


PATIENT REFERRAL SOURCE

OPD/WARD/ER



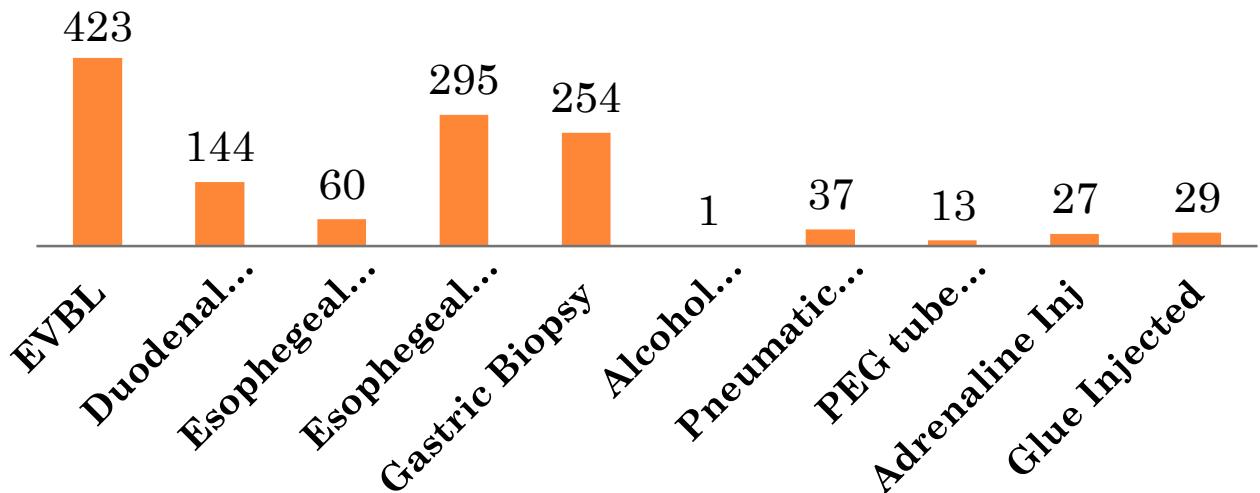
ENDOSCOPY INDICATIONS



ENDOSCOPY FINDINGS



ENDOSCOPY INTERVENTIONS



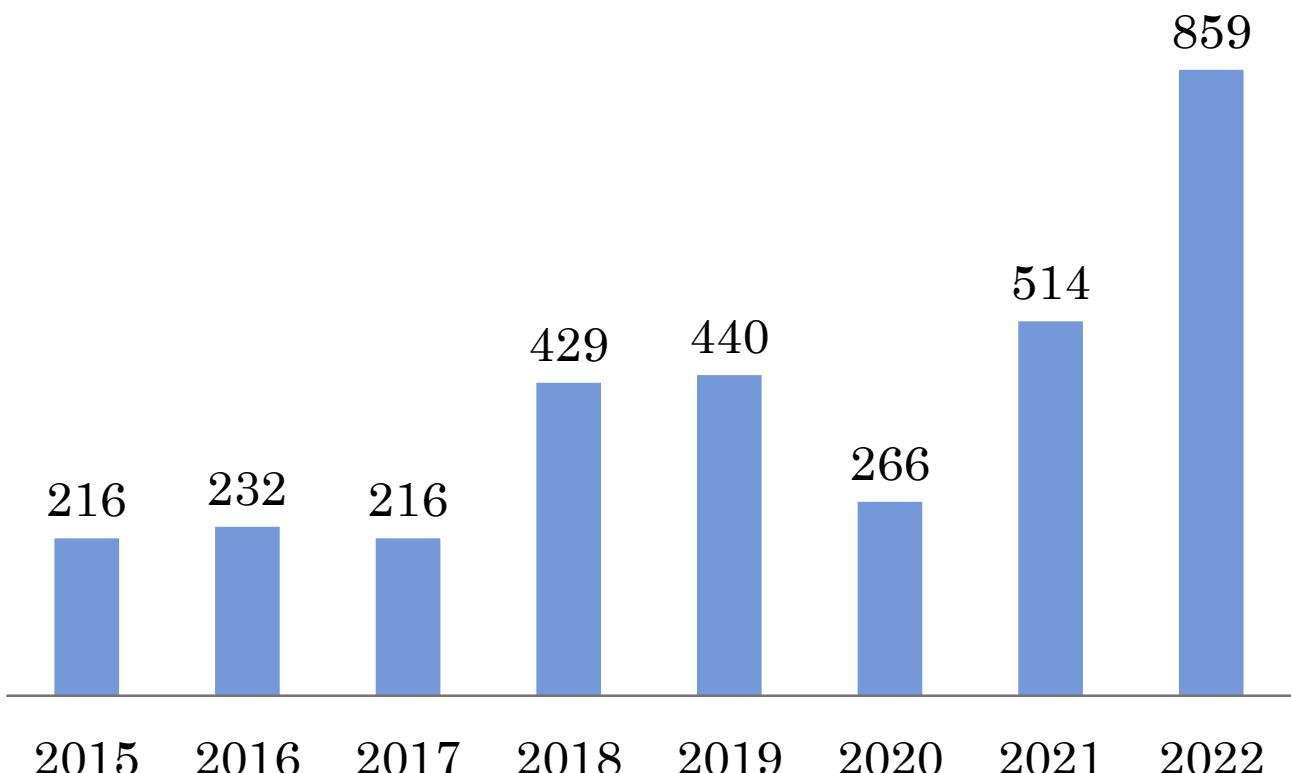
Colonoscopy Audit

Colonoscopy is a common GI procedure. It is Diagnostic as well as therapeutic day care Procedure with utmost importance in screening and surveillance of colon cancer.

At CLD, 266 colonoscopies performed in 2020, 514 in 2021 whereas during the year 2022 , 859 pts. underwent colonoscopy, which is the highest number in the last 5 years. This decline in number of cases during 2020-21 is likely due to limited entertainment of only priority cases during COVID era.

In 2022 out of the total 510 were Male and 349 were Females. The most common indication was per rectal bleed and the commonest positive finding was hemorrhoids followed by growth and polyp. 231 patients didn't reveal any abnormality and cecal intubation was successful in 313 patients only.

The audit report suggests a more intense supervised approach in the colonoscopy to improve the success rate and avoid chances of missing any lesion.

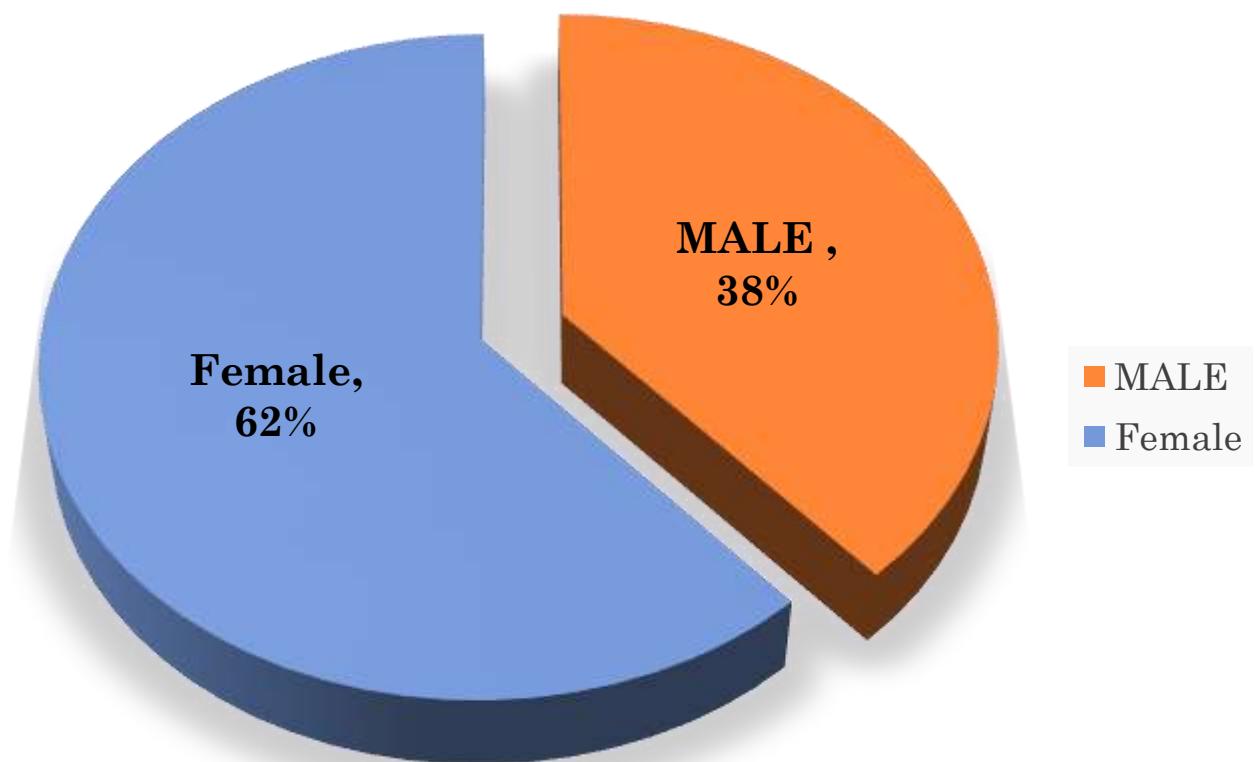


2020

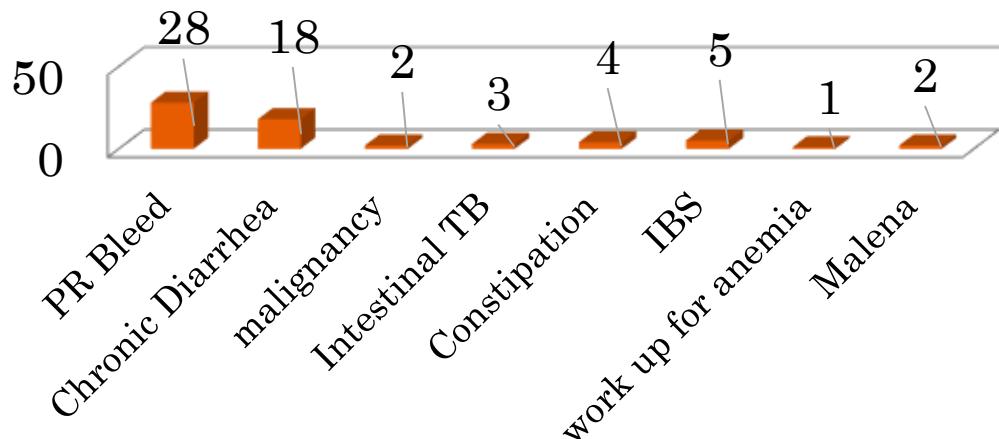
TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

| | |
|----------------------|-----|
| Total No of Patients | 266 |
| Male | 102 |
| Female | 164 |

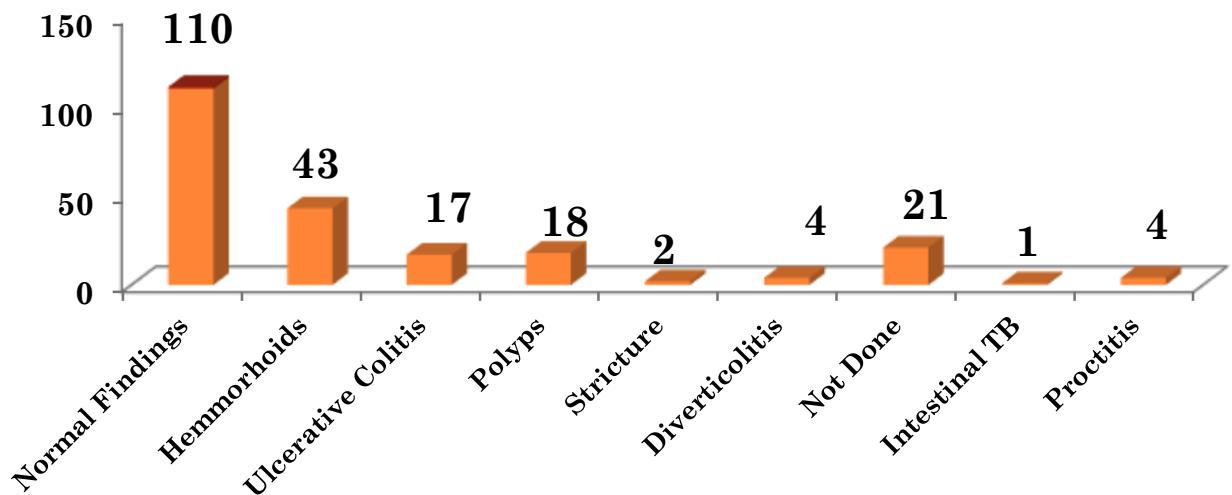
TOTAL NO OF PATIENTS



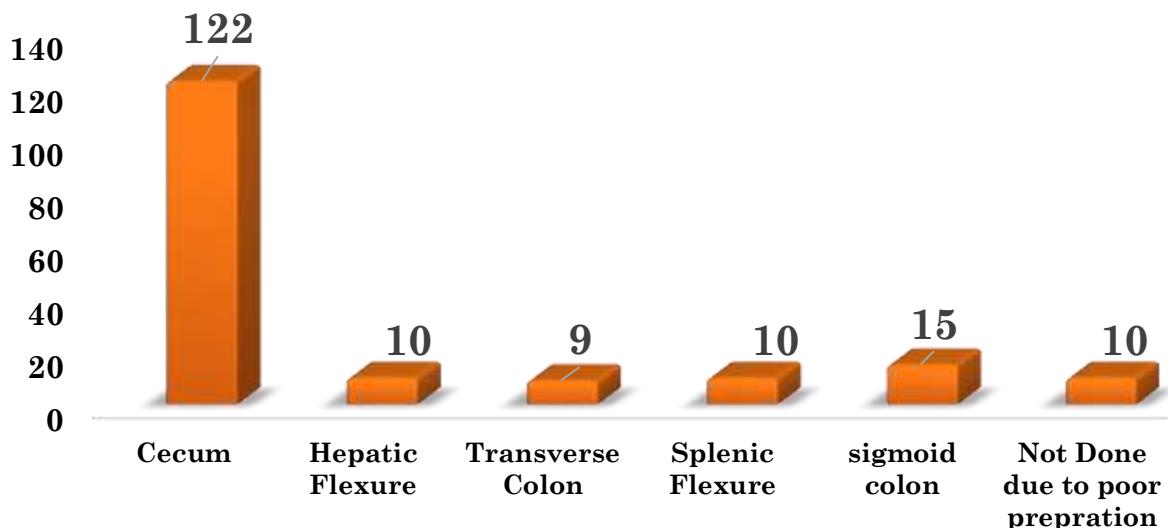
PRESENTING COMPLAINTS



COLONOSCOPY FINDINGS



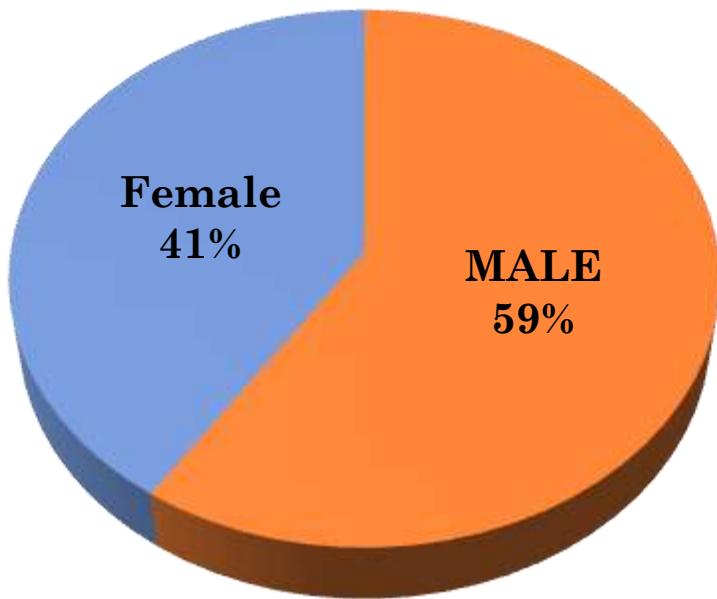
EXTENT OF PROCEDURE



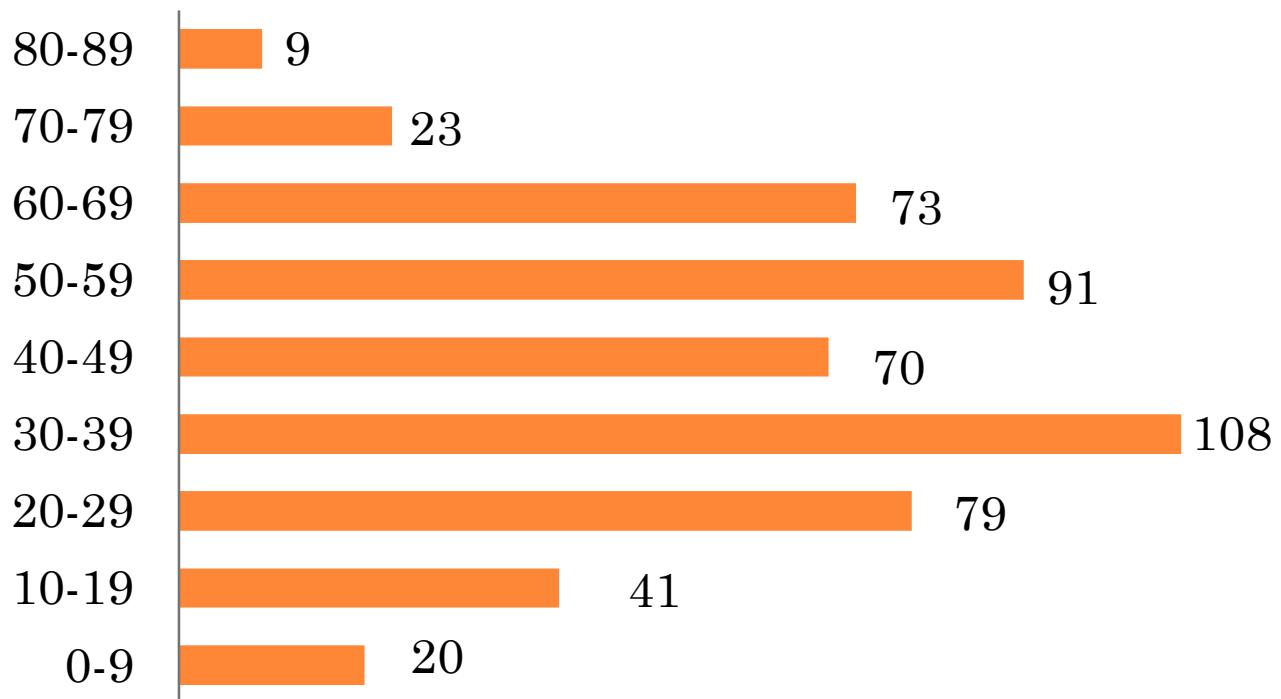
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

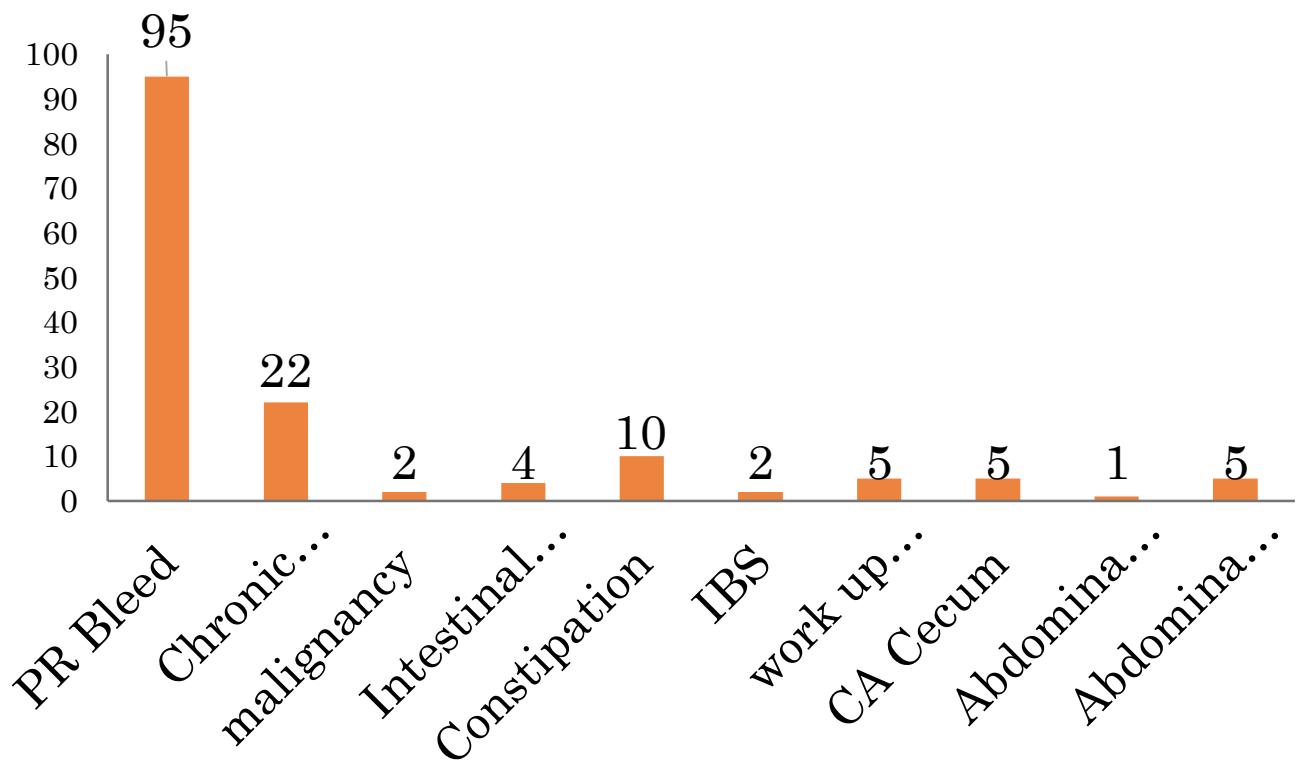
| | |
|----------------------|-----|
| Total No of Patients | 514 |
| Male | 305 |
| Female | 209 |



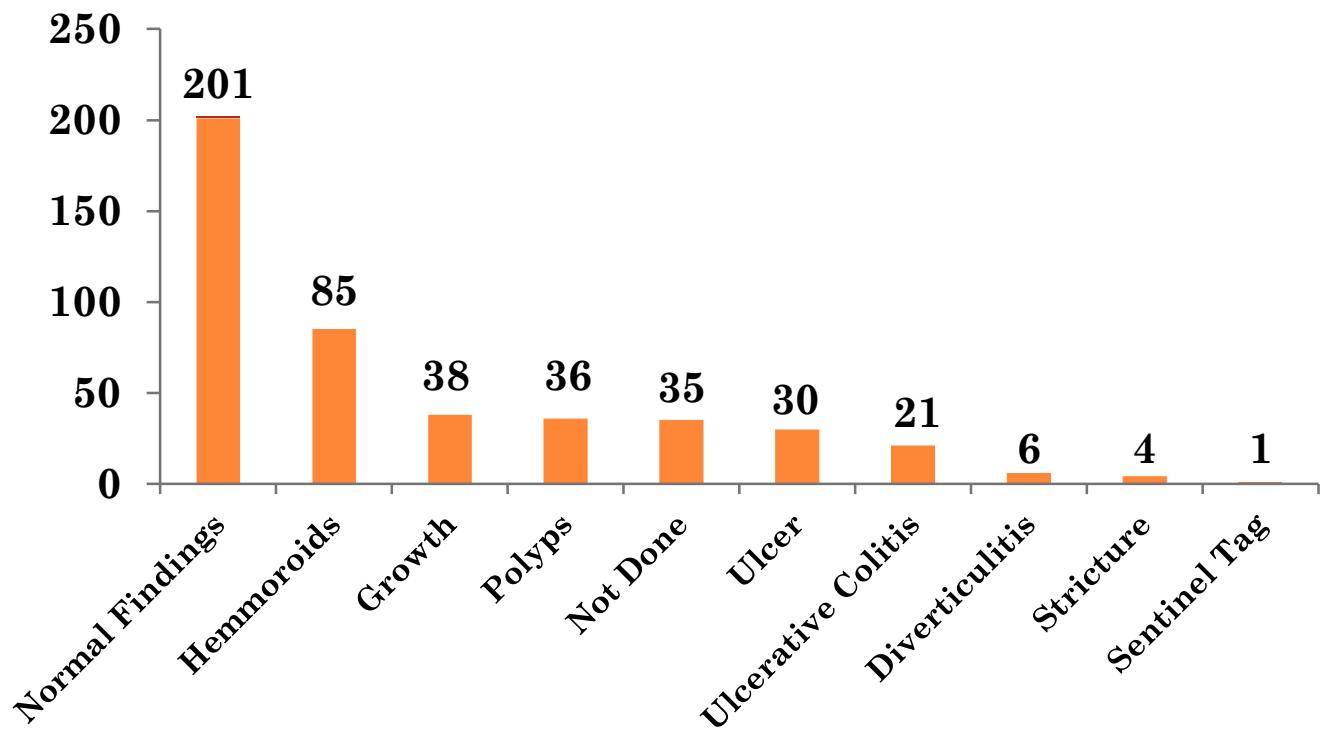
AGE WISE DISTRIBUTION



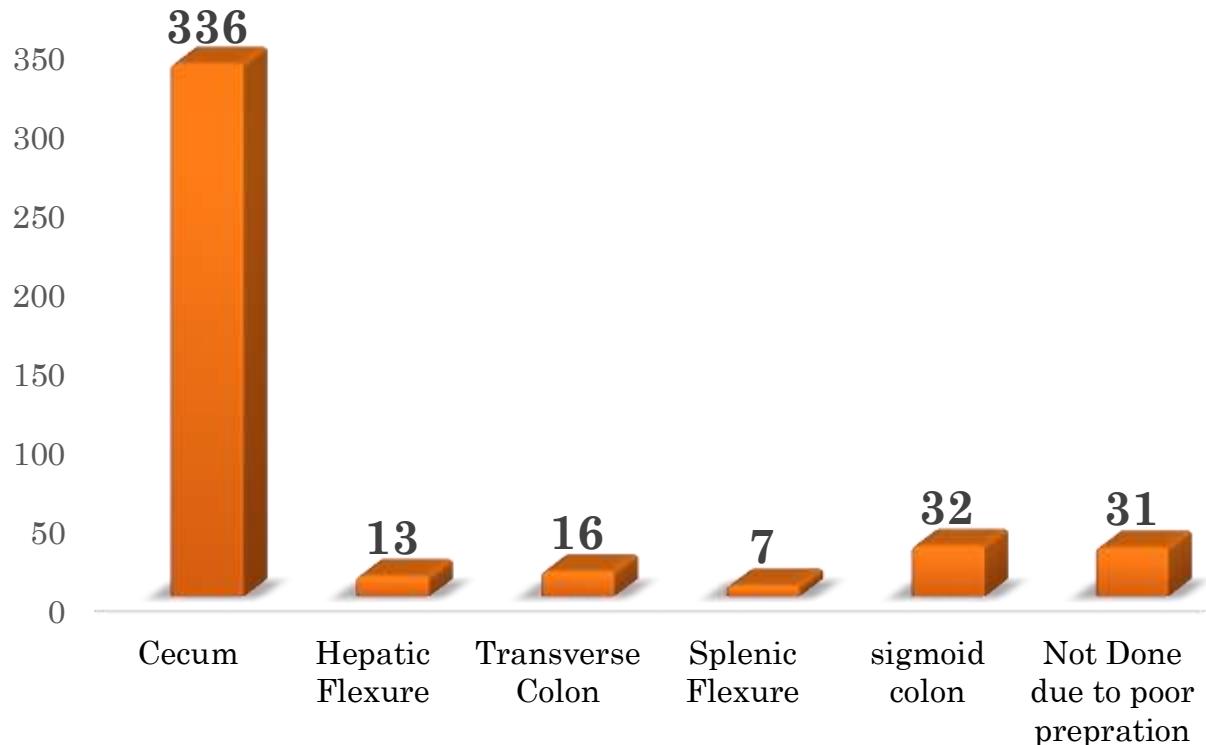
PRESENTING COMPLAINTS



COLONOSCOPY FINDINGS

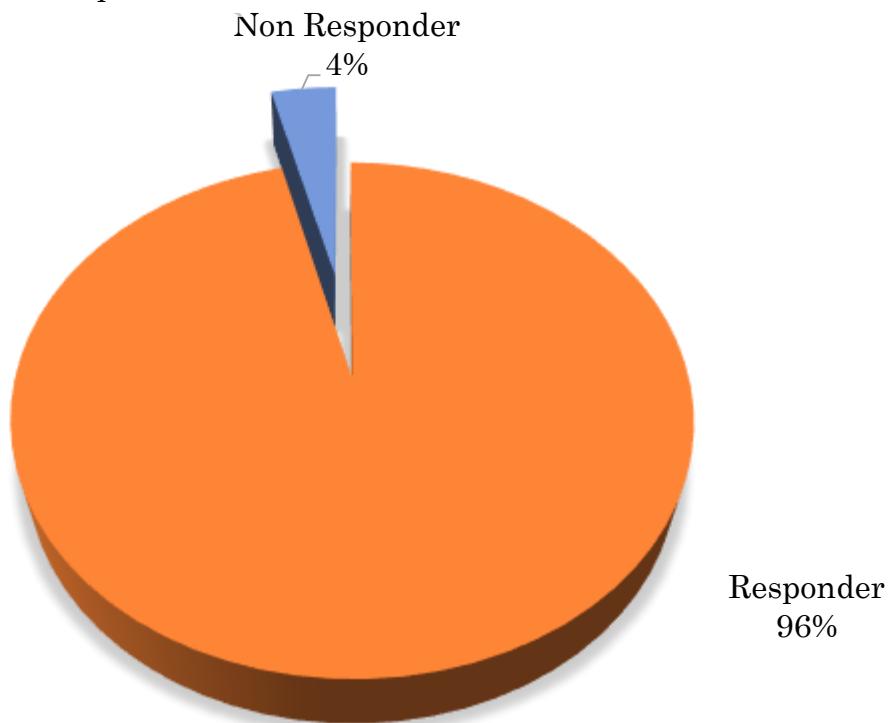


EXTENT OF PROCEDURE

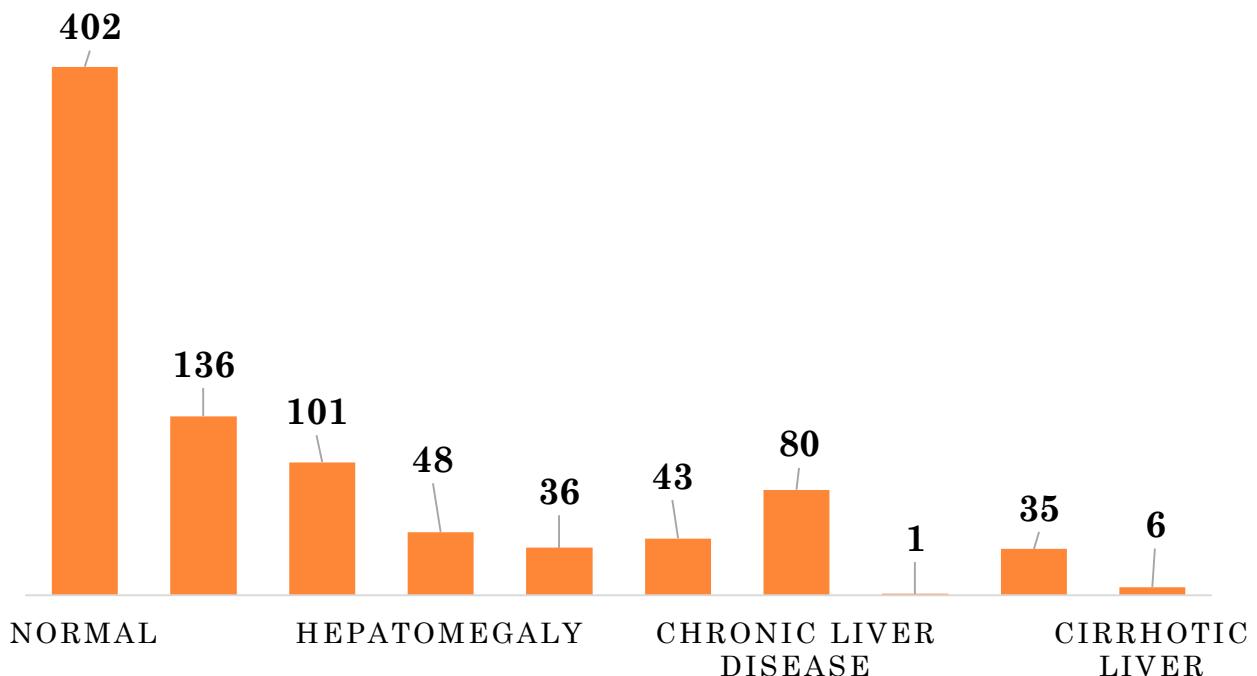


RESPONDER, NON RESPONDER

■ Responder ■ Non Responder



USG

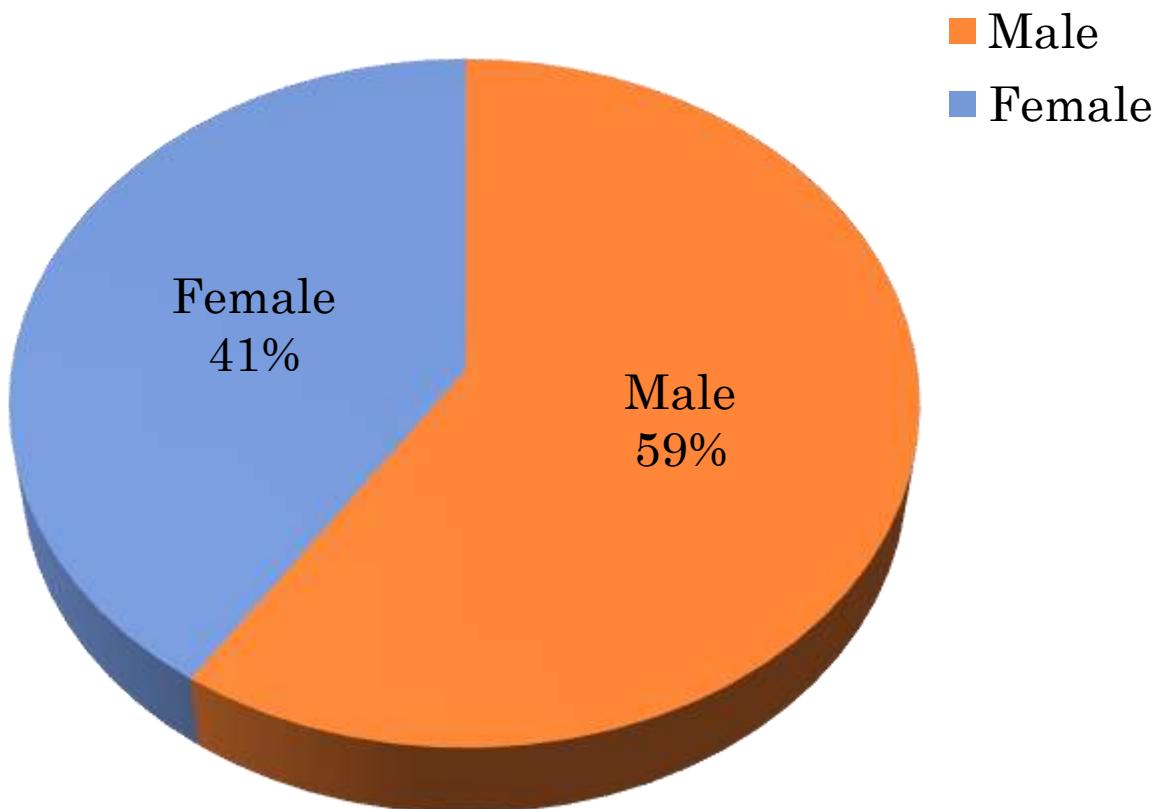


2022

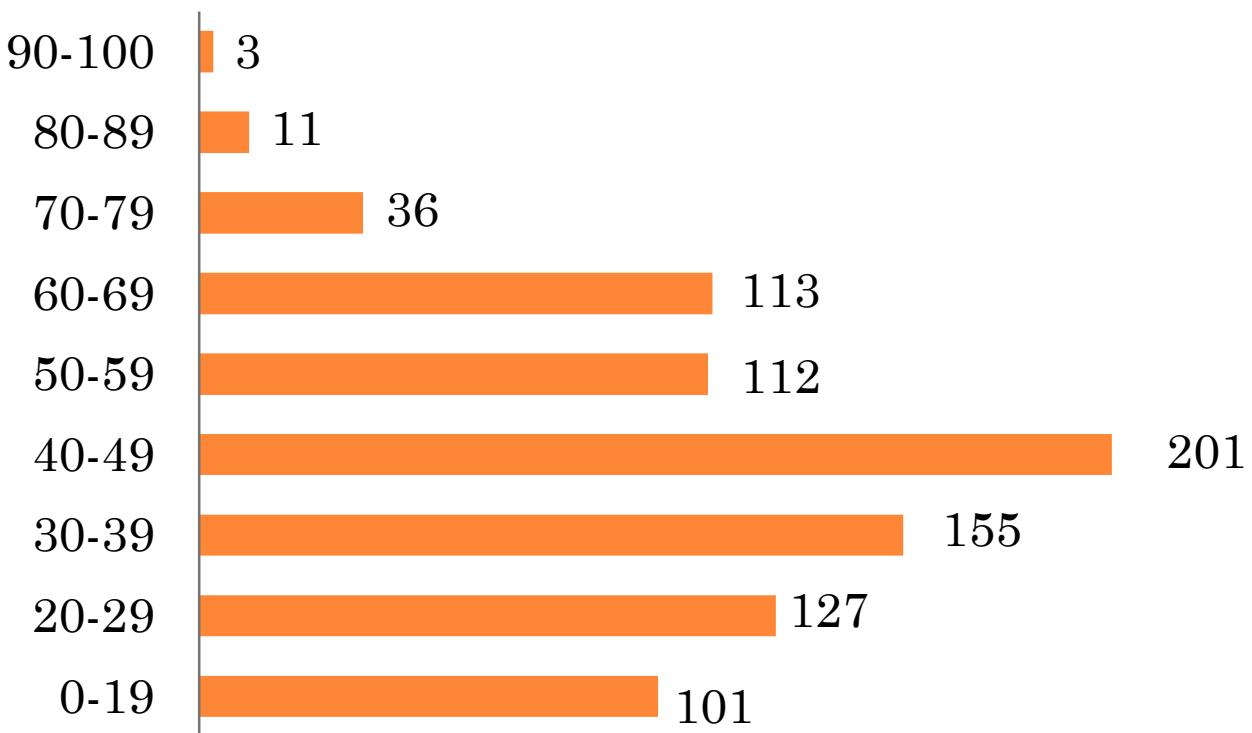
TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

| | |
|----------------------|-----|
| Total No of Patients | 859 |
| Male | 510 |
| Female | 349 |

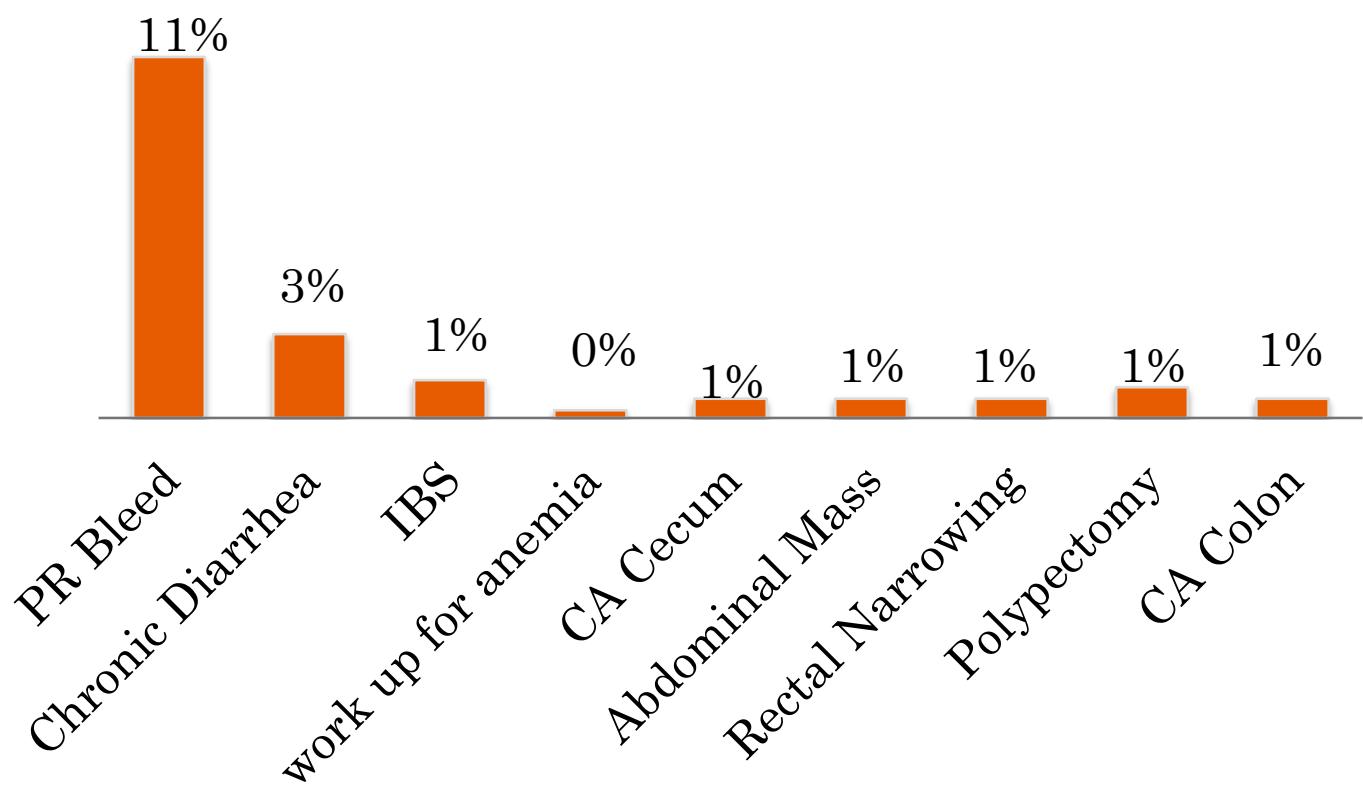
Gender



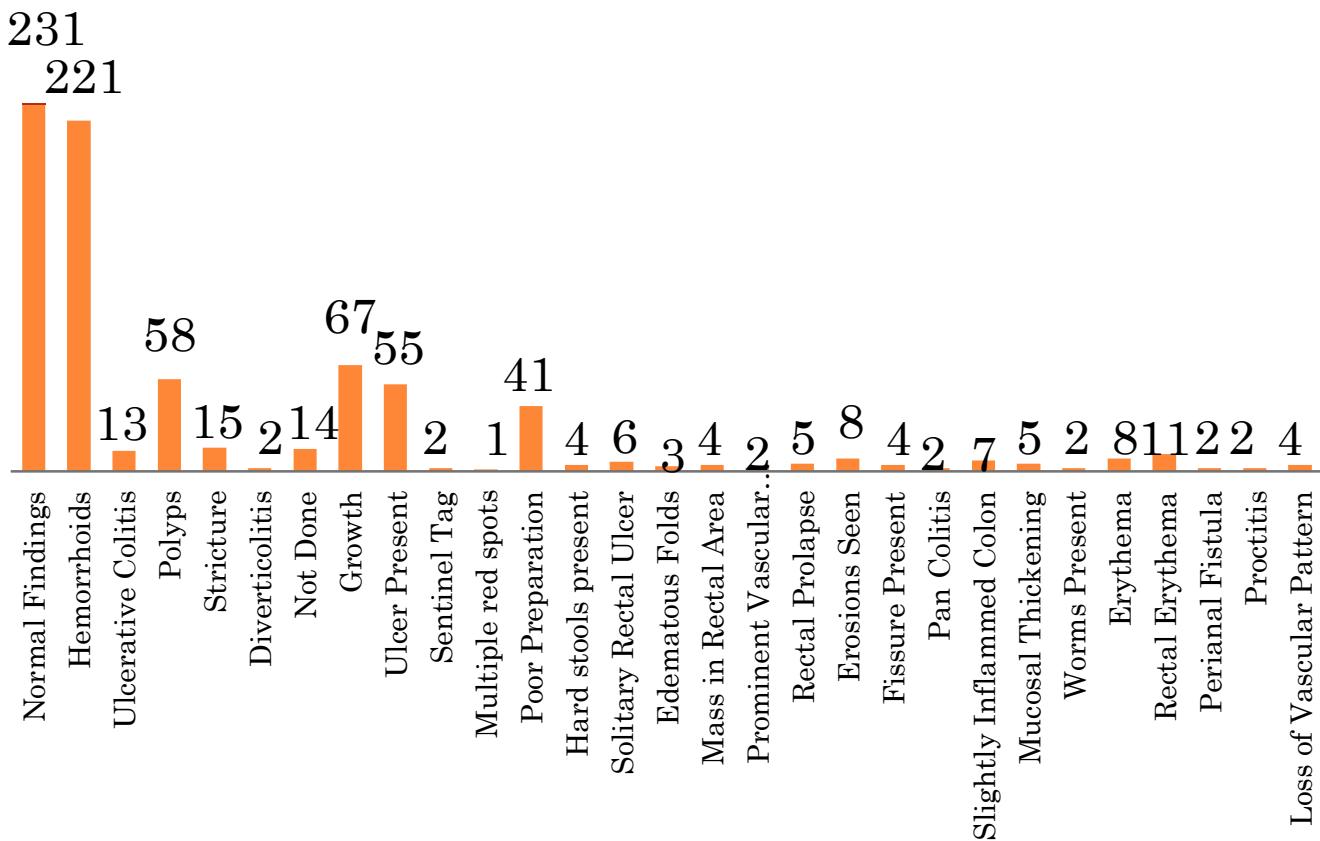
AGE WISE DISTRIBUTION



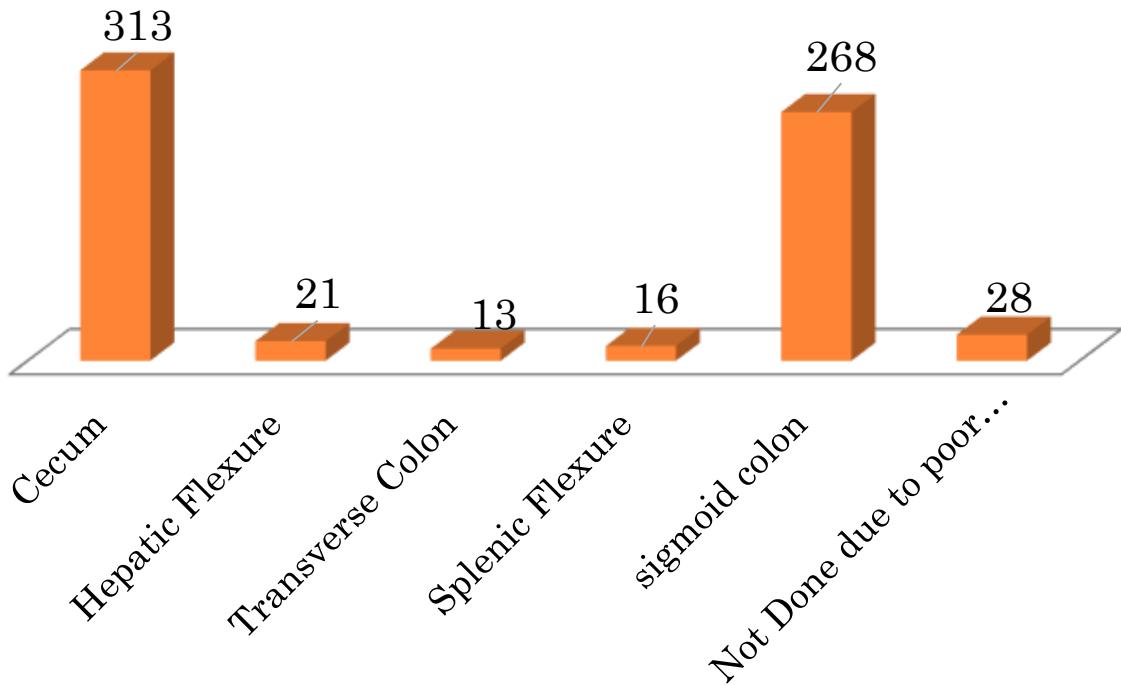
PRESENTING COMPLAINTS



COLONOSCOPY FINDINGS

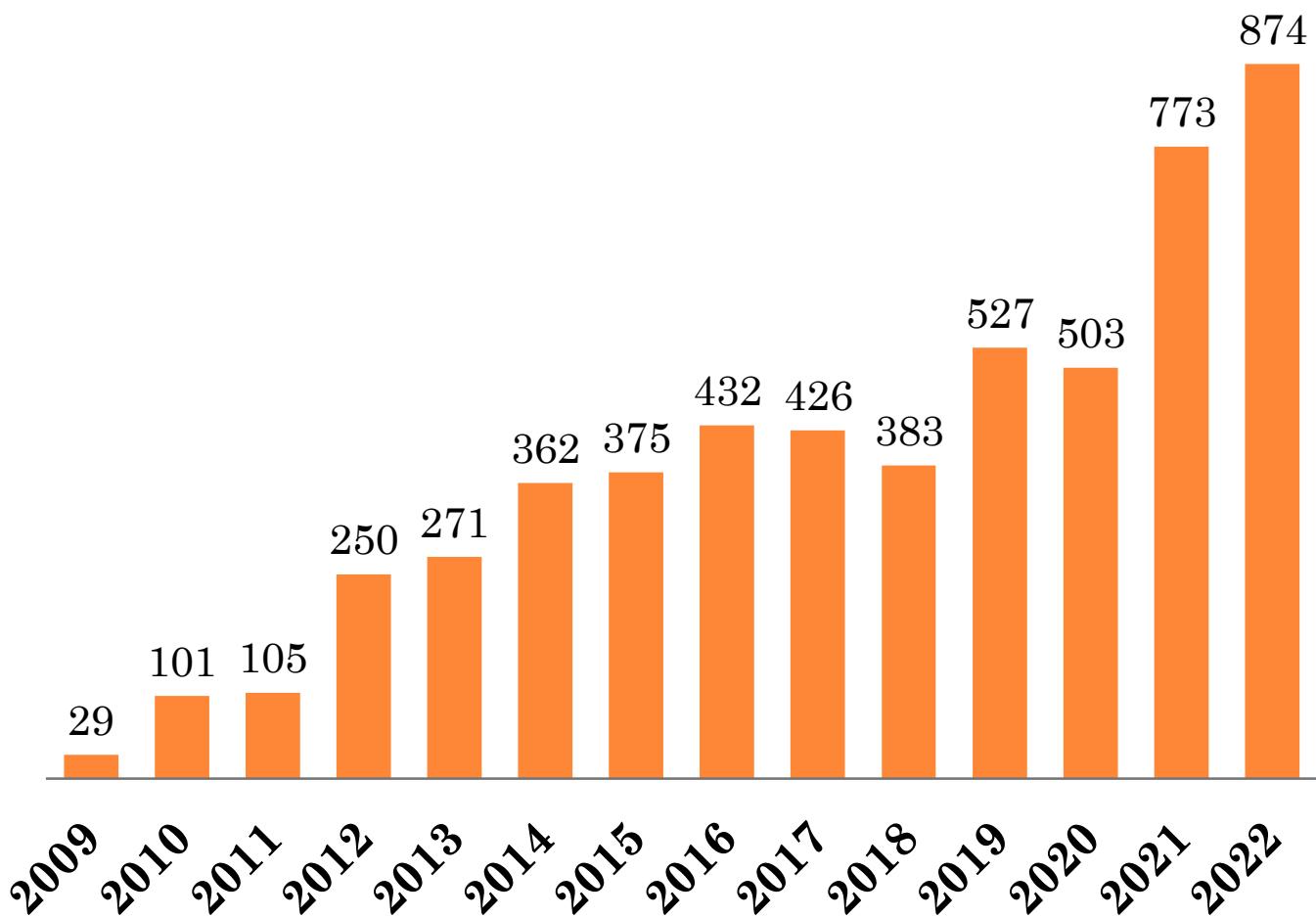


EXTENT OF PROCEDURE



ERCP Audit

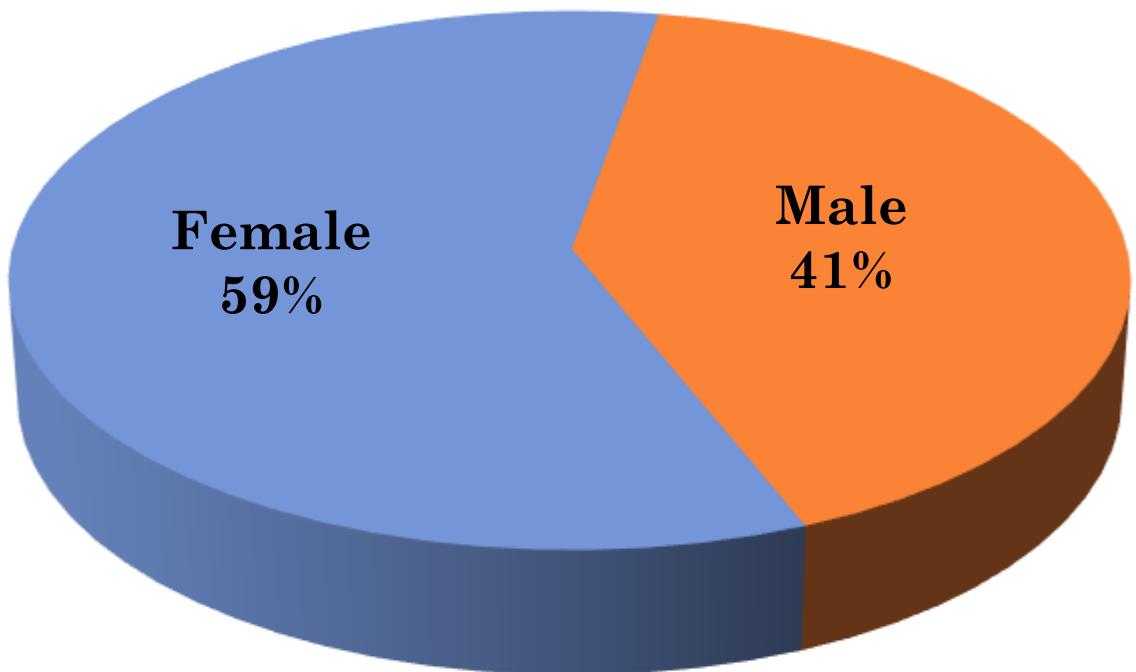
ERCP developed in 1960 as a pancreaticobiliary diagnostic procedure. ERCP has recently evolved as a therapeutic procedure only. Our center is now performing an average of 700-800 procedures per year. Despite COVID 503 patients were entertained during 2020. The number subsequently rise to 773 in 2021 and 874 in 2022 respectively. Commonest indication is choledocholithiasis, stenting was performed in 137 patient with 10 FR x 10cm plastic stent is the commonest stand used at our center this year. Overall success rate was 88% and in 70% of the cases the cannulation time was <3 minutes.



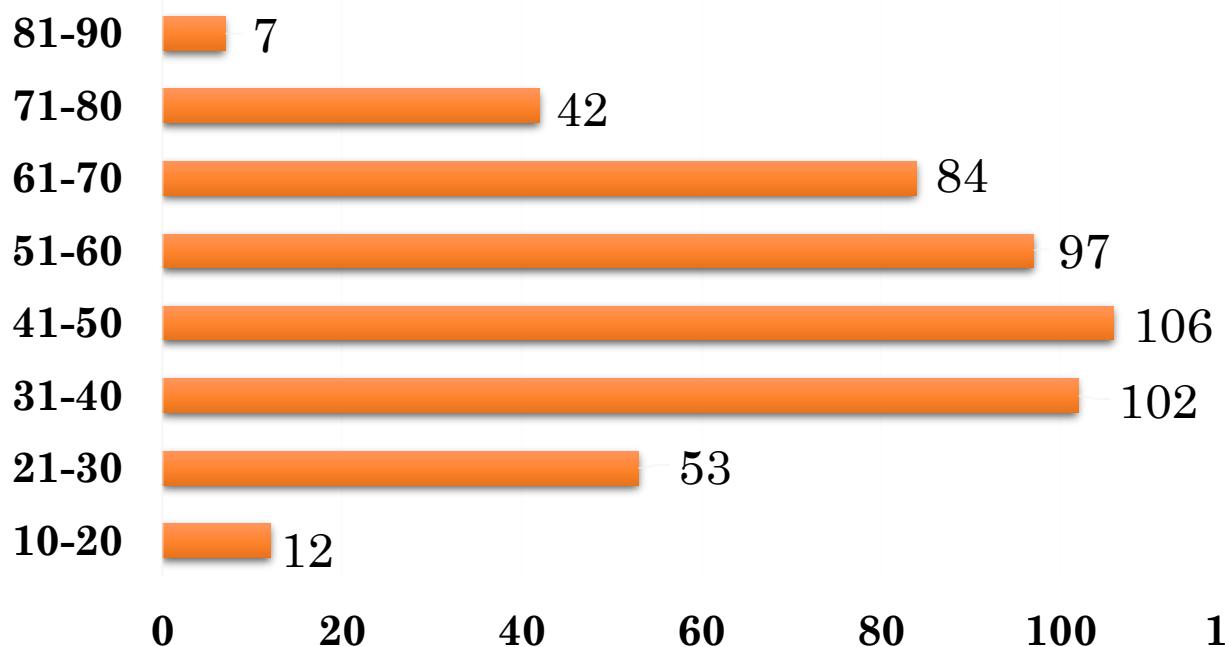
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

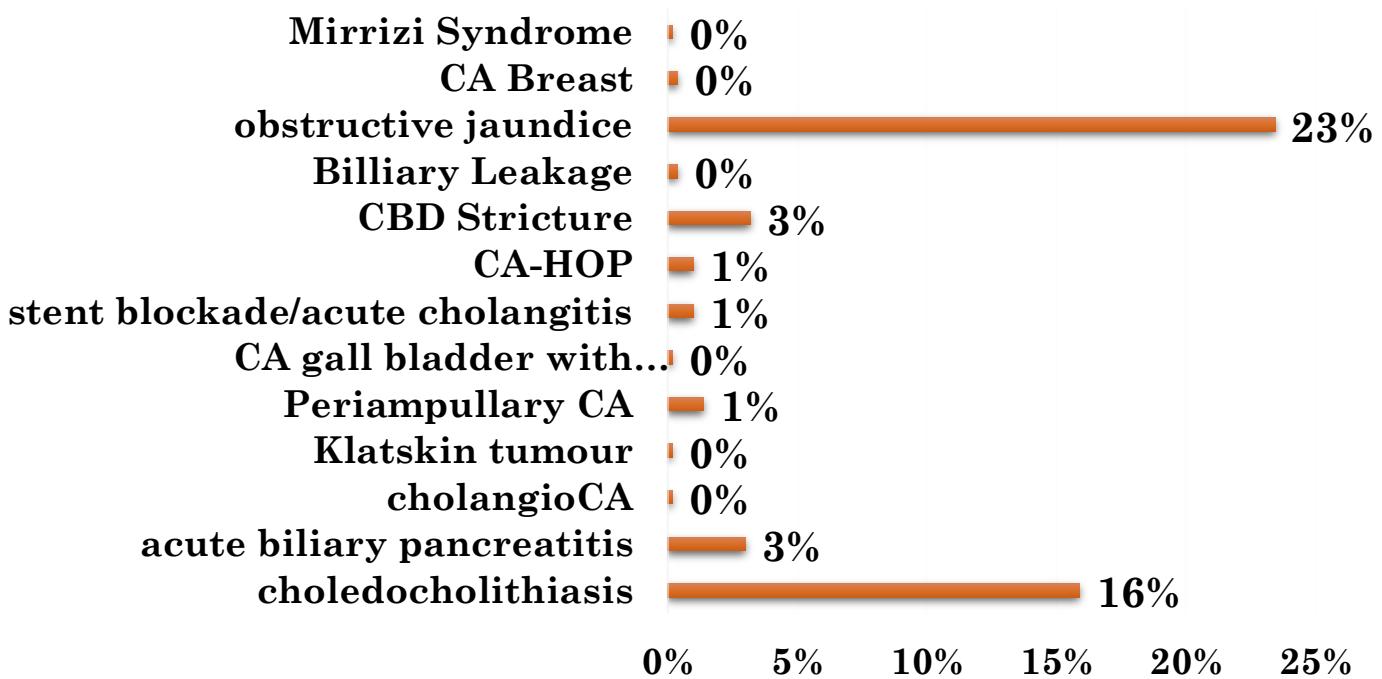
| | |
|-----------------------|------------|
| Total Patient: | 503 |
| Male | 207 |
| Female | 296 |



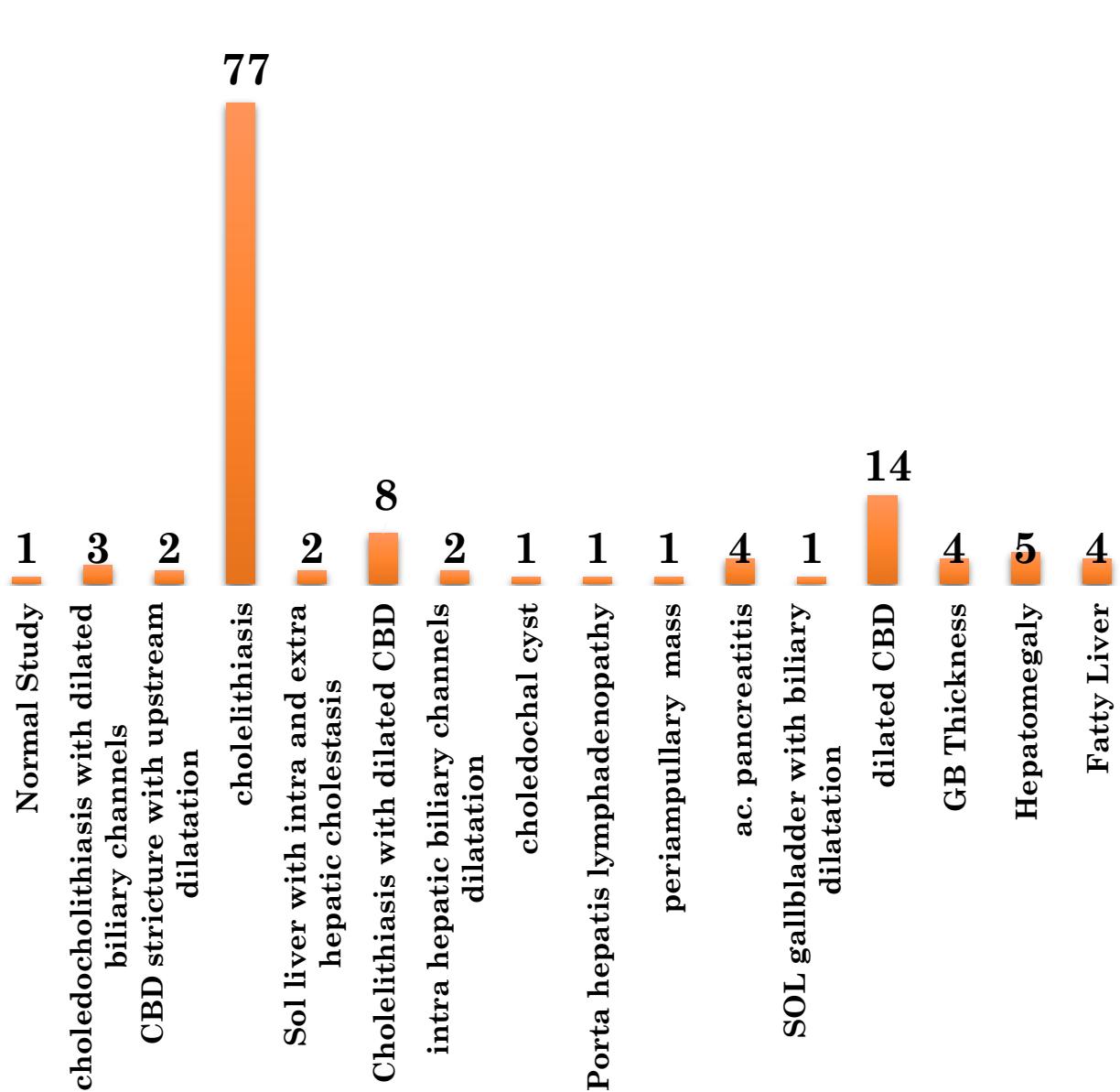
AGE WISE DISTRIBUTION

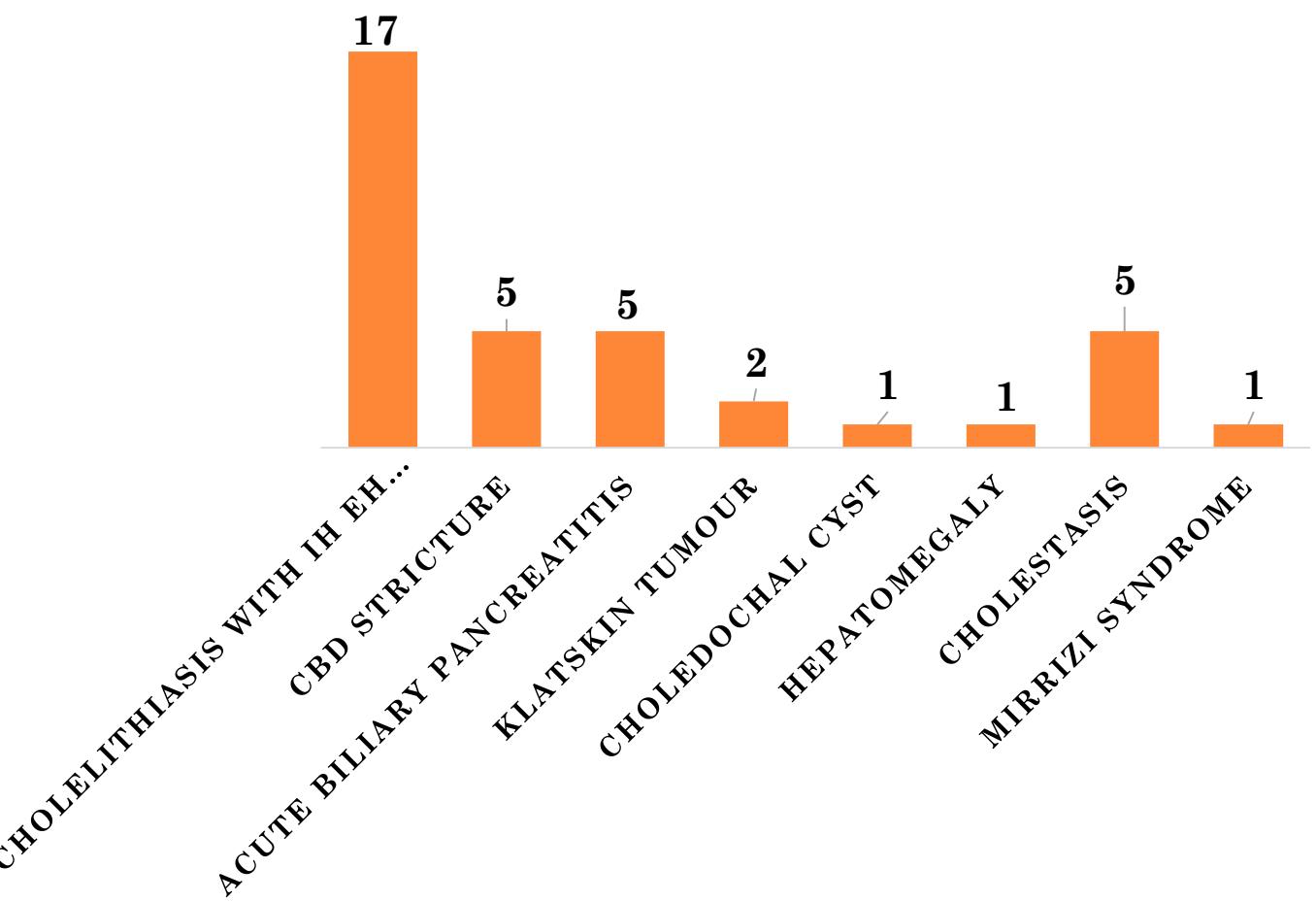


ERCP INDICATION

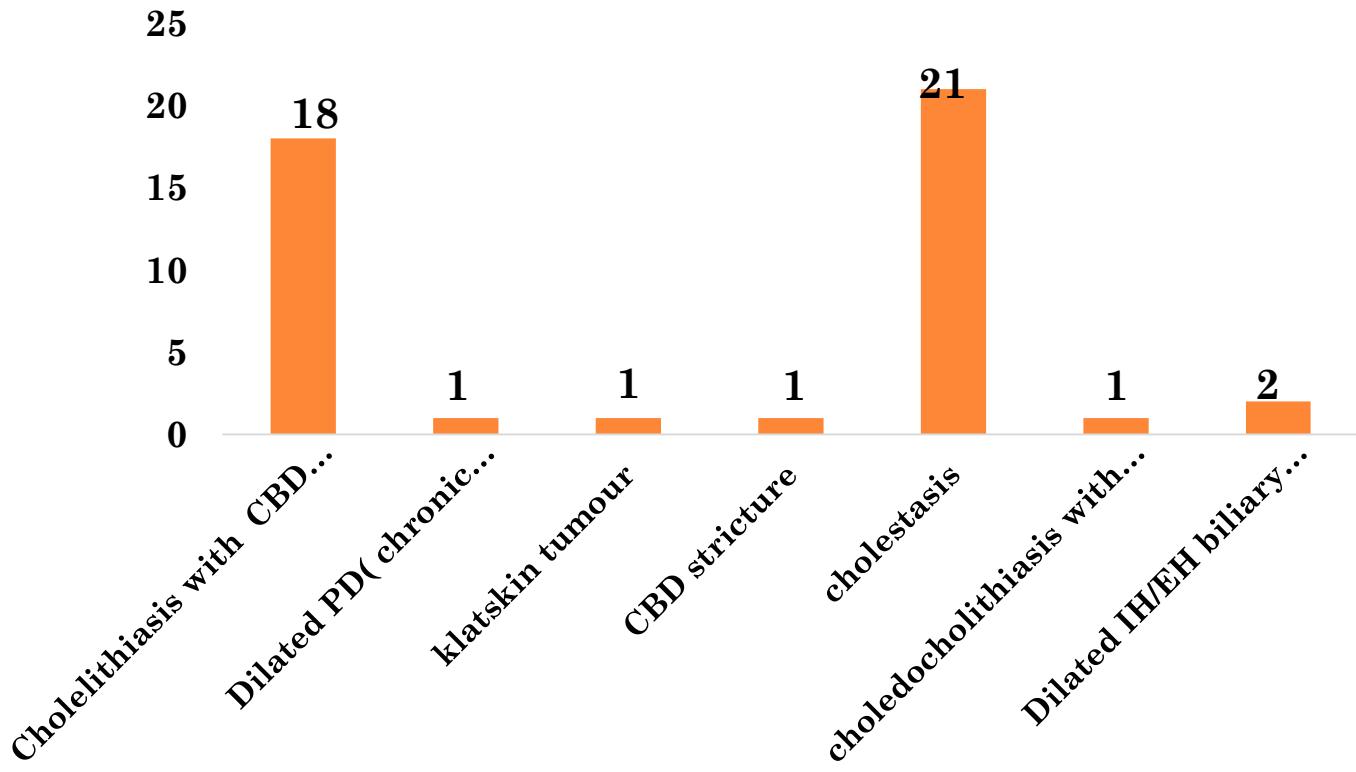


USG FINDINGS

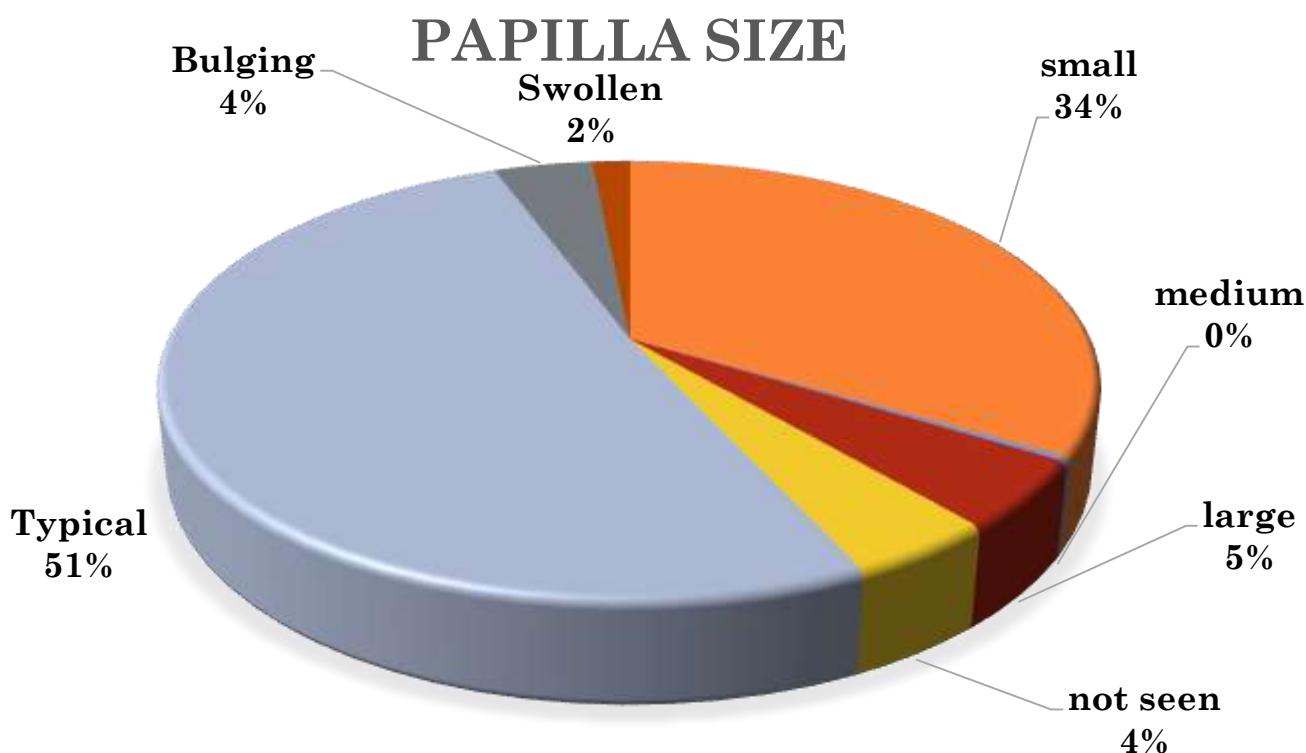
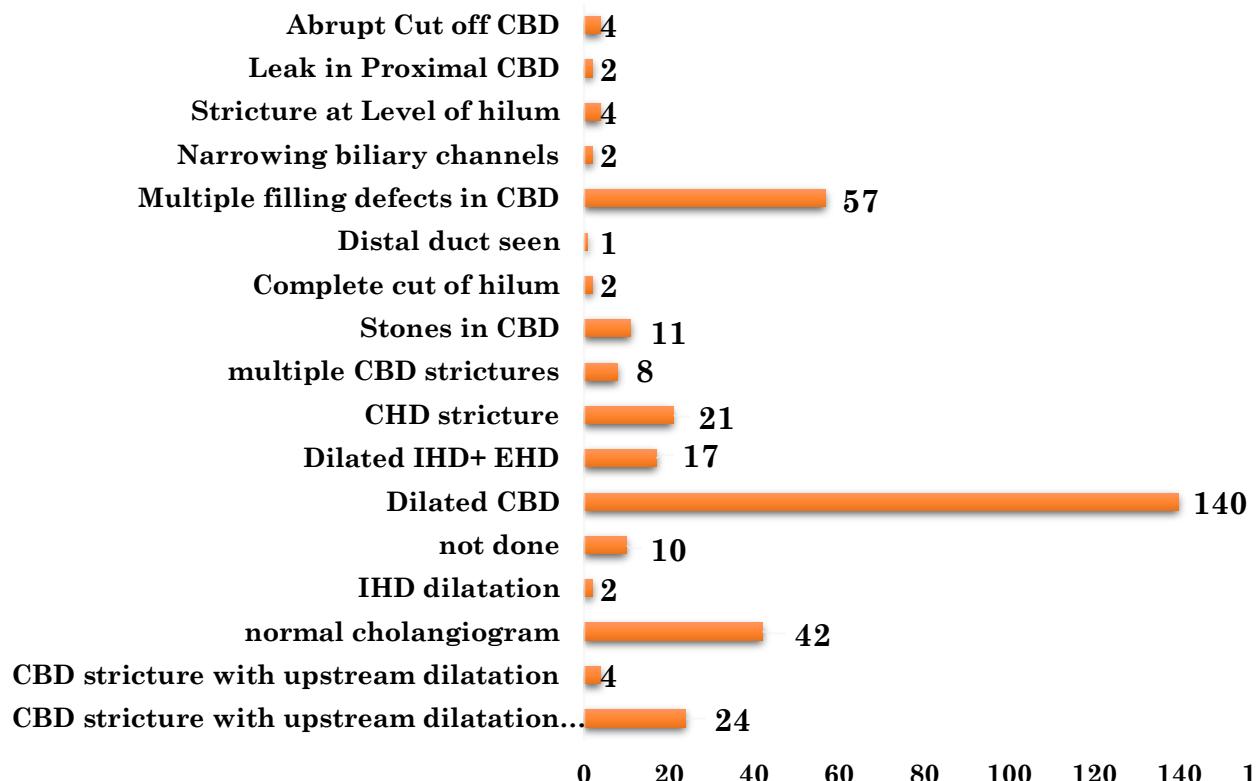




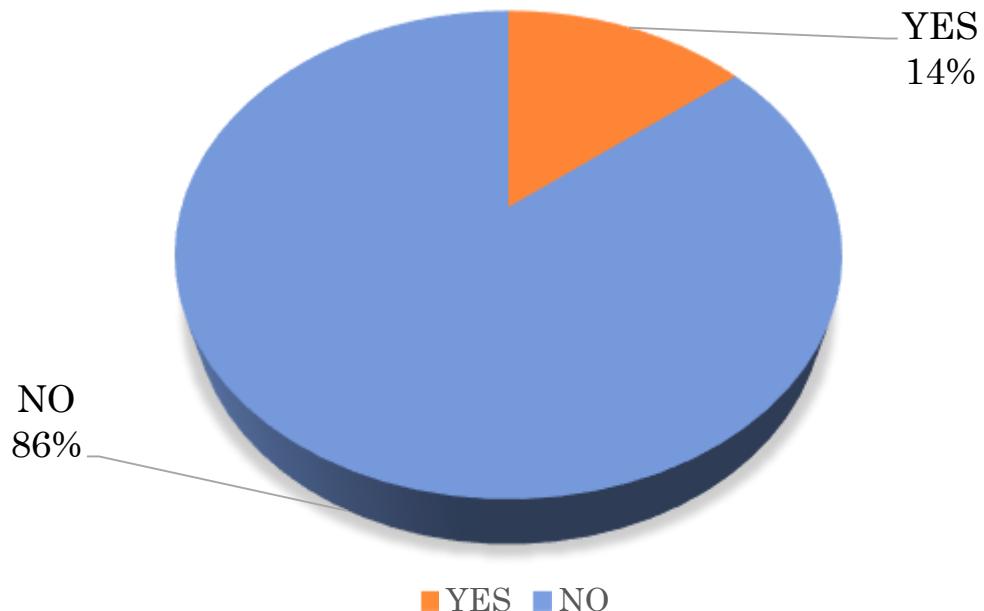
MRCP FINDINGS



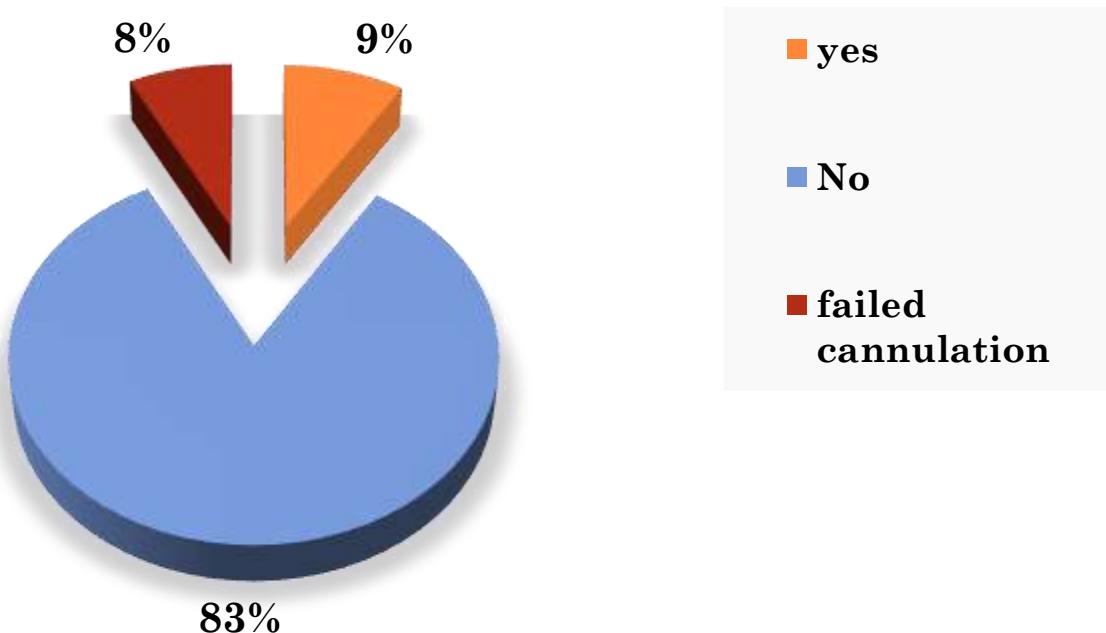
CHOLANGIOGRAM FINDINGS



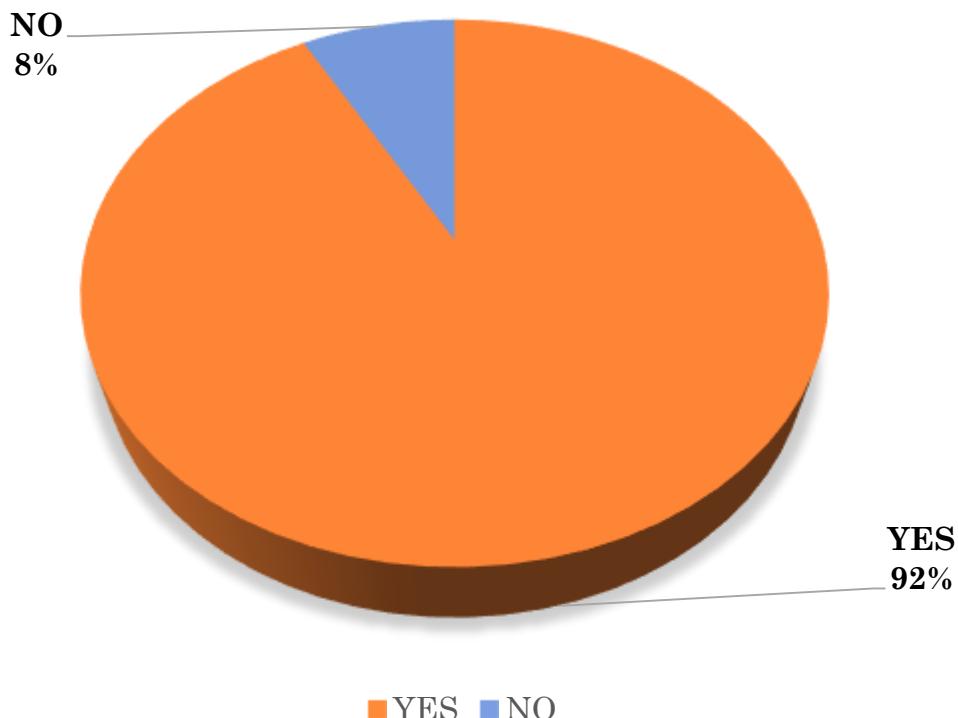
BILE FLOW PRESENT



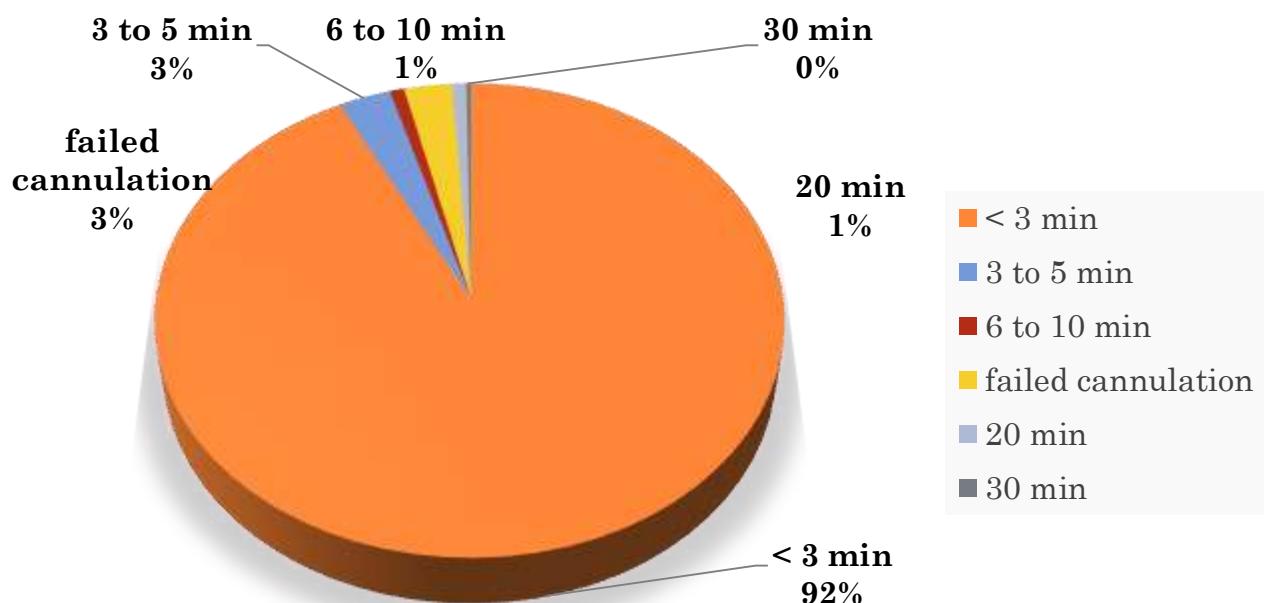
Difficult Cannulation



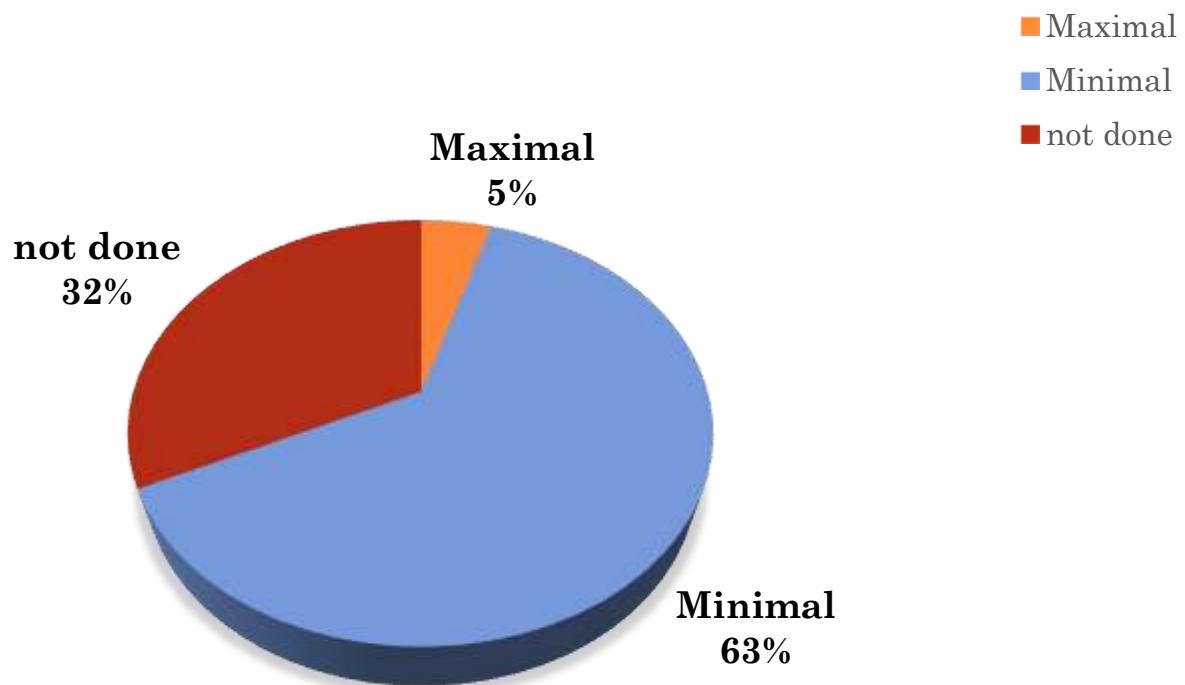
CANNULATION SUCCESSFUL



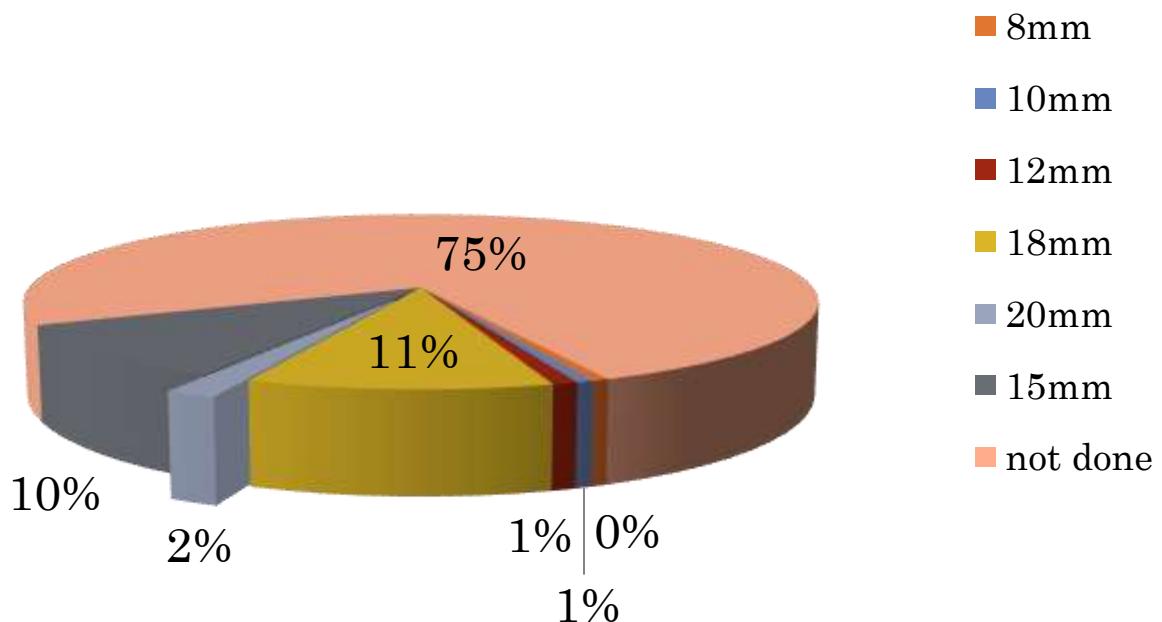
CANNULATION TIME IN MINUTES



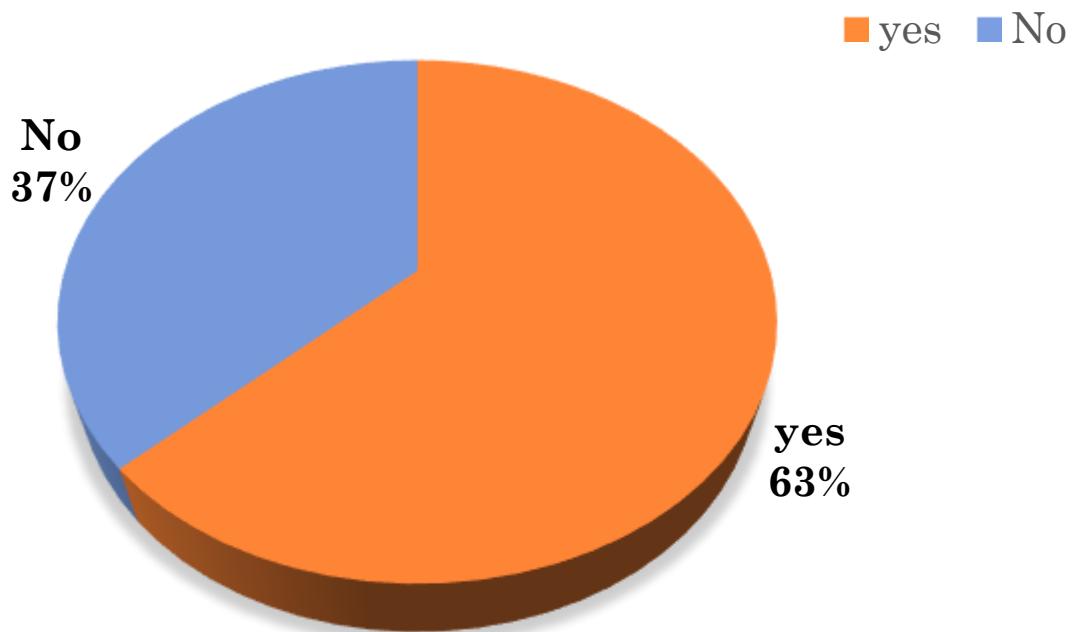
SPHINCTEROTOMY



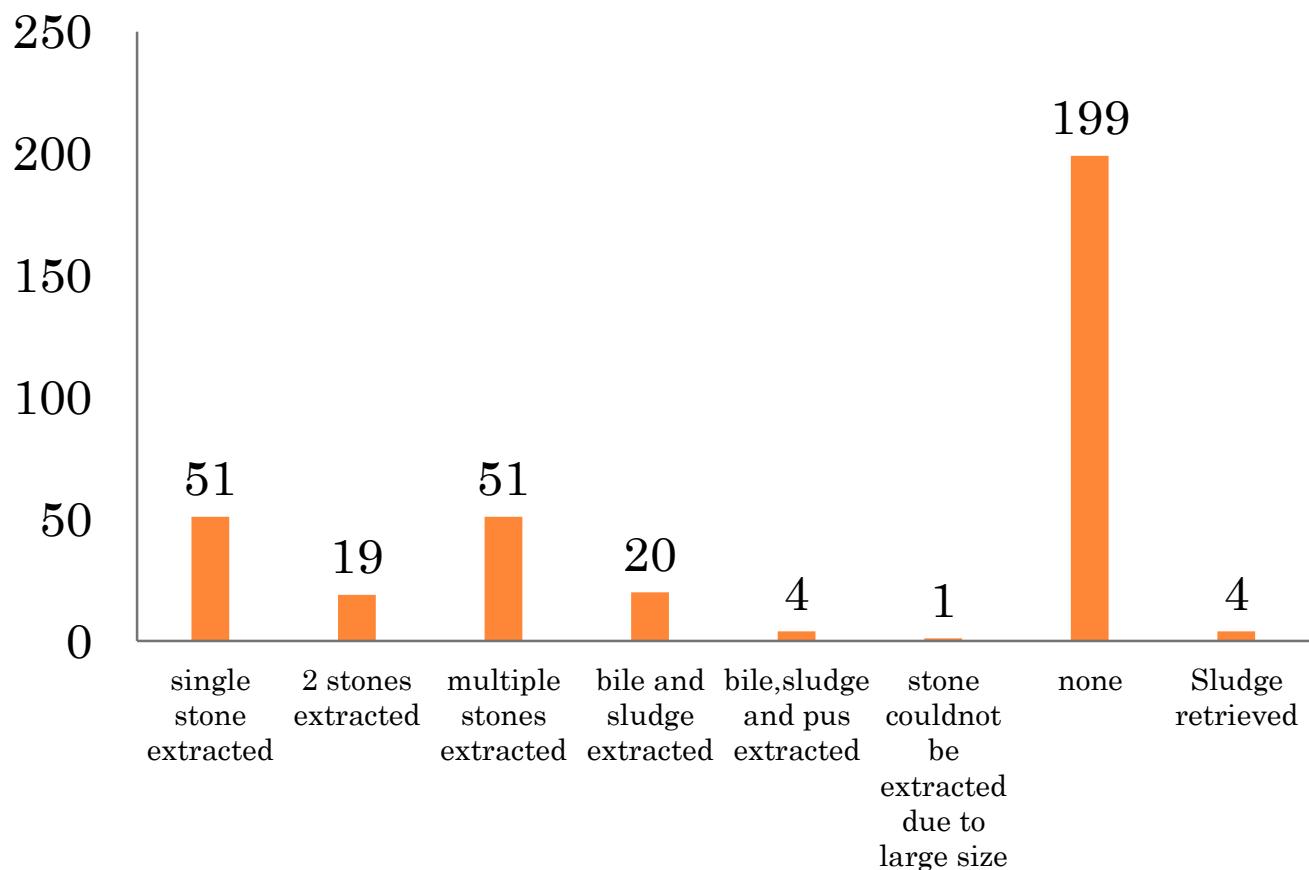
Balloon Dilation diameter



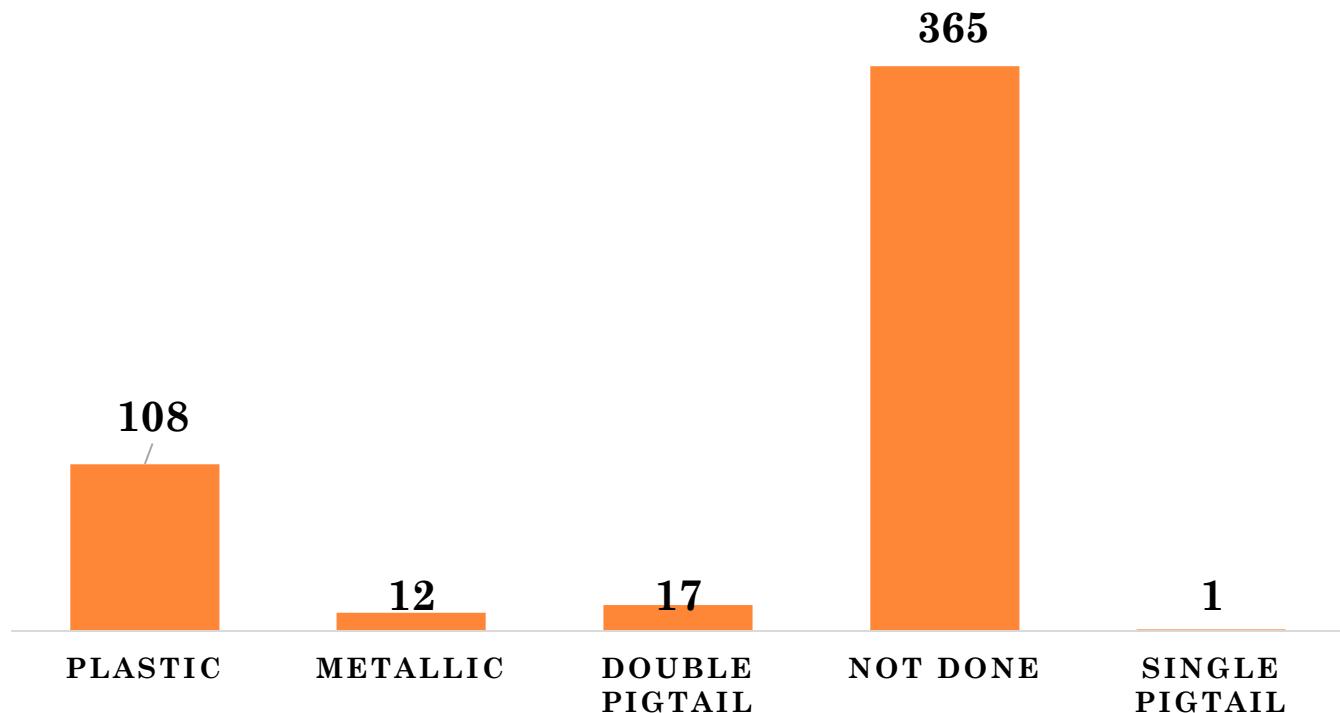
BALLOON SWEEP PERFORMED



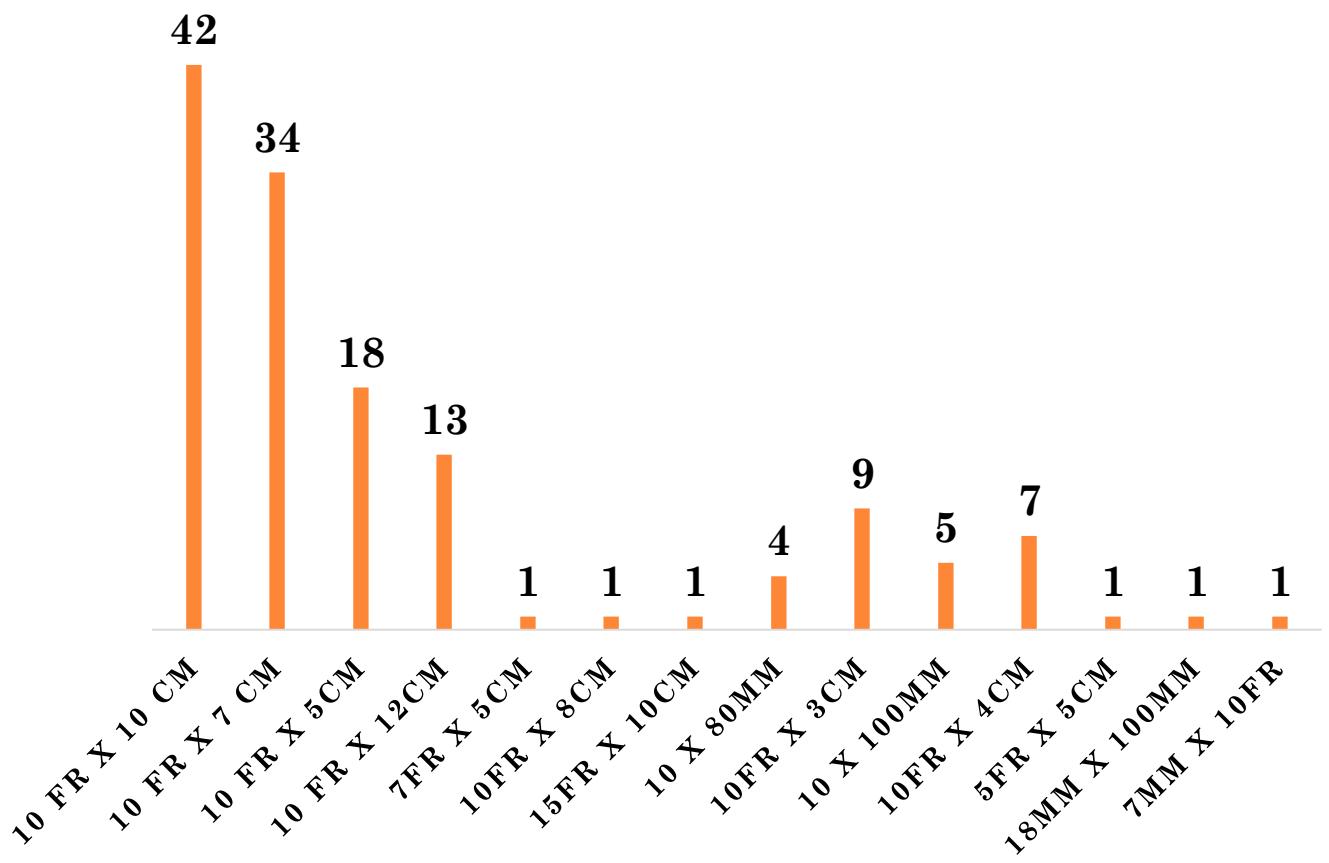
Stone or Sludge Extraction



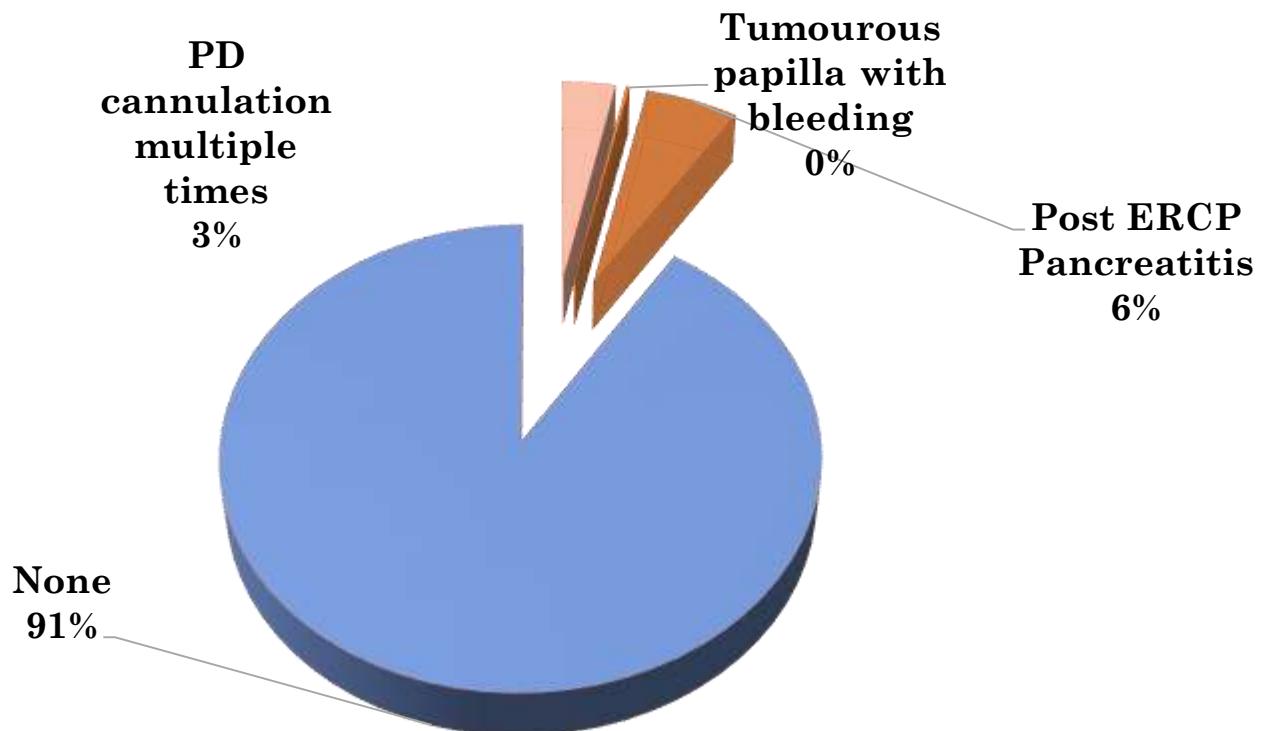
TYPE OF STENT



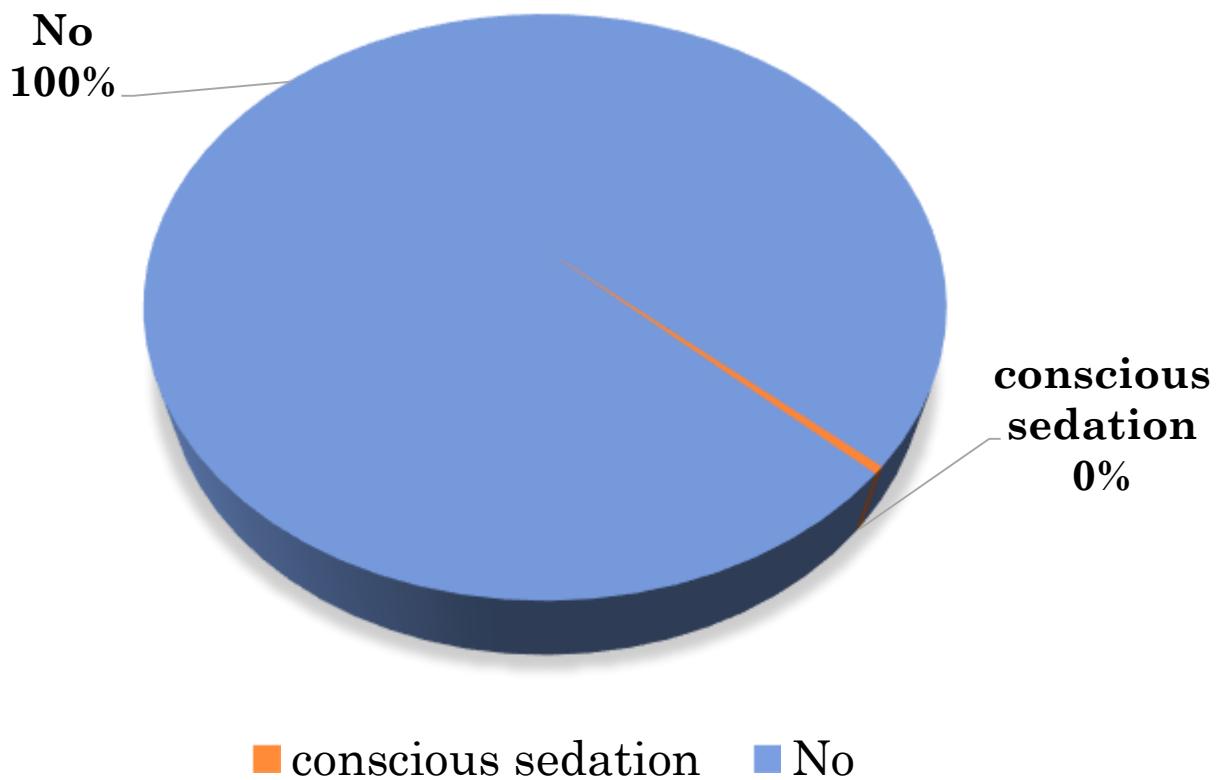
SIZE OF STENTS



COMPLICATION



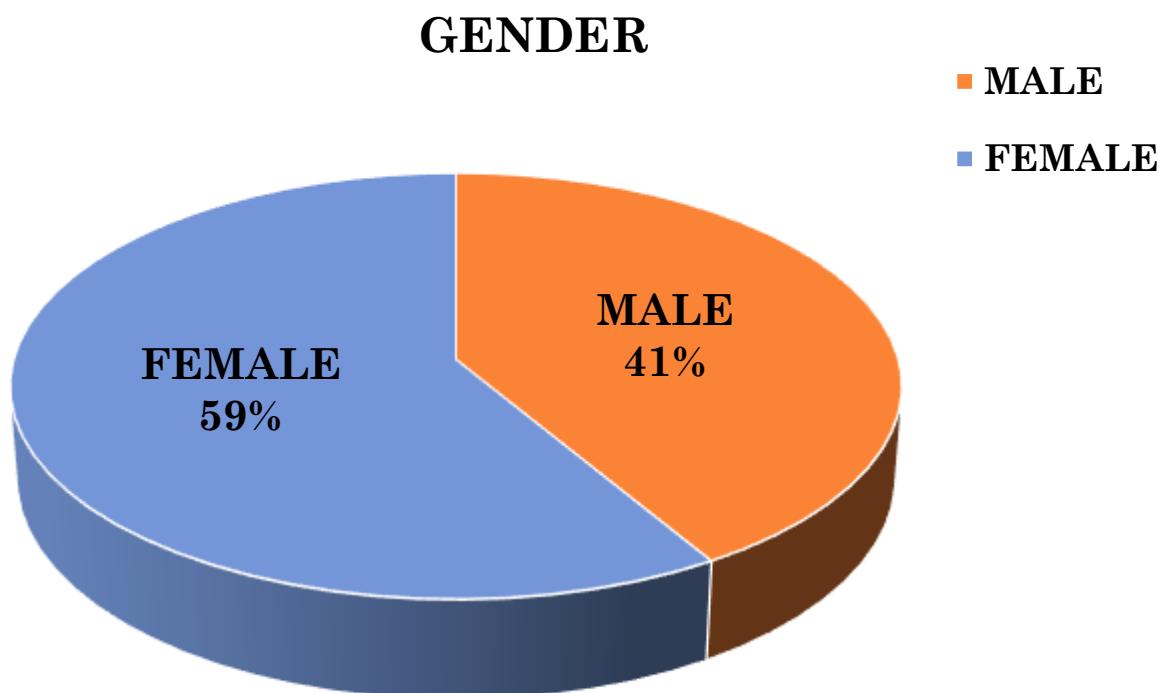
Sedation Type



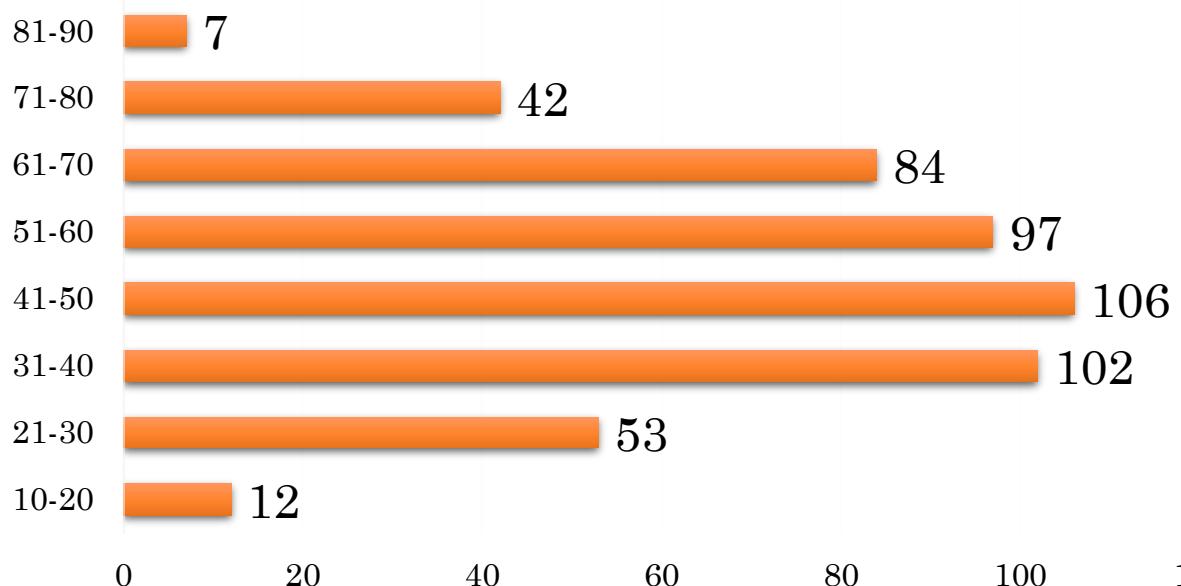
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

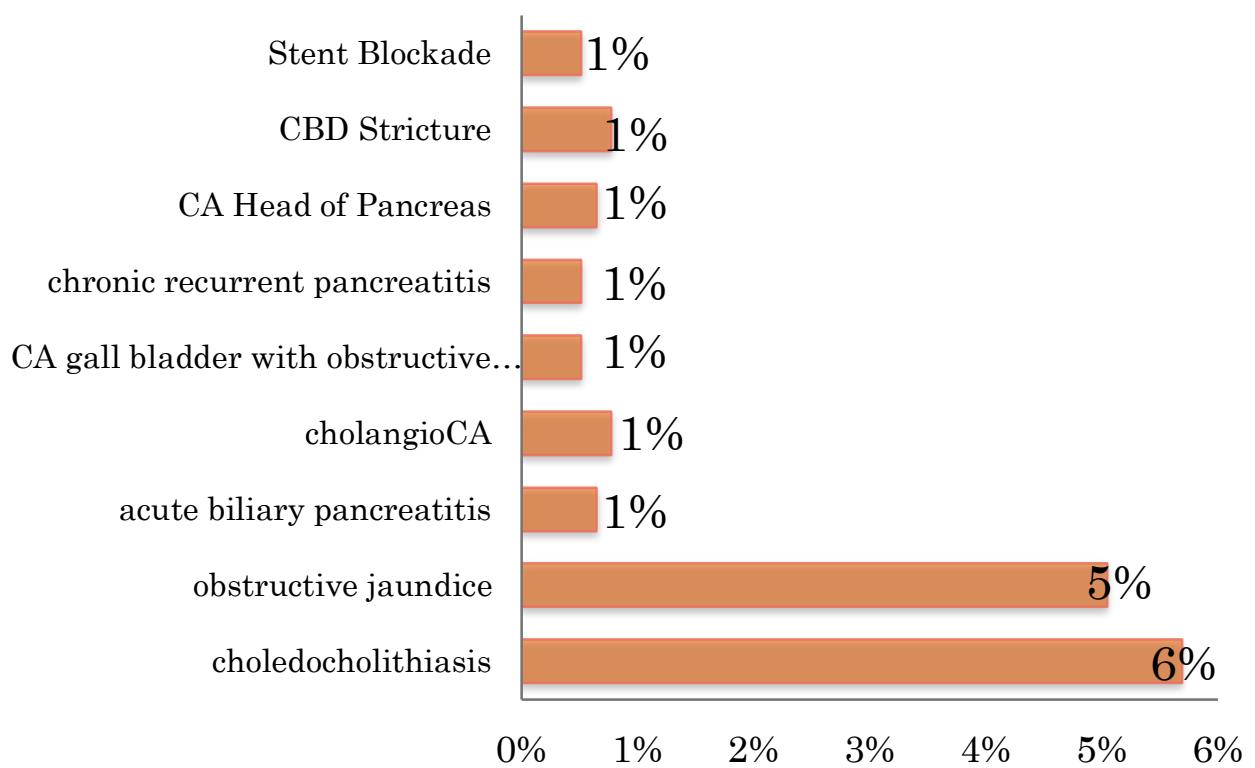
| | |
|----------------------|-----|
| Total No of Patients | 773 |
| Male | 320 |
| Female | 453 |



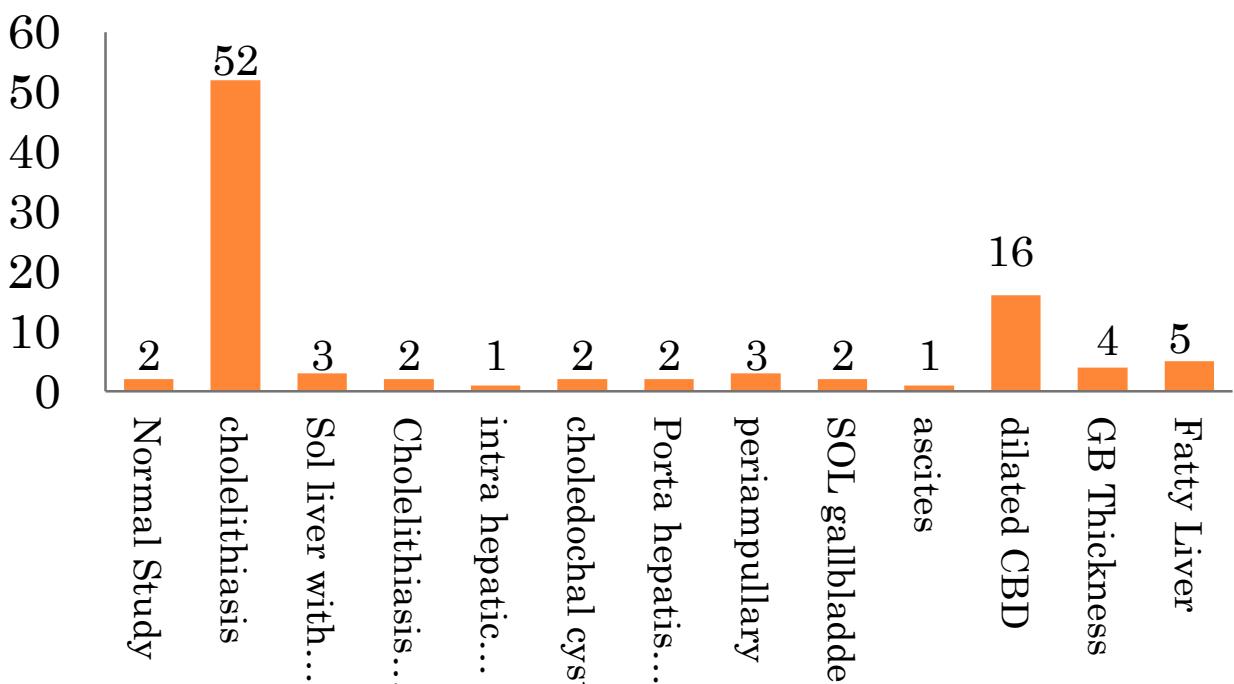
AGE WISE DISTRIBUTION



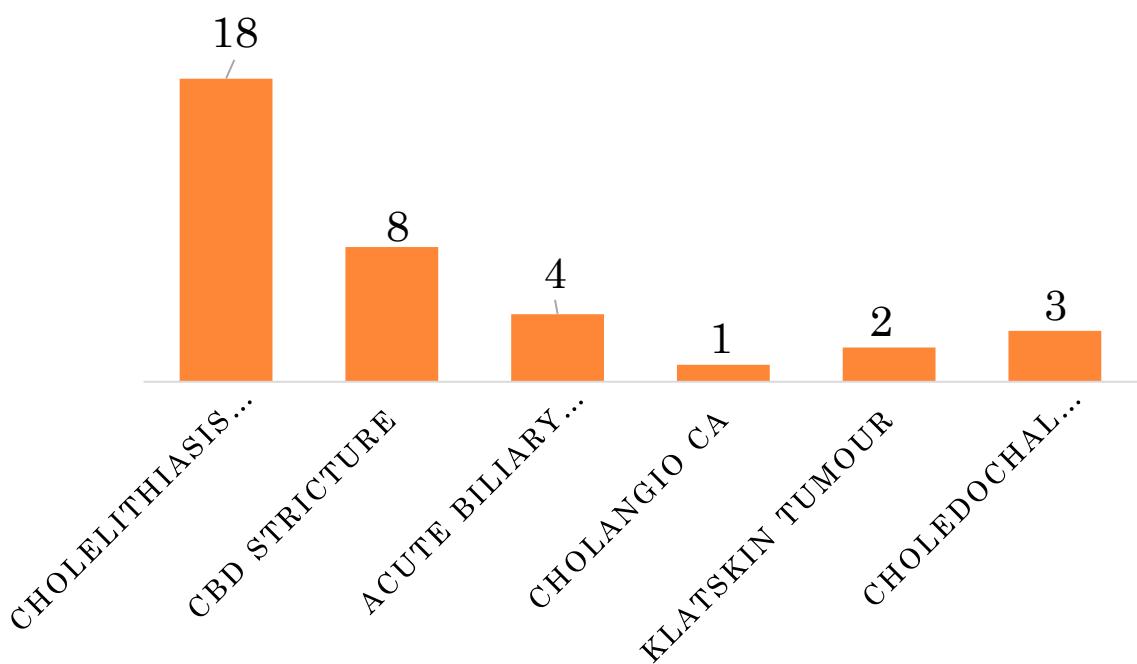
ERCP INDICATION



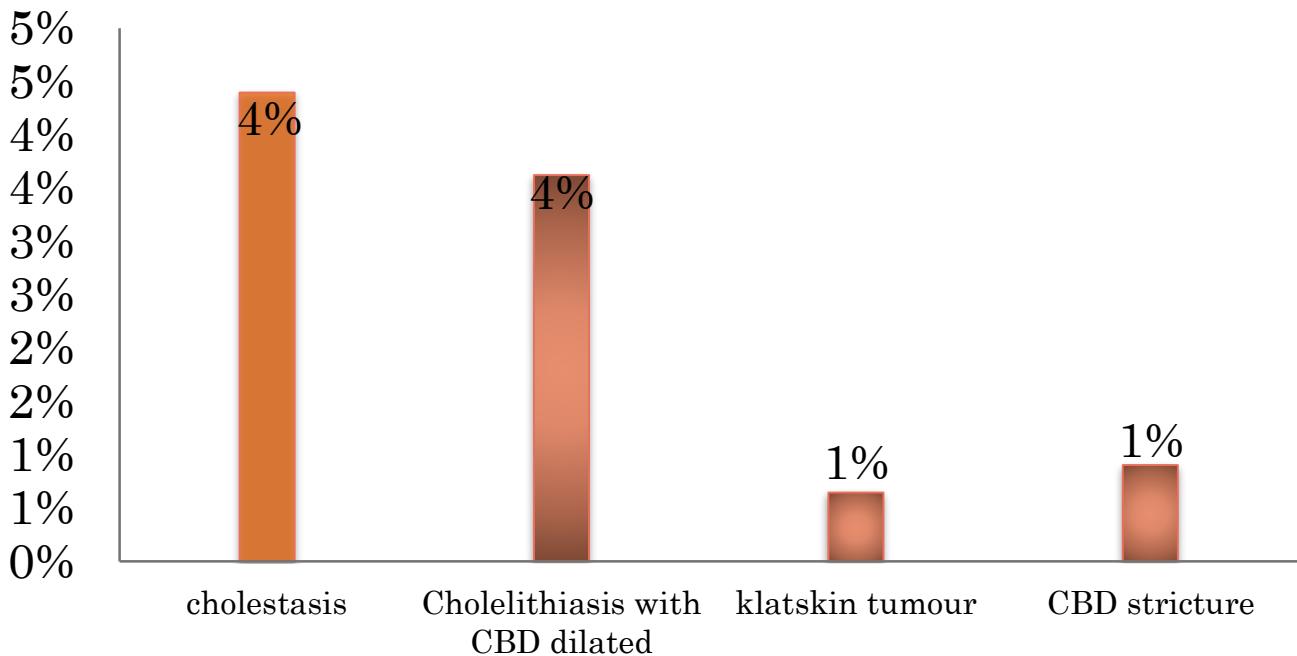
USG FINDINGS



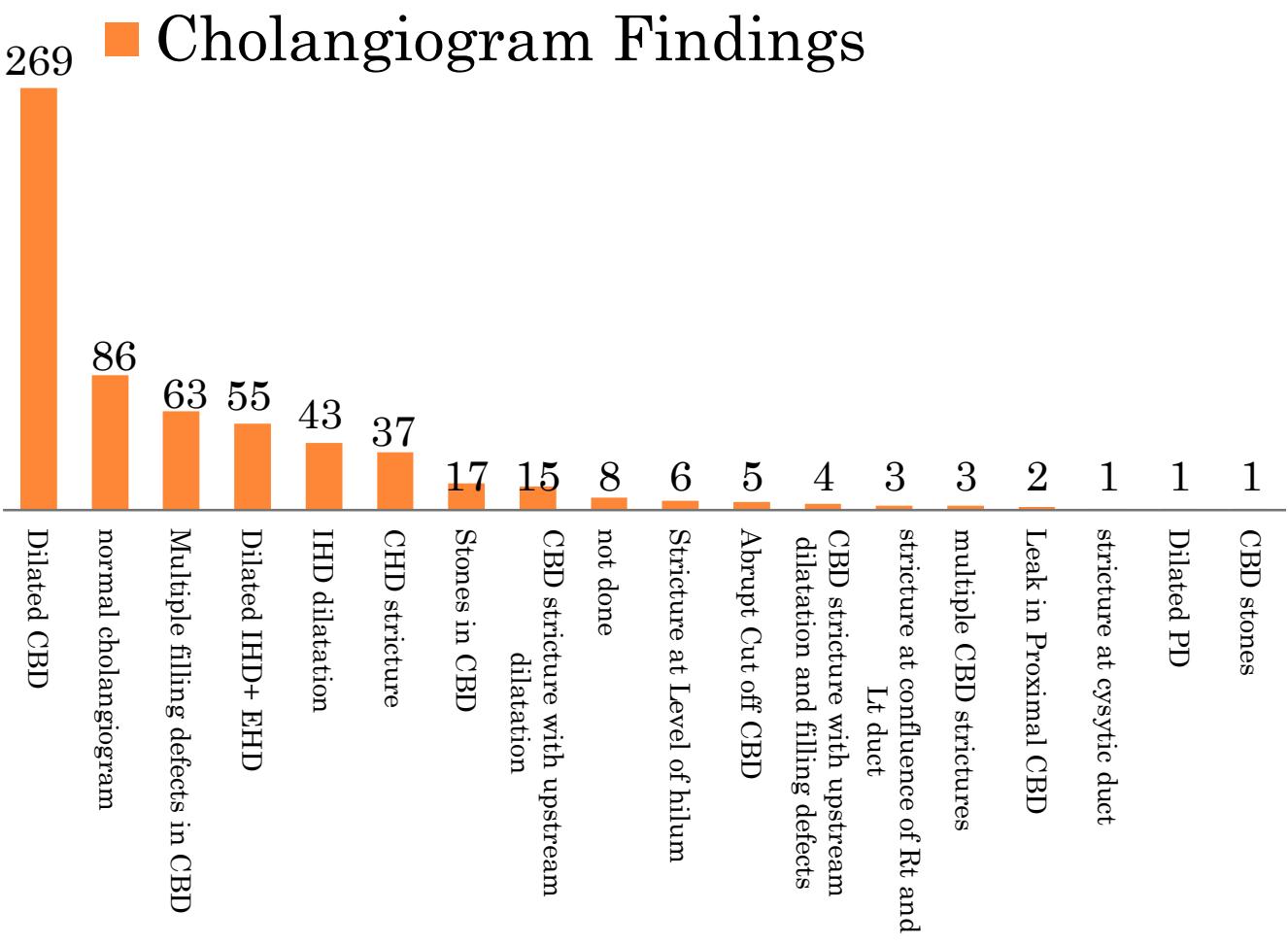
CT SCAN FINDINGS



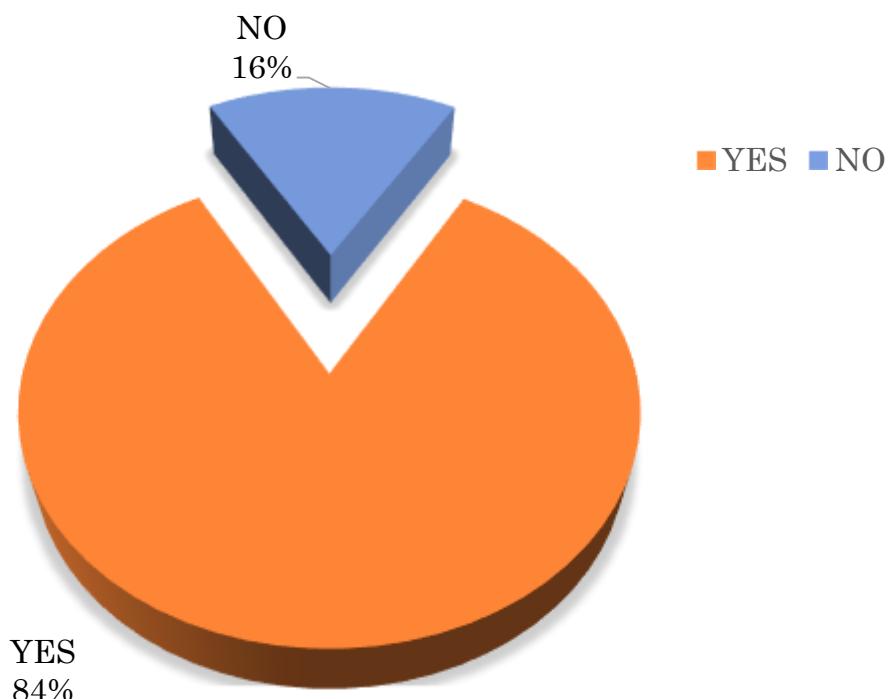
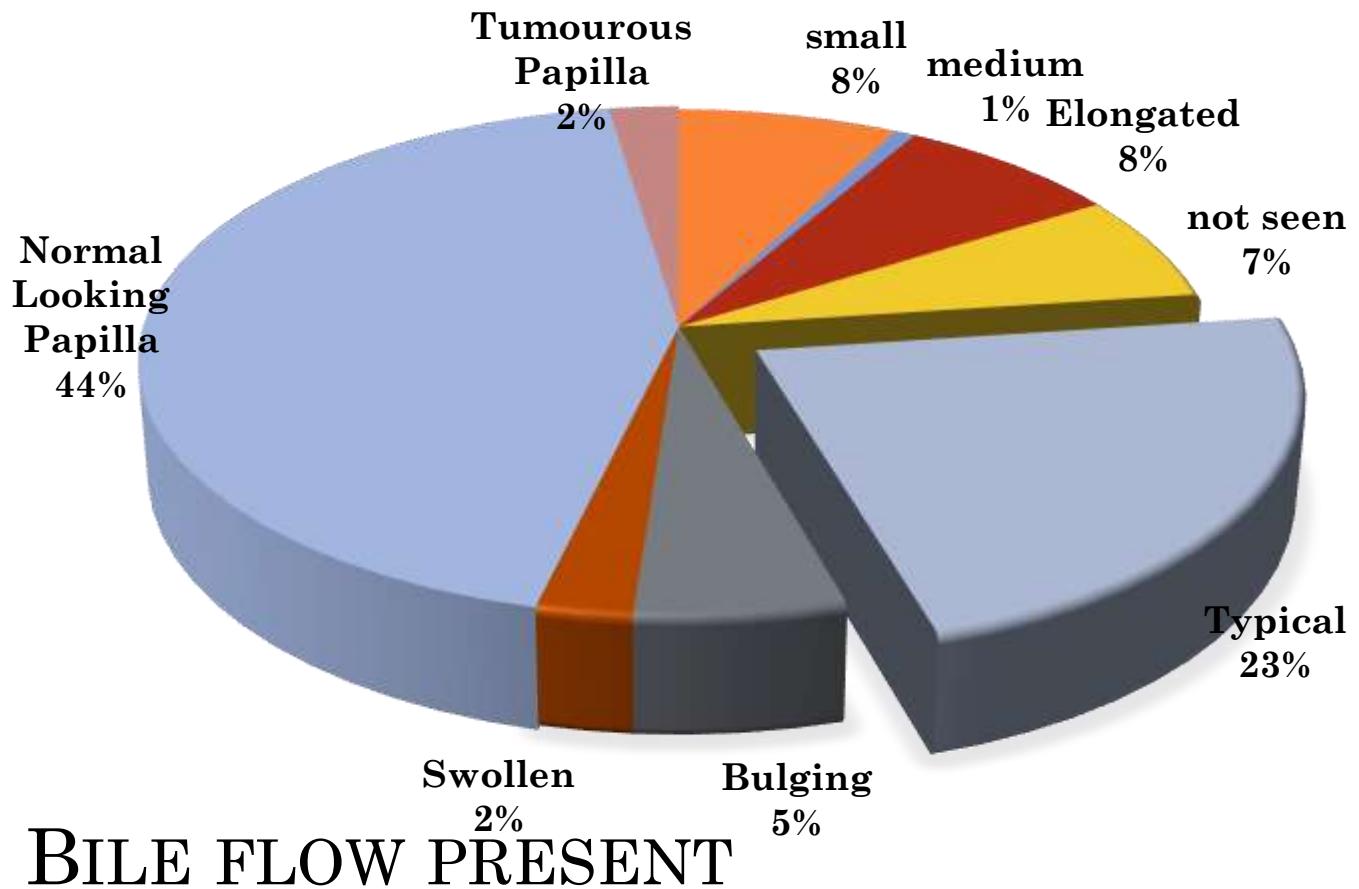
MRCP FINDINGS



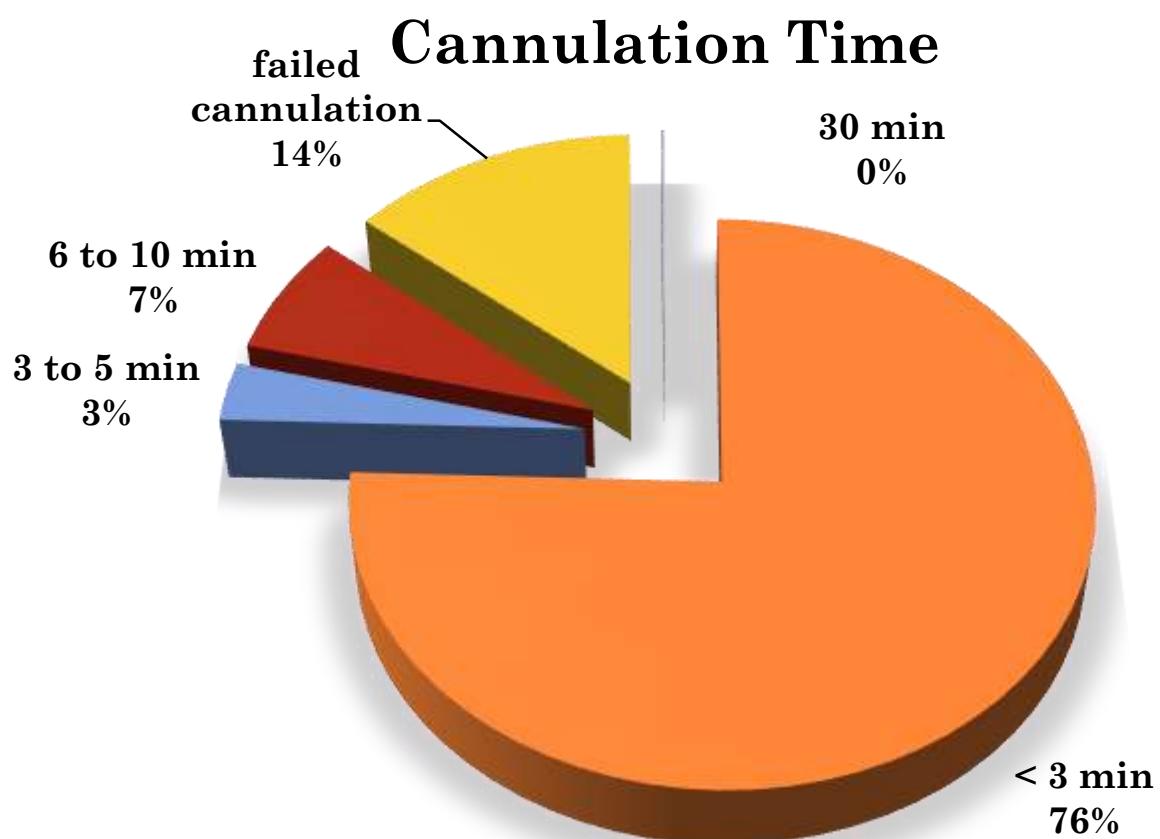
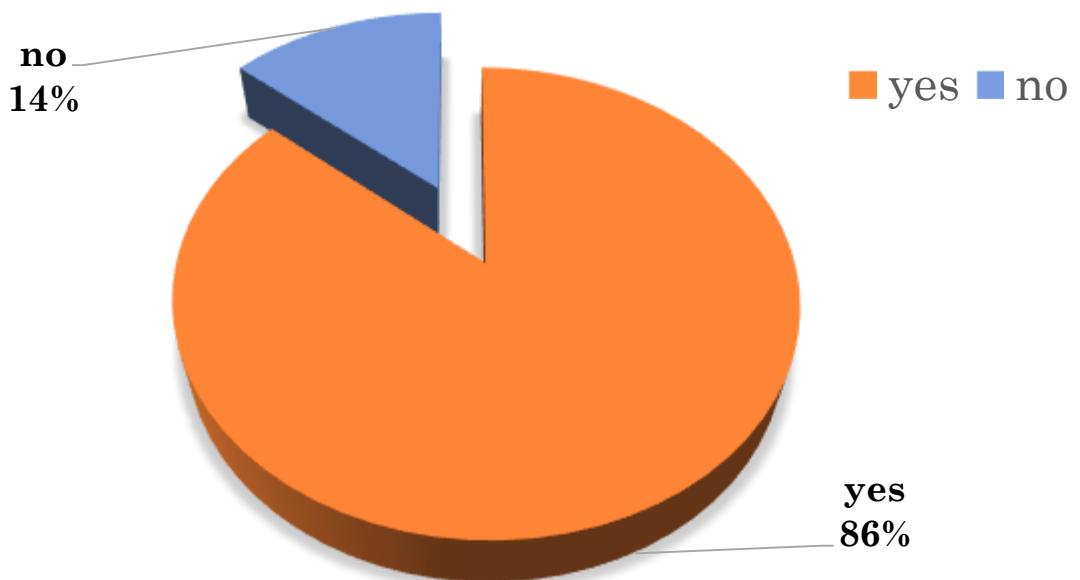
Cholangiogram Findings



TYPE OF PAPILLA

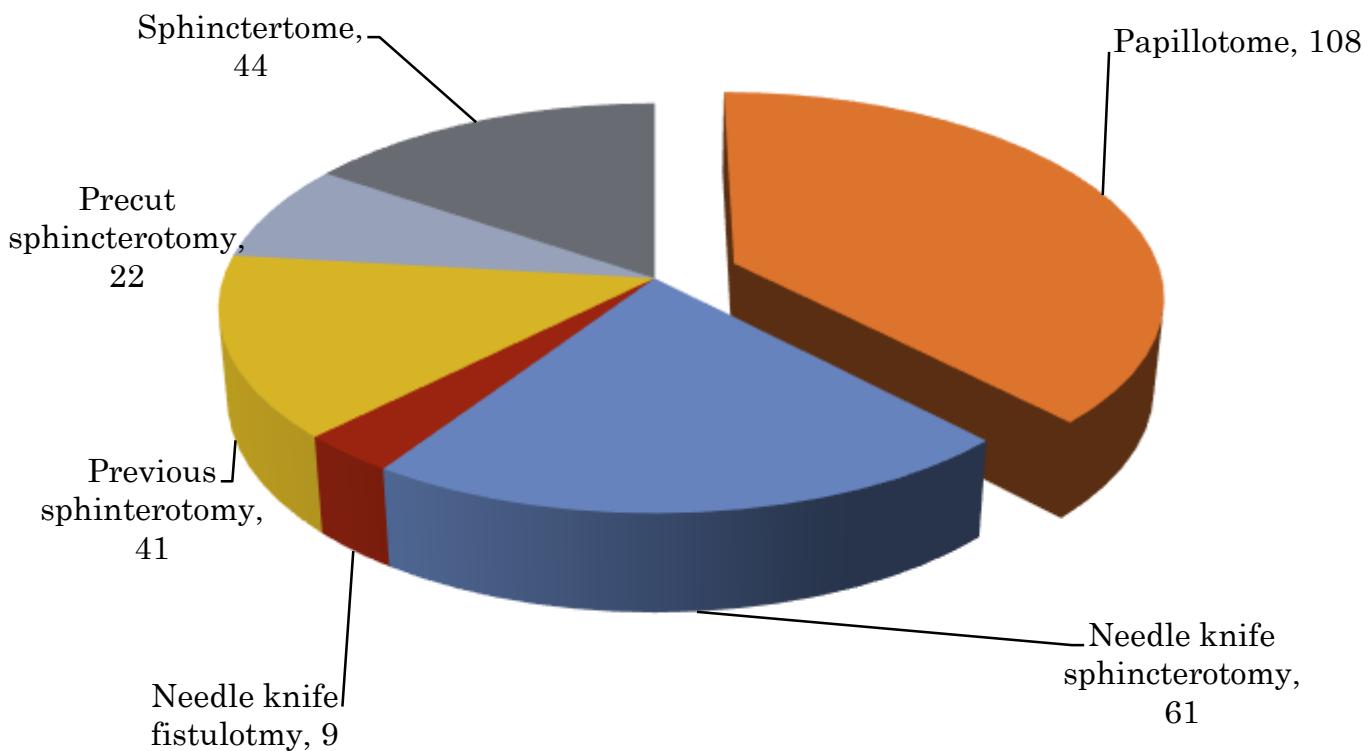
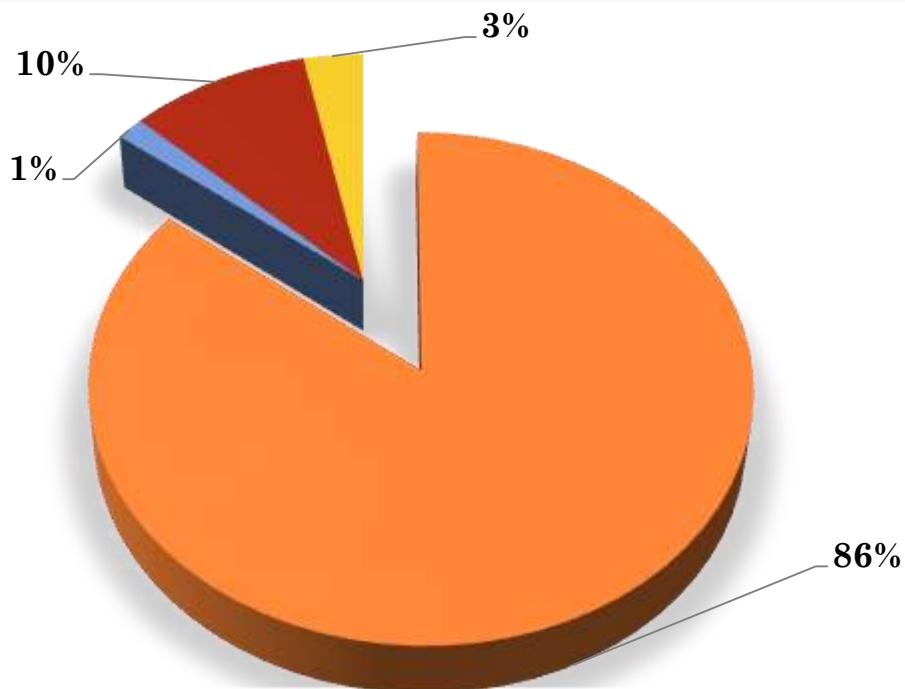


CANNULATION SUCCESSFUL

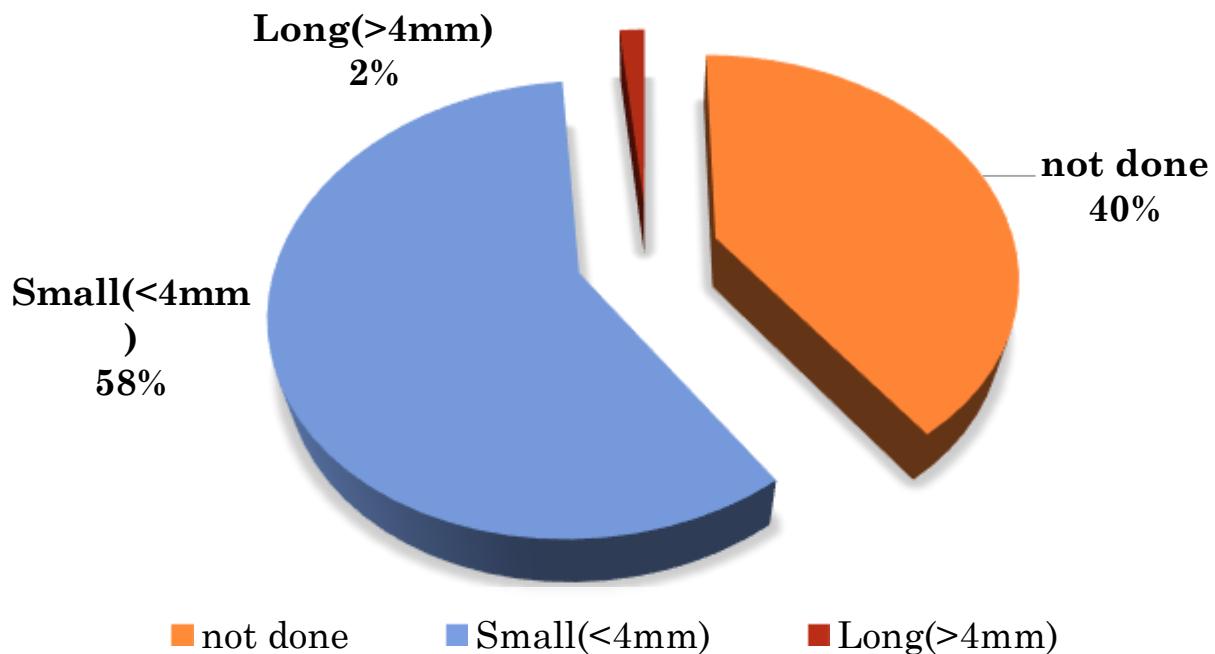


DIFFICULT CANNULATION

■ Easy ■ Medium ■ Difficult ■ Failed

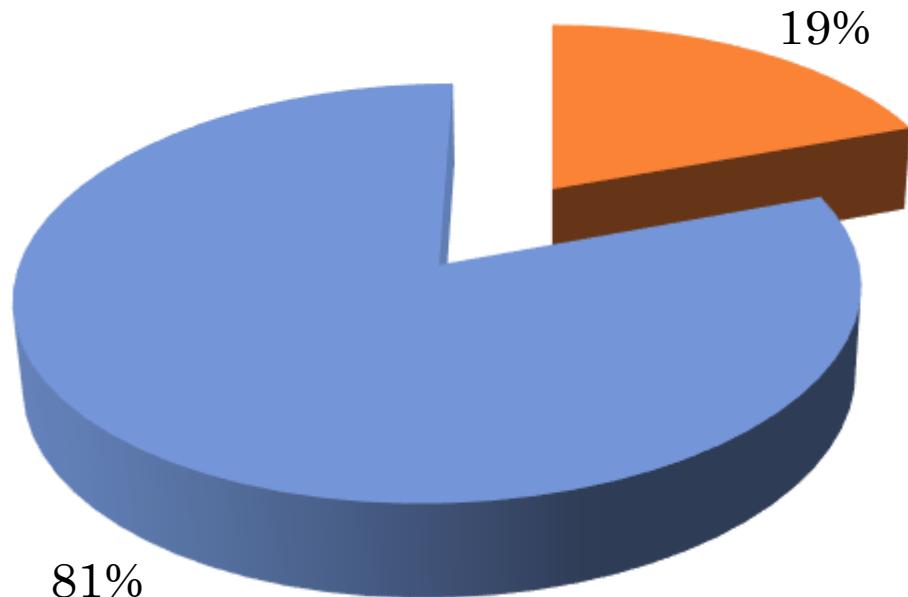


SPHINCTEROTOMY

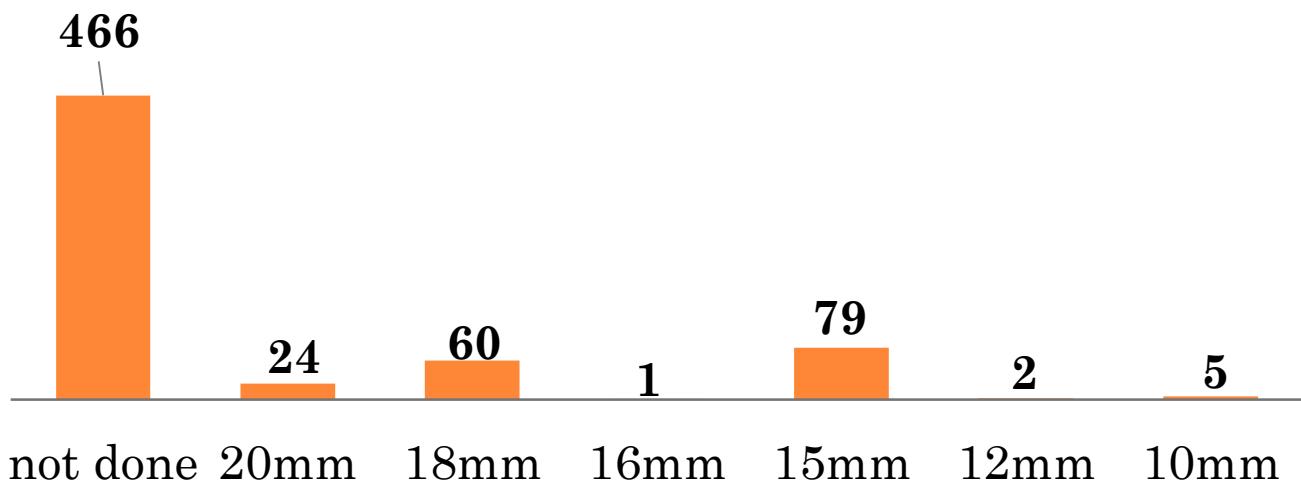


Sphincteroplasty

■ Done ■ Not Done



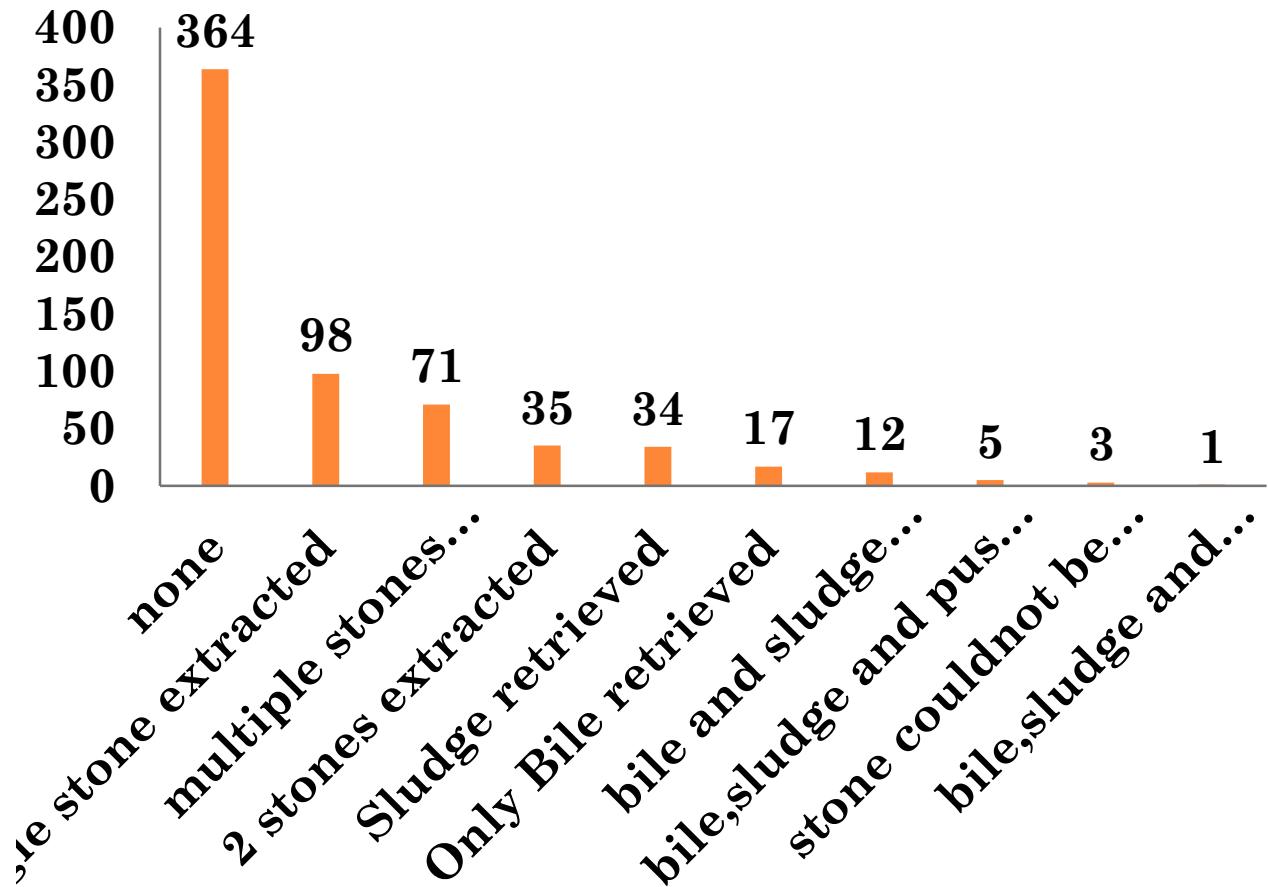
BALLOON DILATION DIAMETER



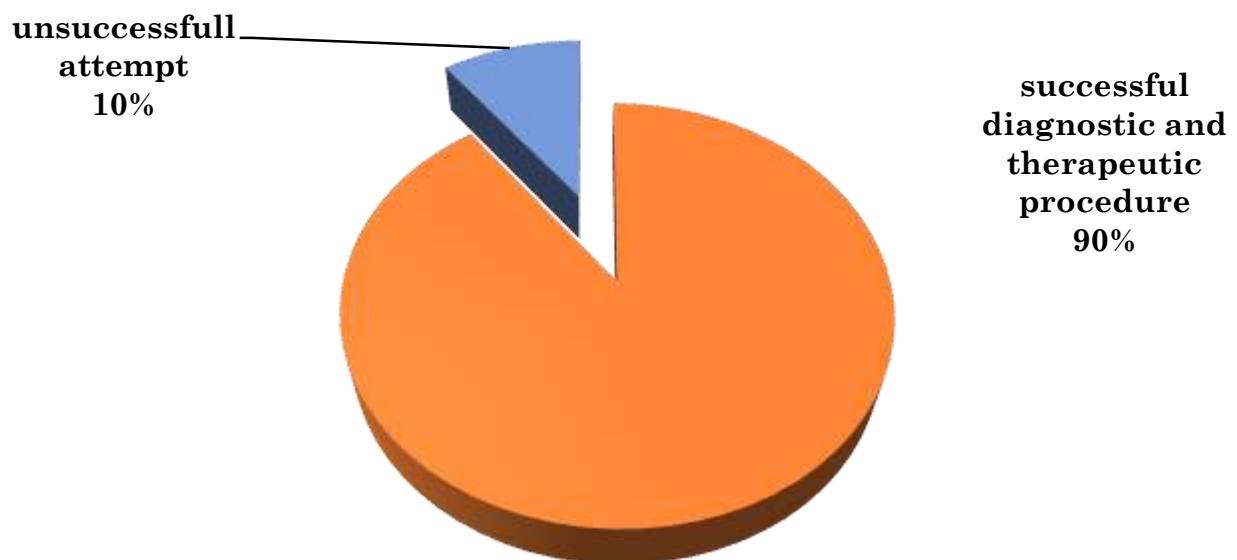
Balloon Sweep Performed



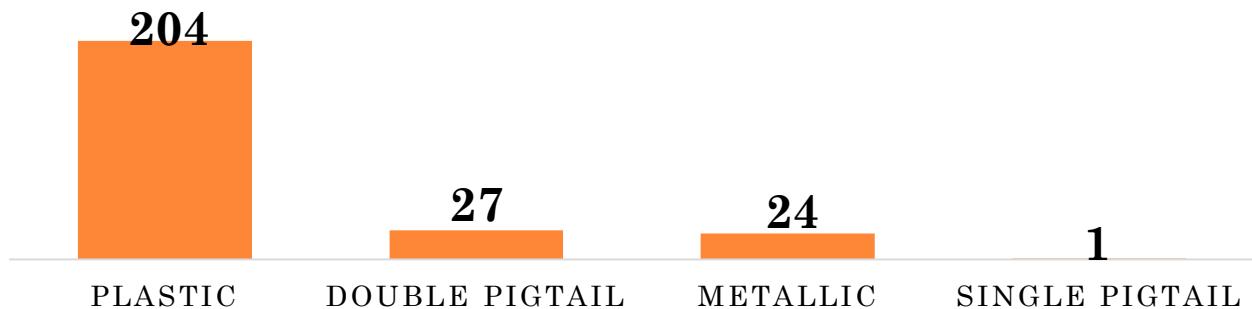
STONE AND SLUDGE EXTRACTION



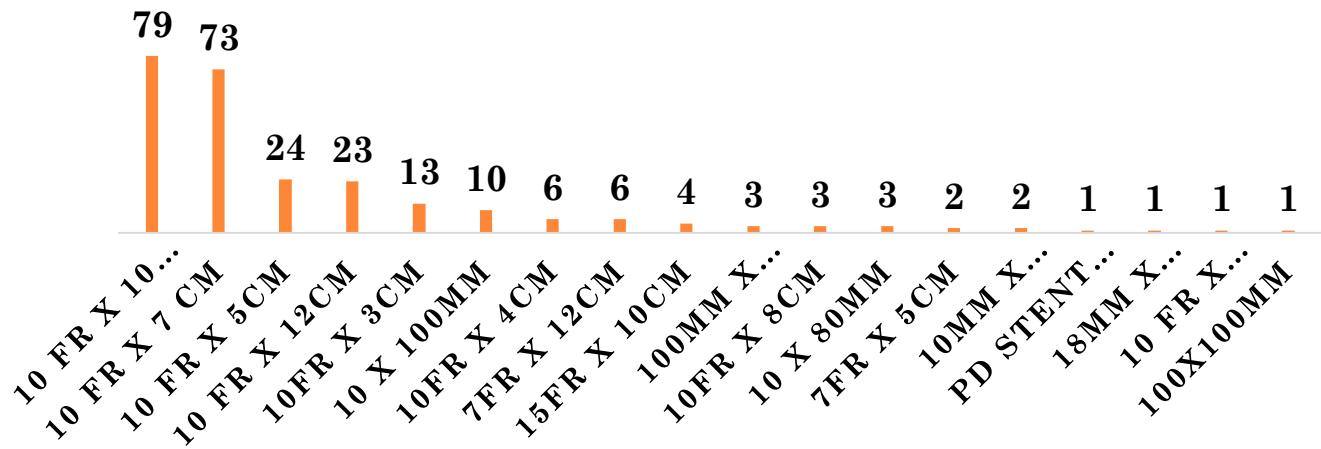
Procedure Successful Rate



STENT PLACED



SIZE OF STENTS



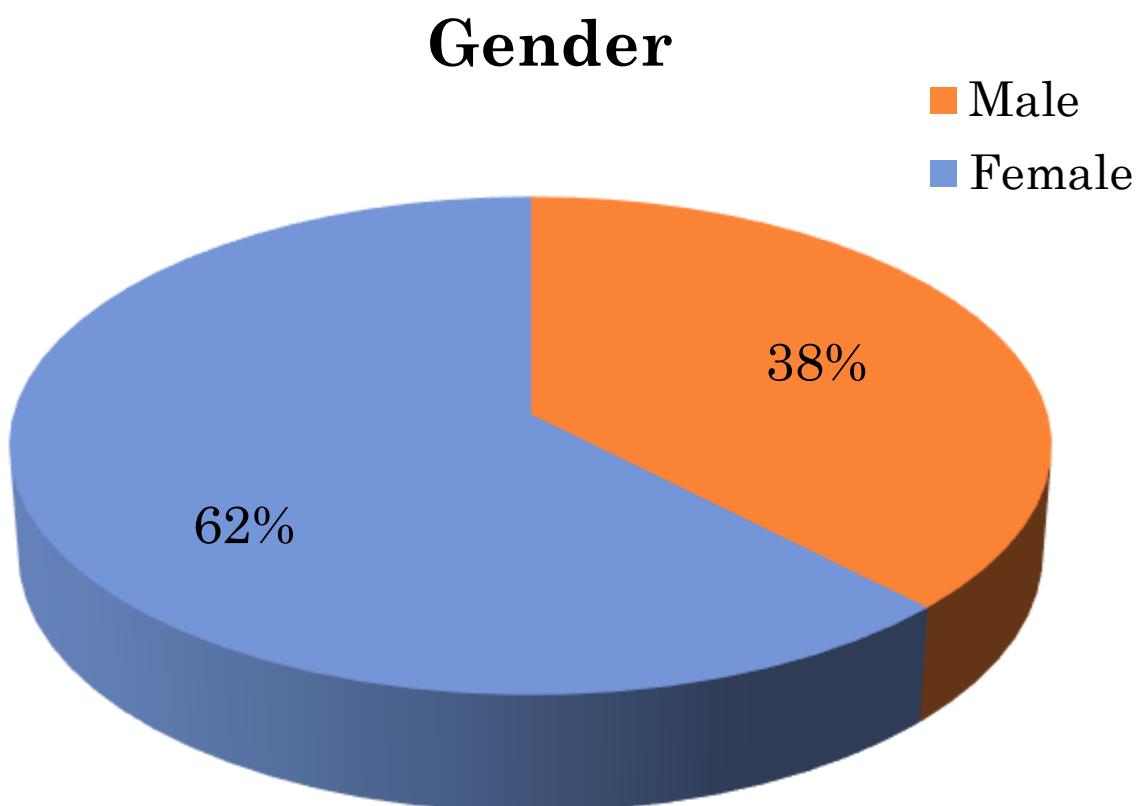
PROCEDURE SUCCESSFUL RATE



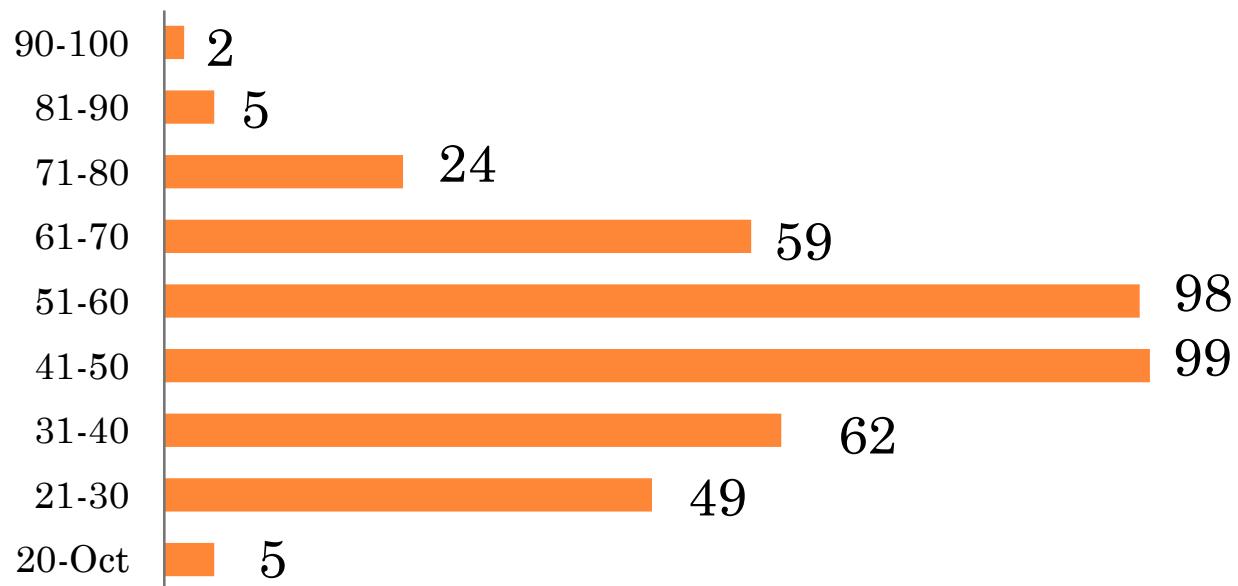
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

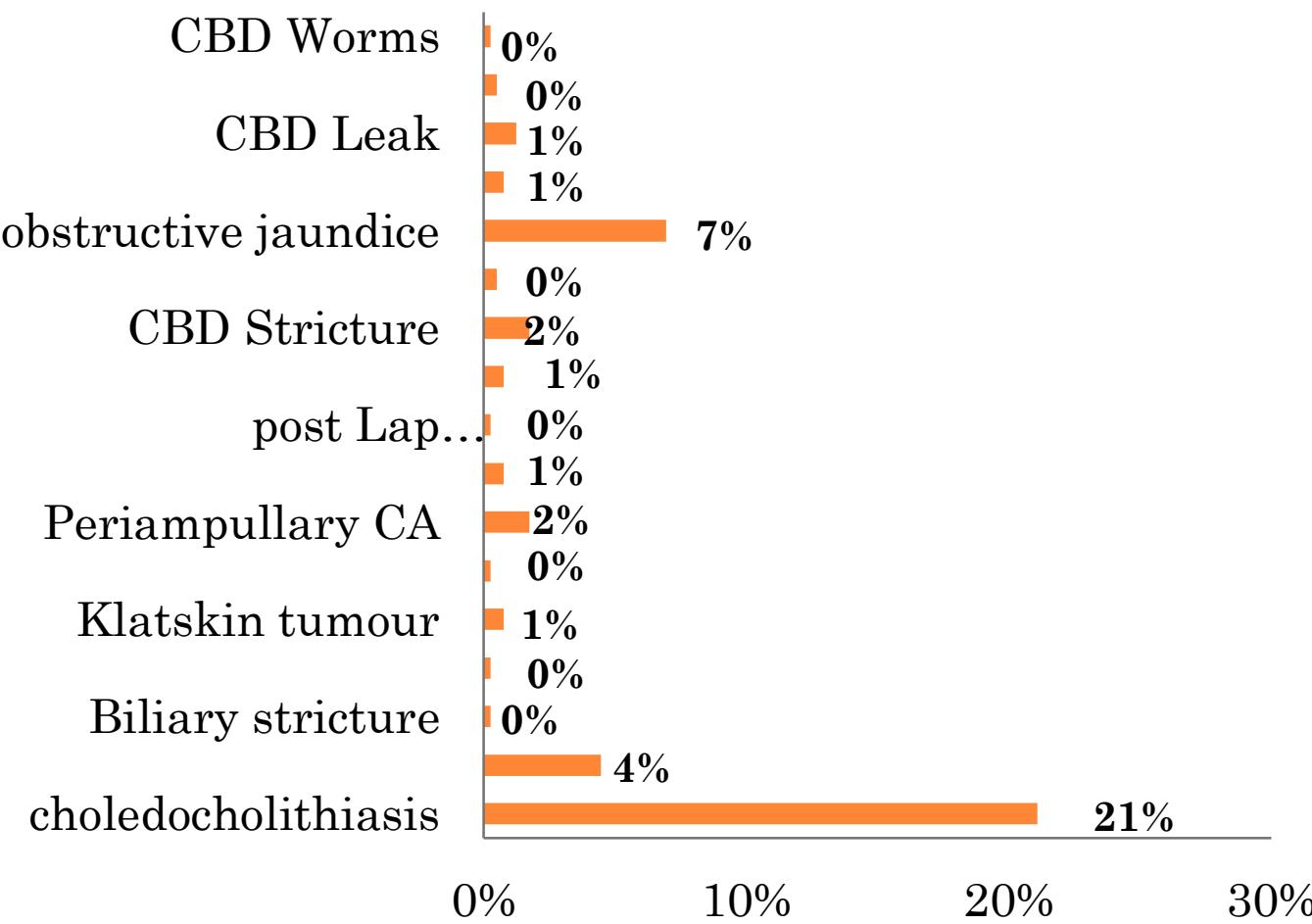
| | |
|-----------------------------|------------|
| Total No of Patients | 403 |
| Male | 152 |
| Female | 251 |



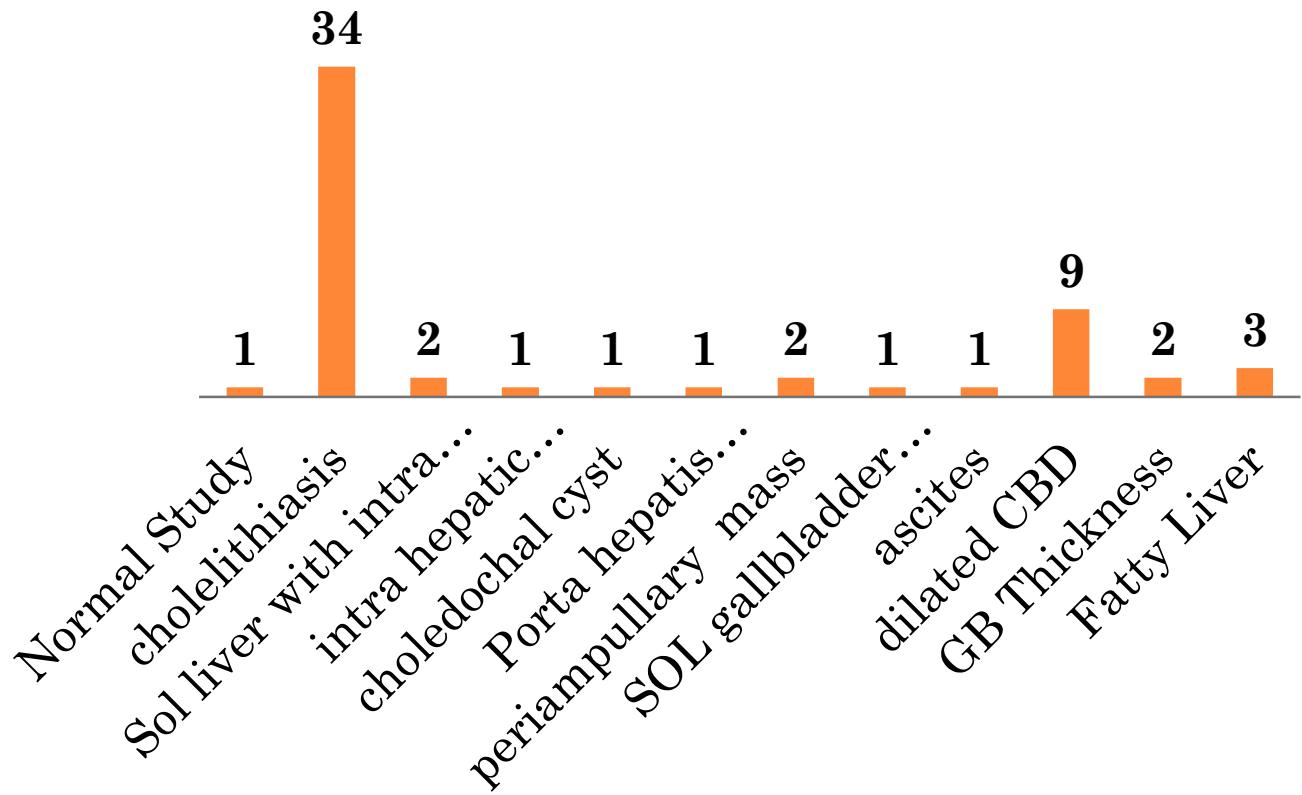
AGE WISE DISTRIBUTION



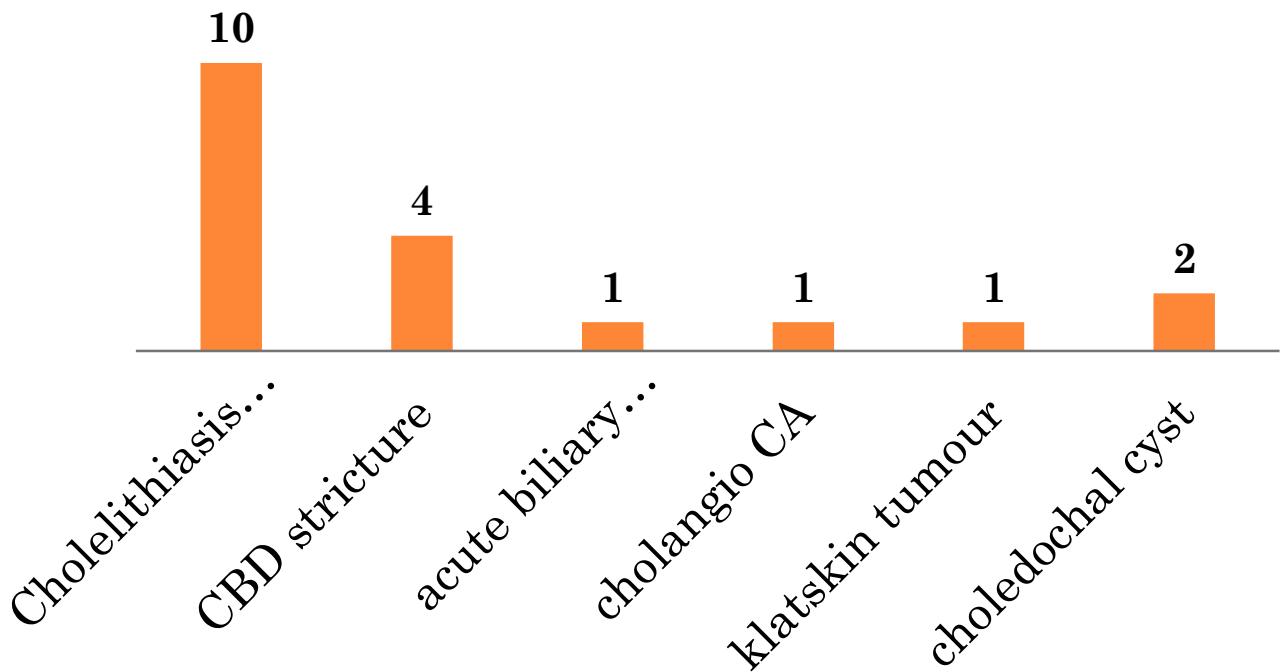
ERCP INDICATION



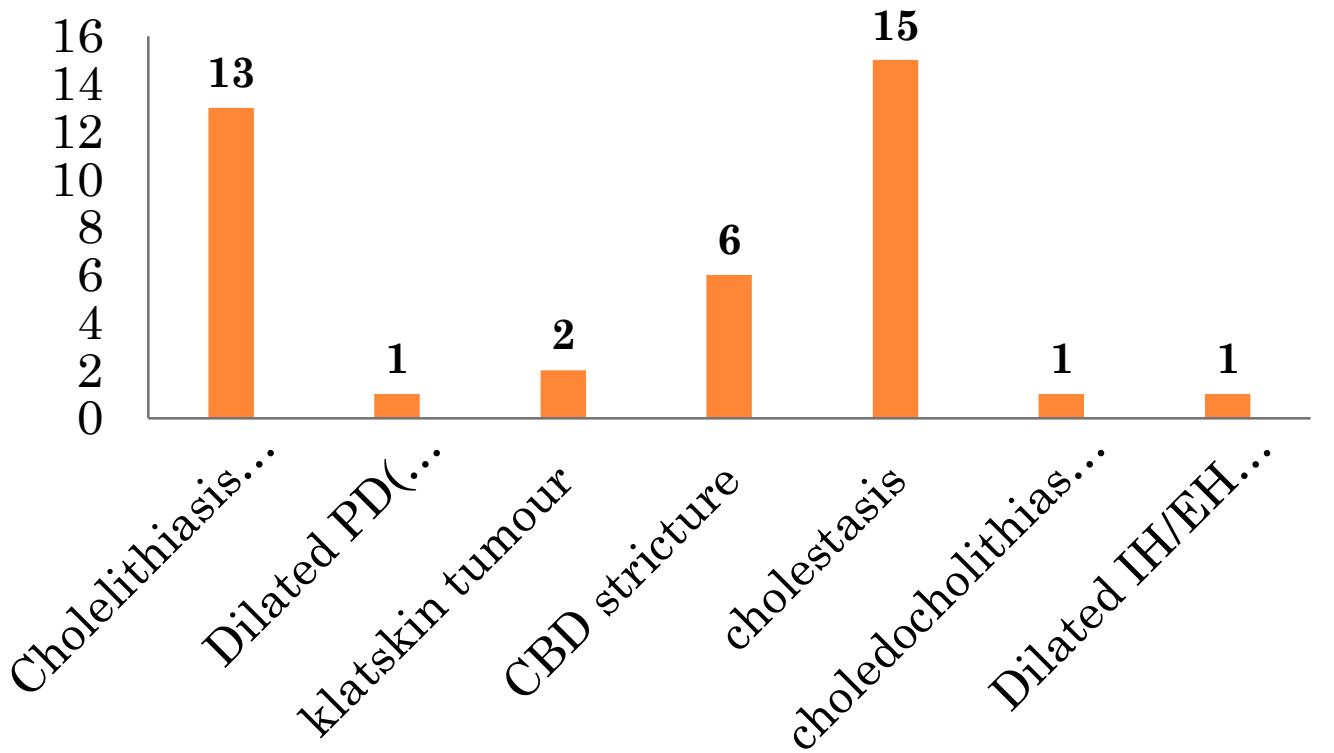
USG AND CT SCAN FINDINGS



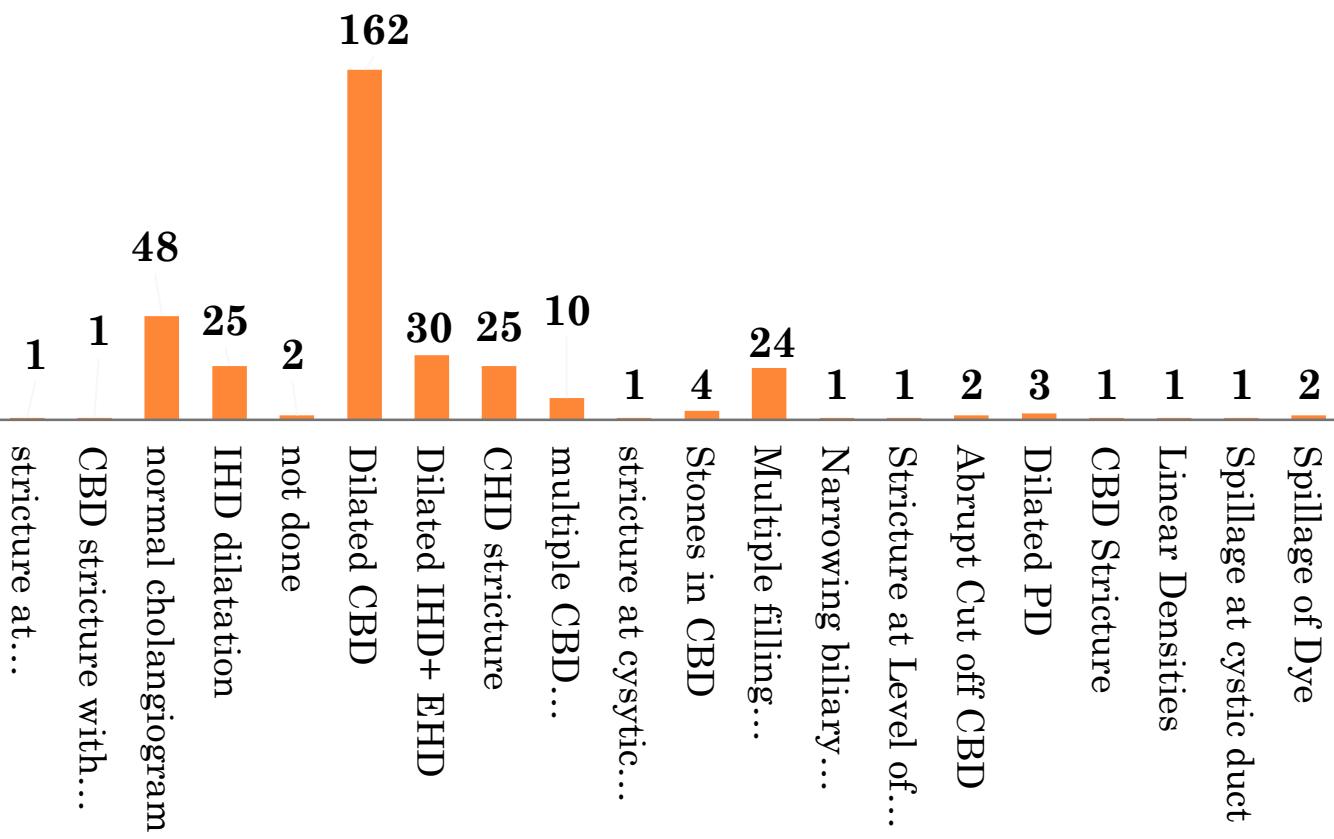
CT Scan



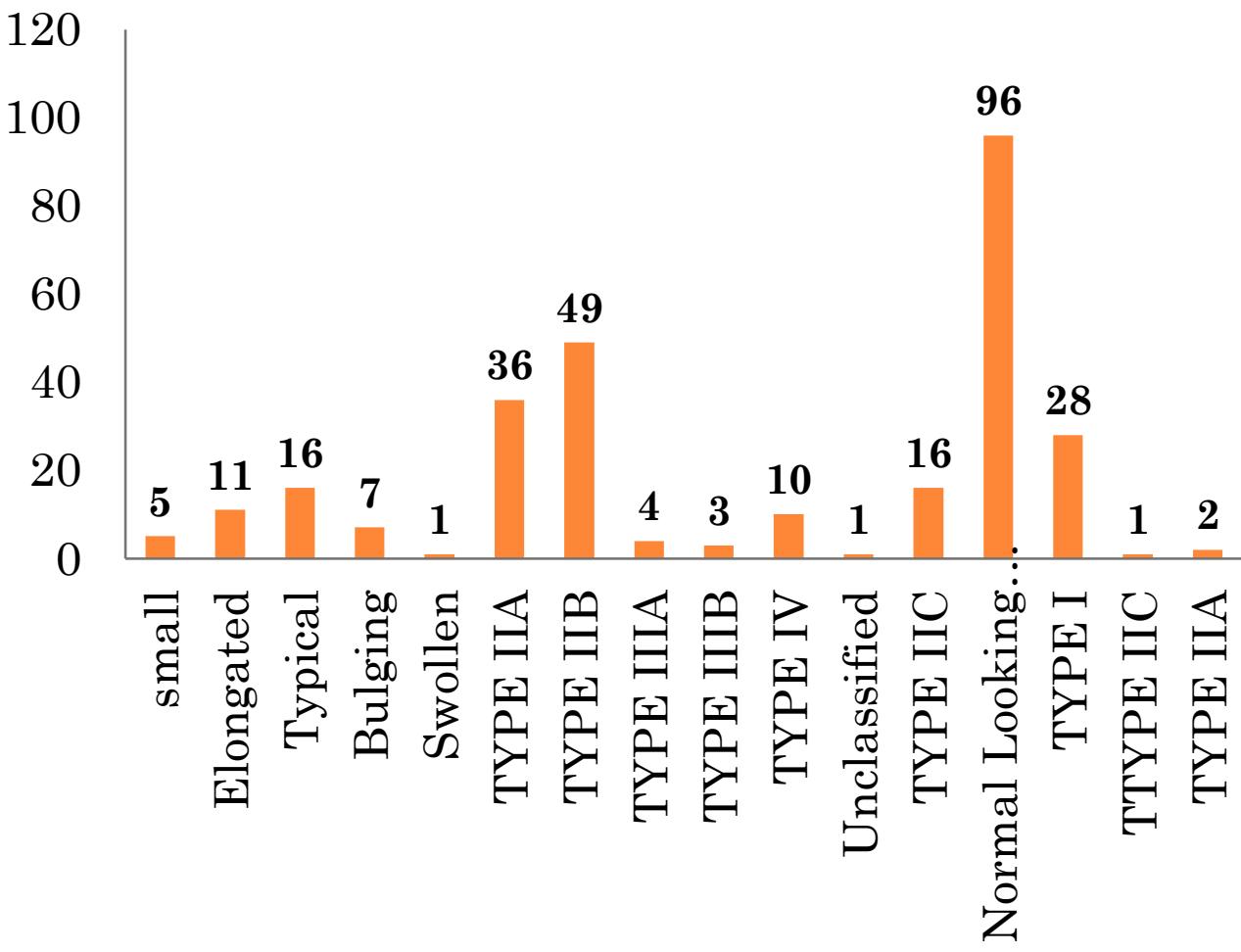
MRCP FINDINGS



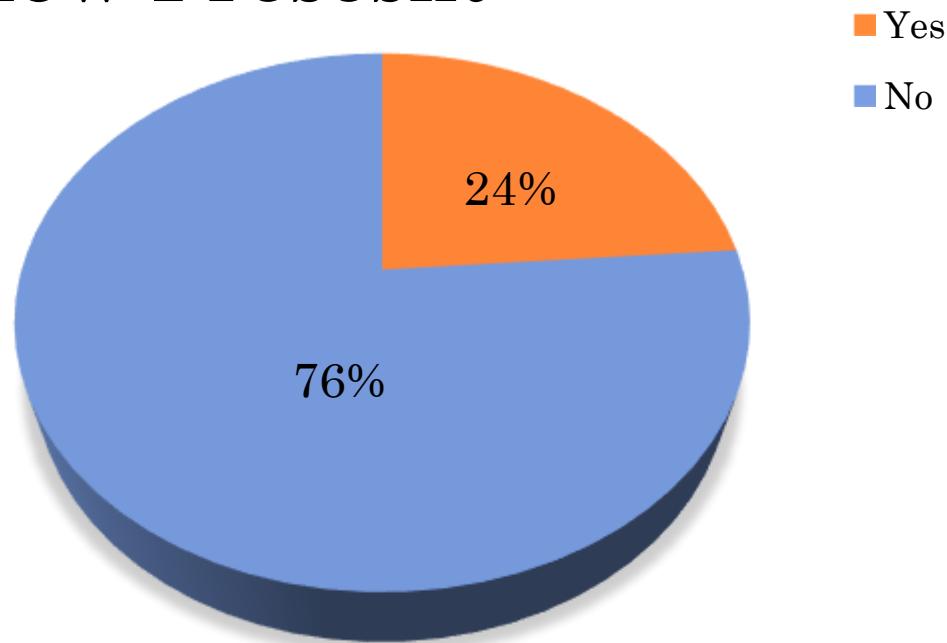
Cholangiogram Findings



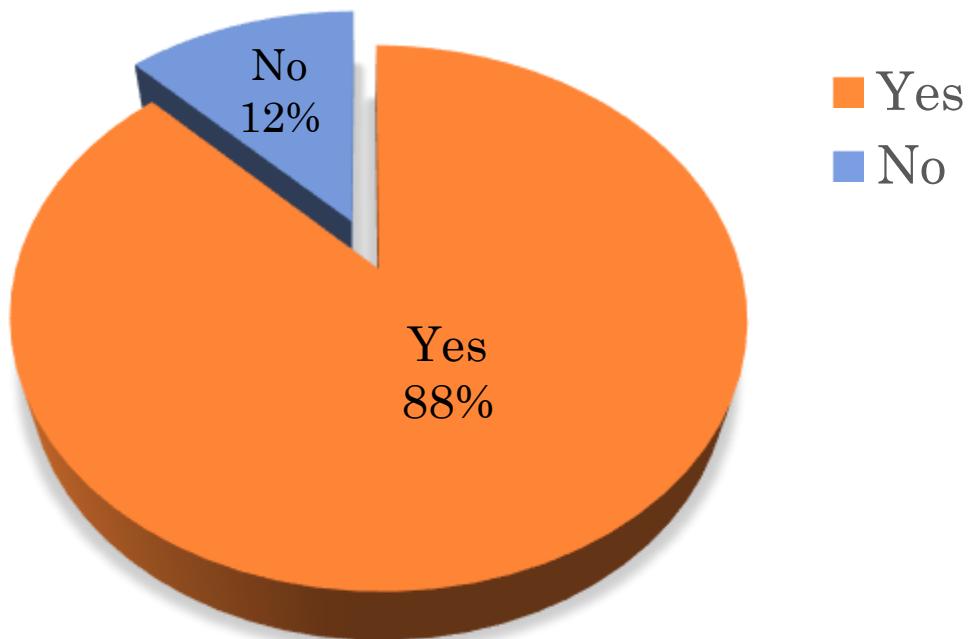
TYPE OF PAPILLA



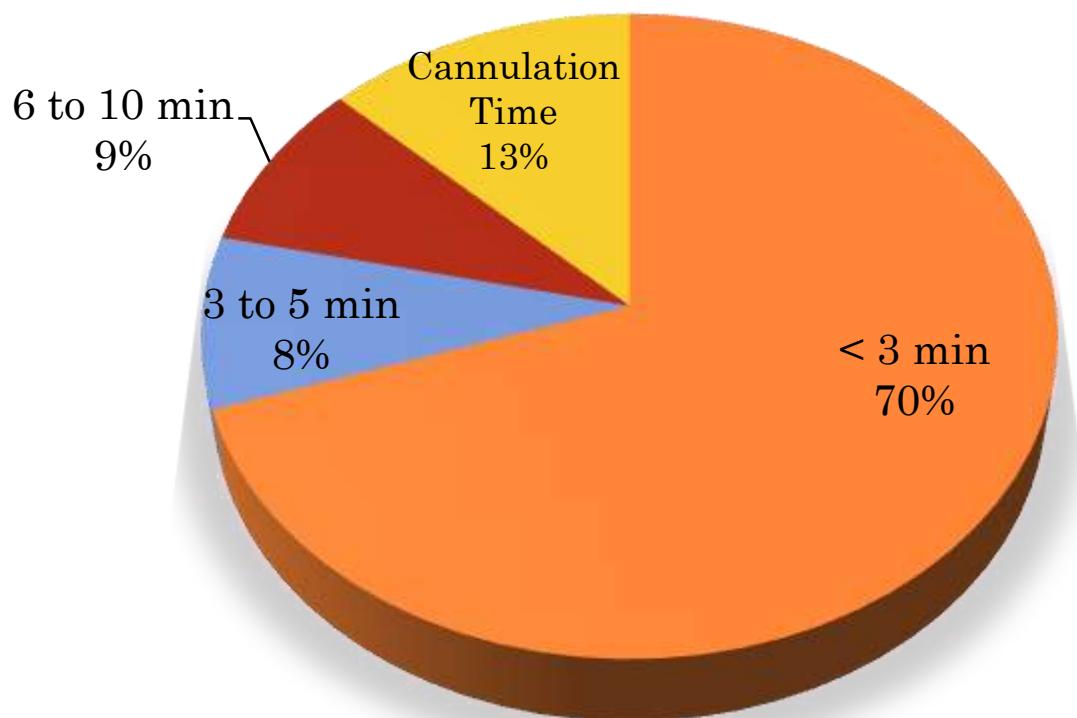
Bile Flow Present



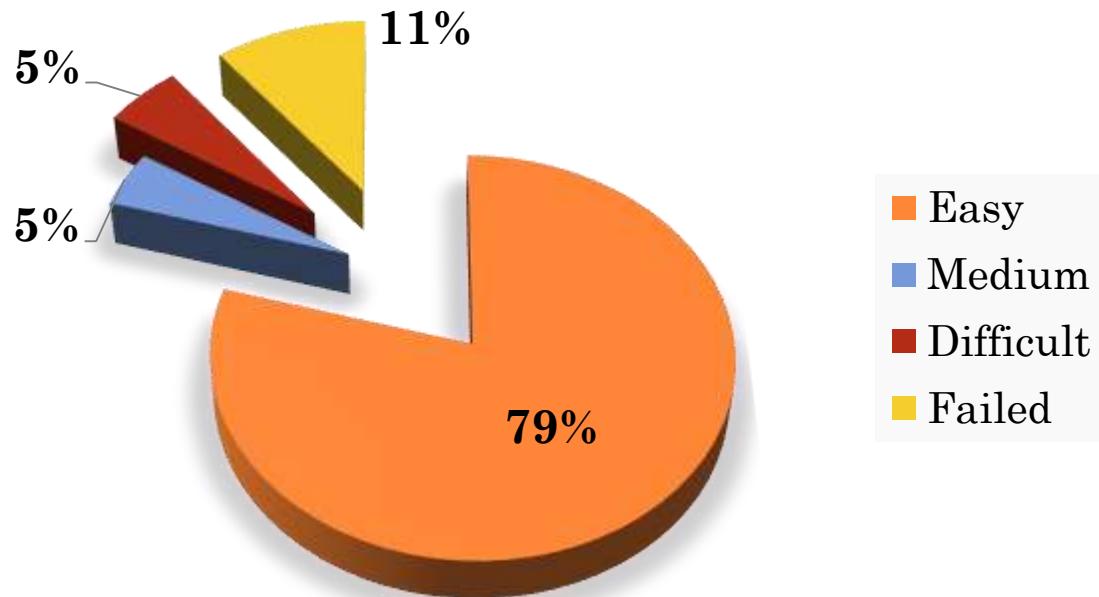
CANNULATION SUCCESSFUL



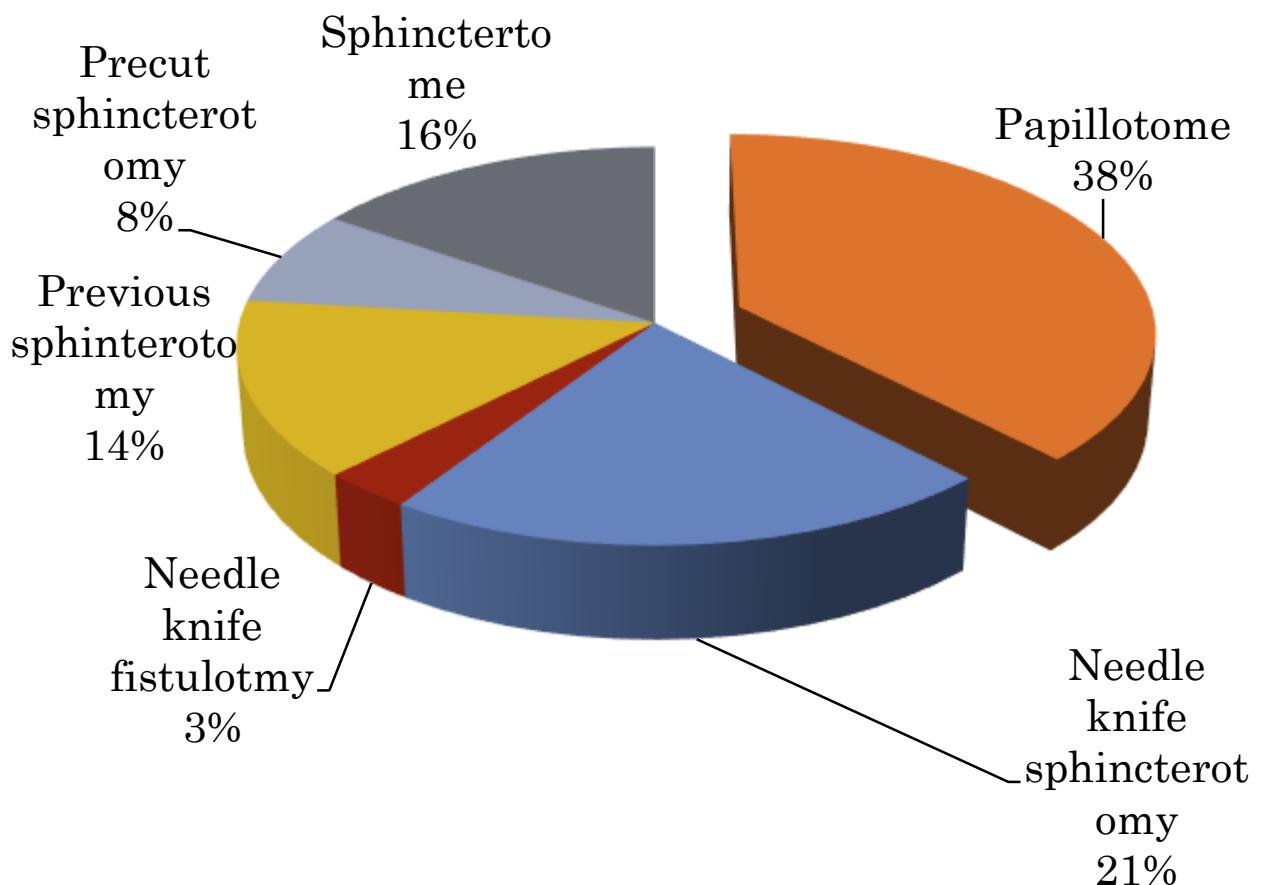
CANNULATION TIME IN MINUTES



DIFFICULT CANNULATION

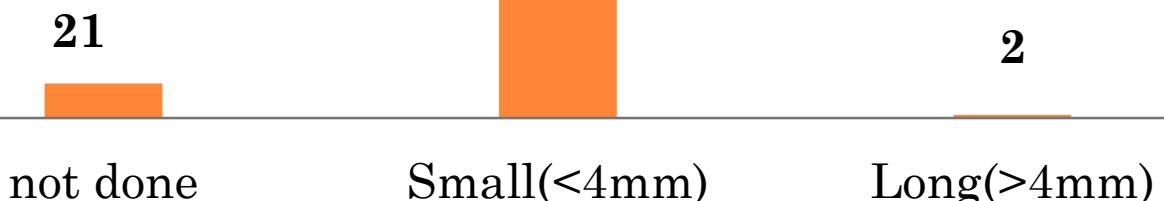


CANNULATION INSTRUMENT



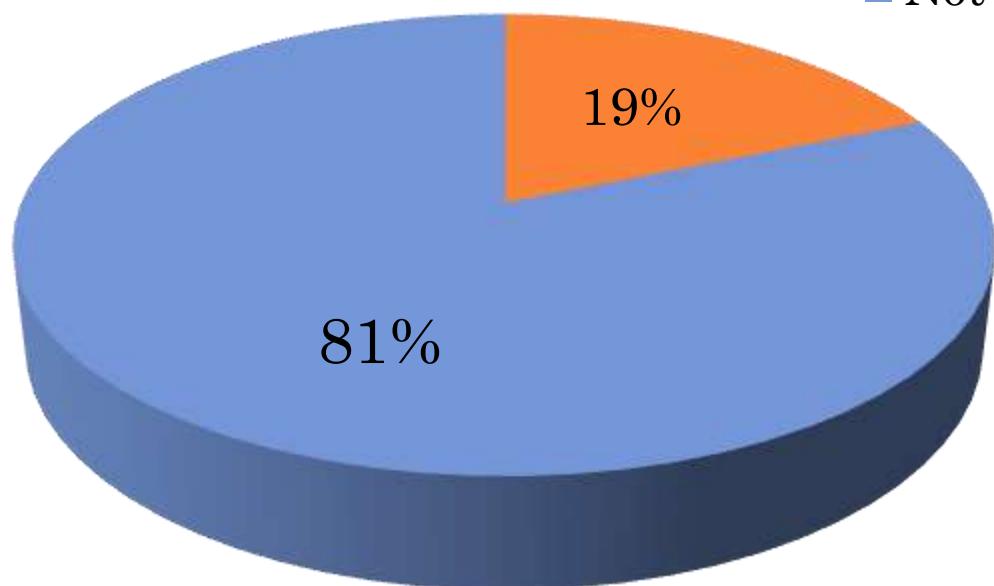
SPHINCTEROTOMY

331

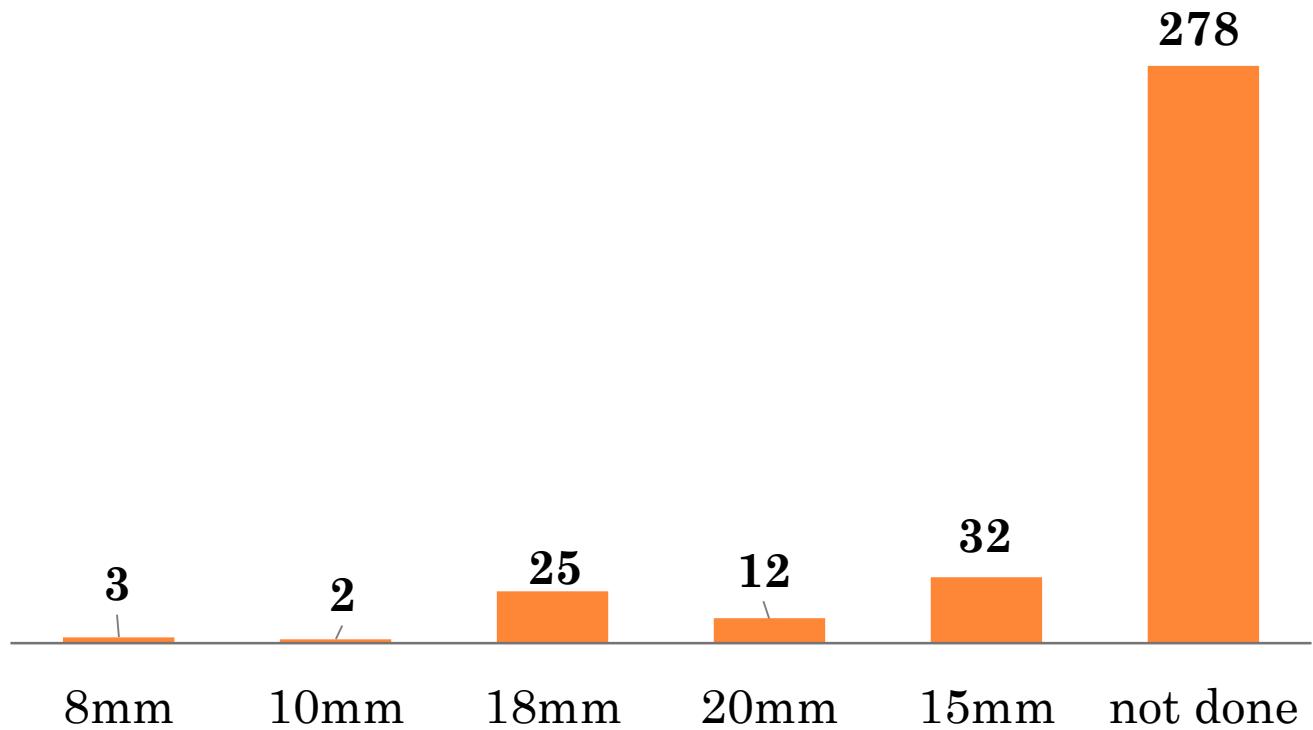


Sphincteroplasty

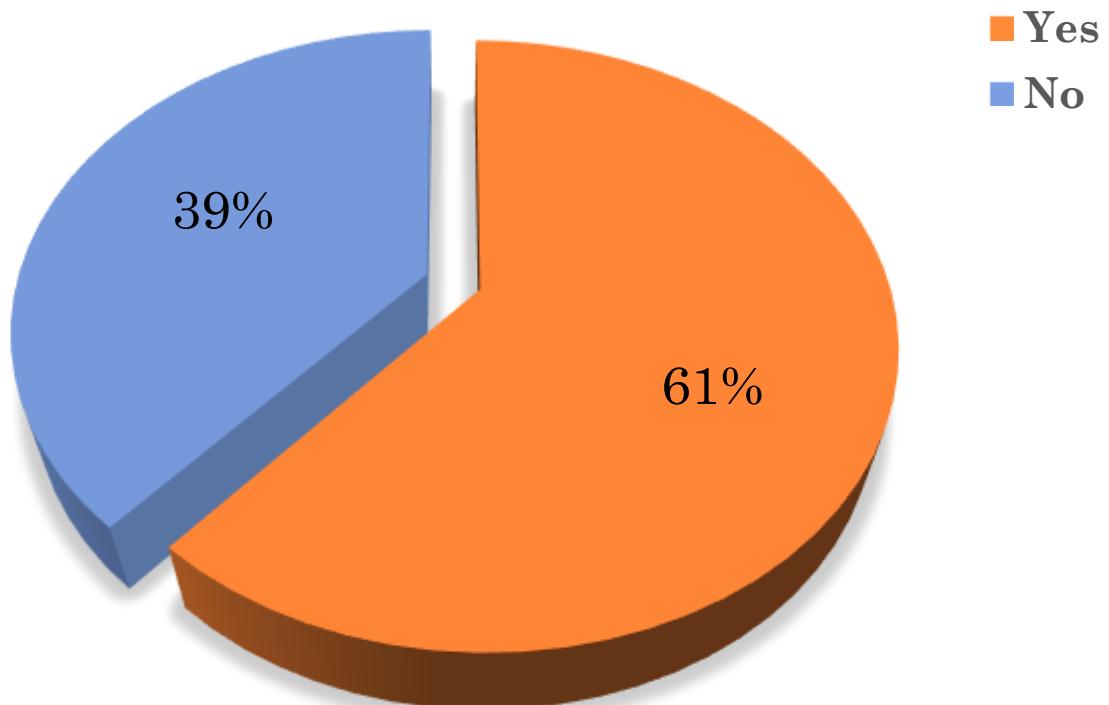
■ Done
■ Not Done



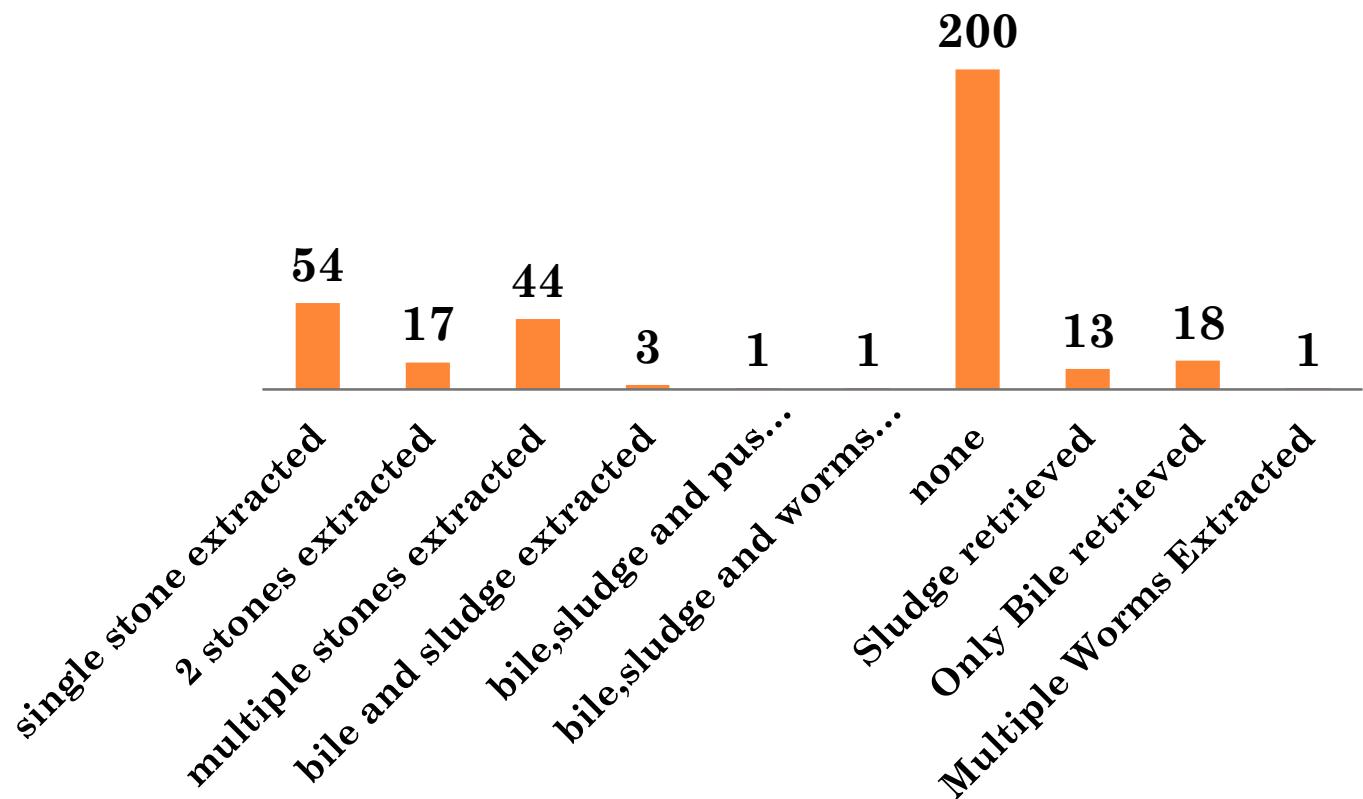
BALLOON DILATION DIAMETER



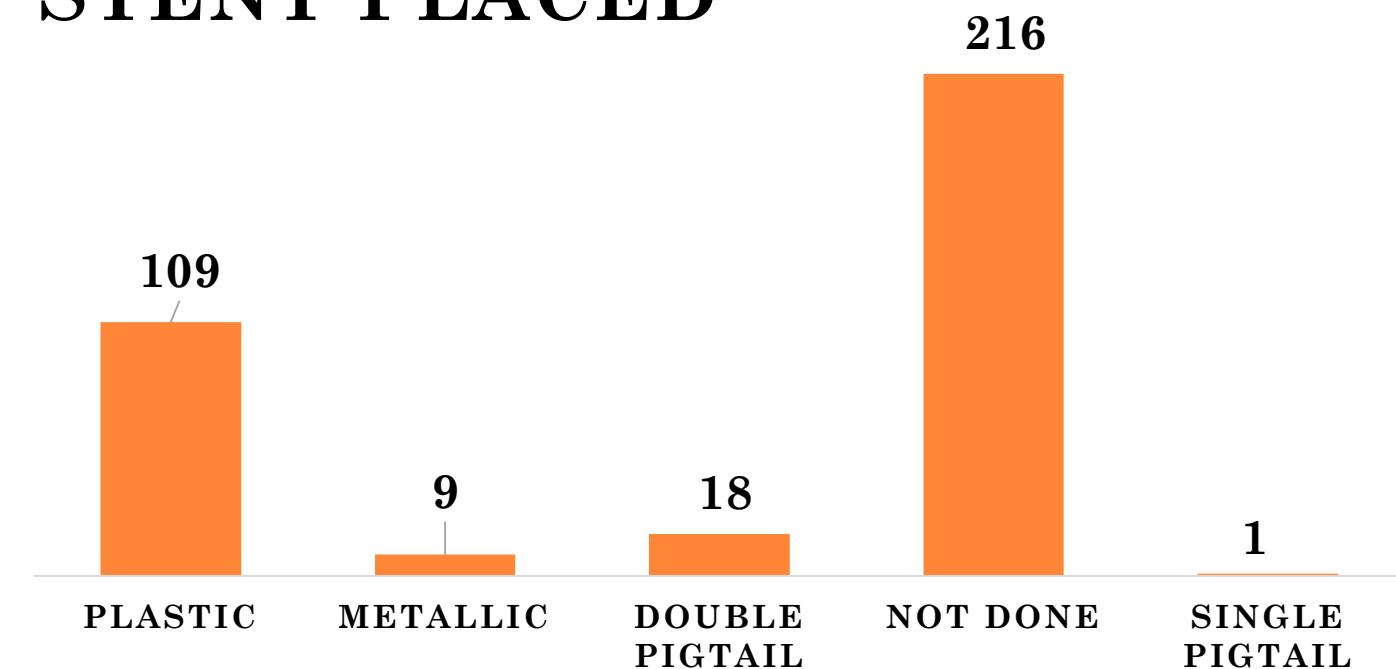
Balloon Sweep Performed



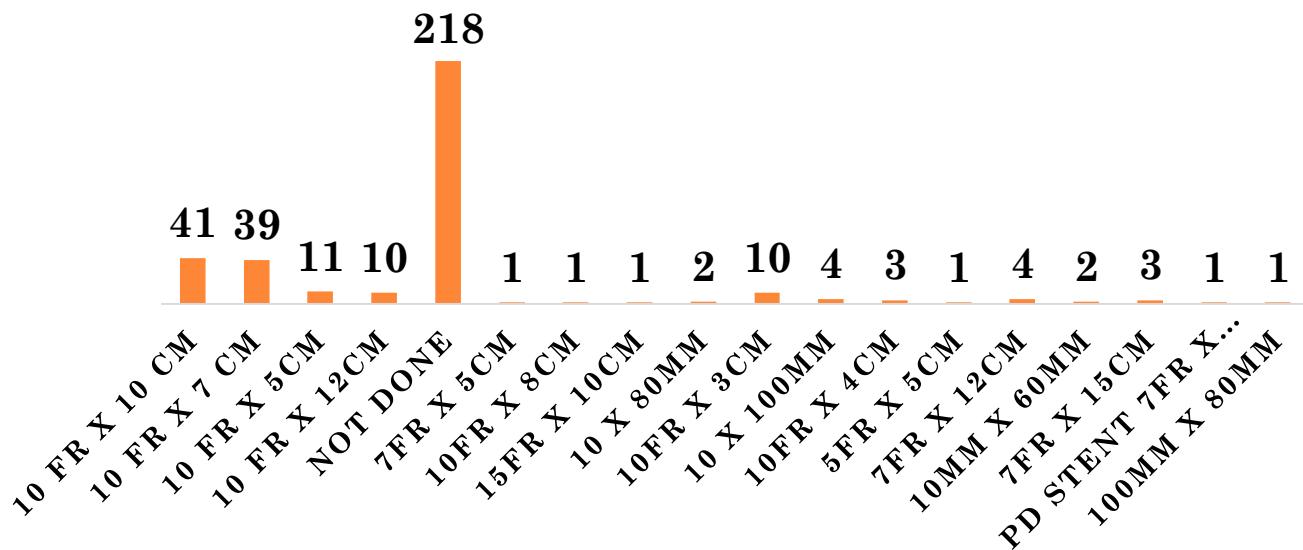
STONE AND SLUDGE EXTRACTION



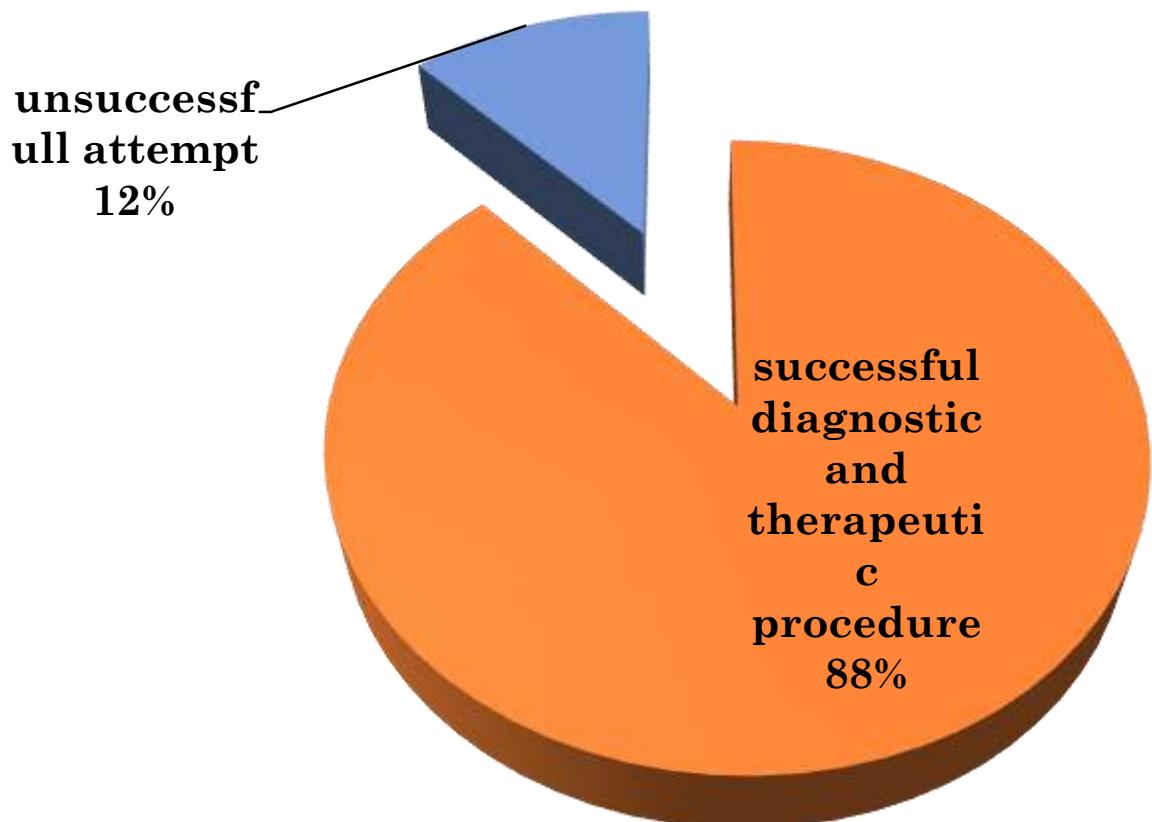
STENT PLACED



SIZE OF STENTS



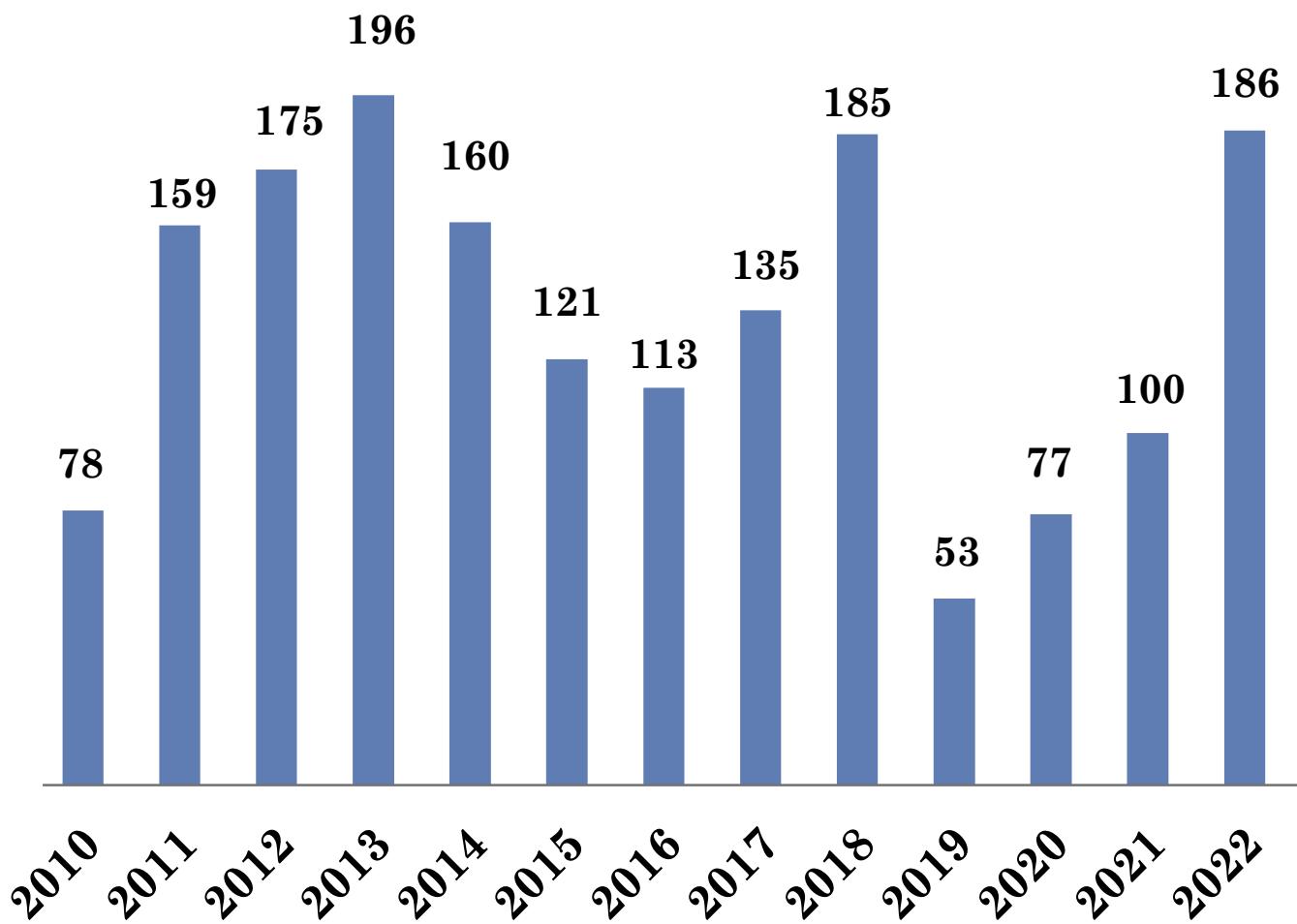
PROCEDURE SUCCESSFUL RATE



PD CANNULATION 60 TIMES

EUS Audit

- EUS is a novel minimally invasive technique with very limited availability in Pakistan. Our center is one of the oldest center providing this facility free of cost in public sector of Pakistan. More than 1700 patients took advantage of this procedure since its availability in our center. Our center has also the availability of onsite Histology by consultant histopathologist. During the COVID year the center facilitated 77 patients in 2020 and 100 patients in 2021. The number again raised to 186 in 2022.

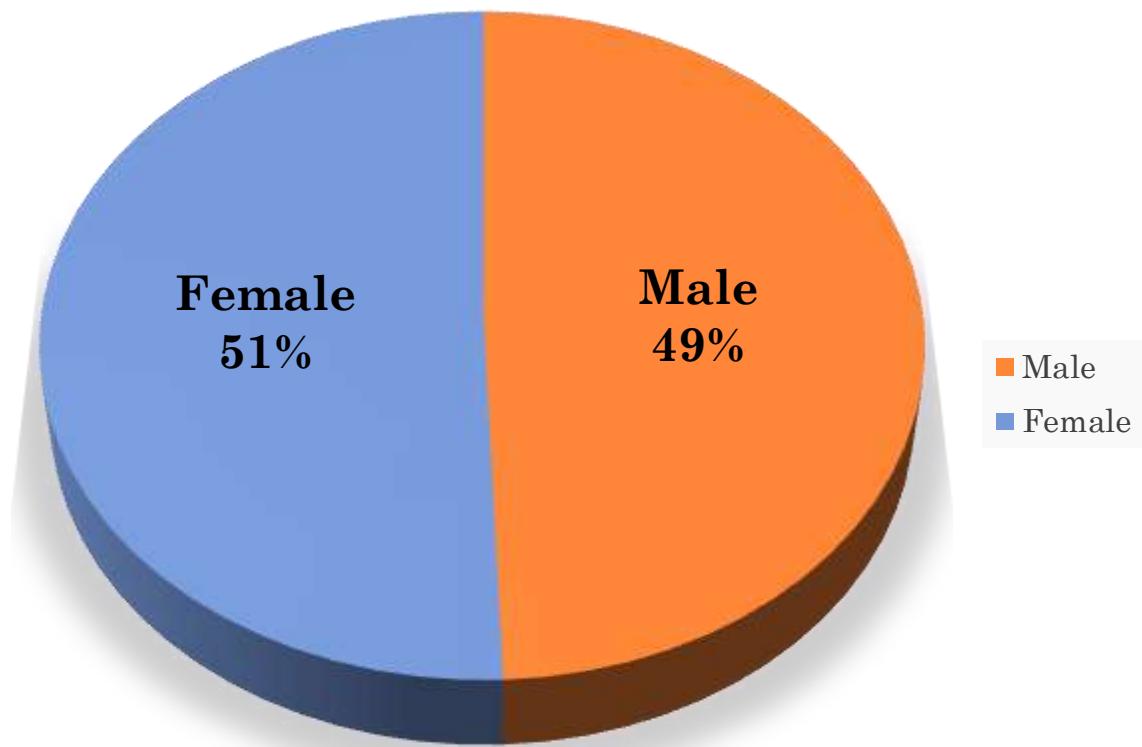


2020

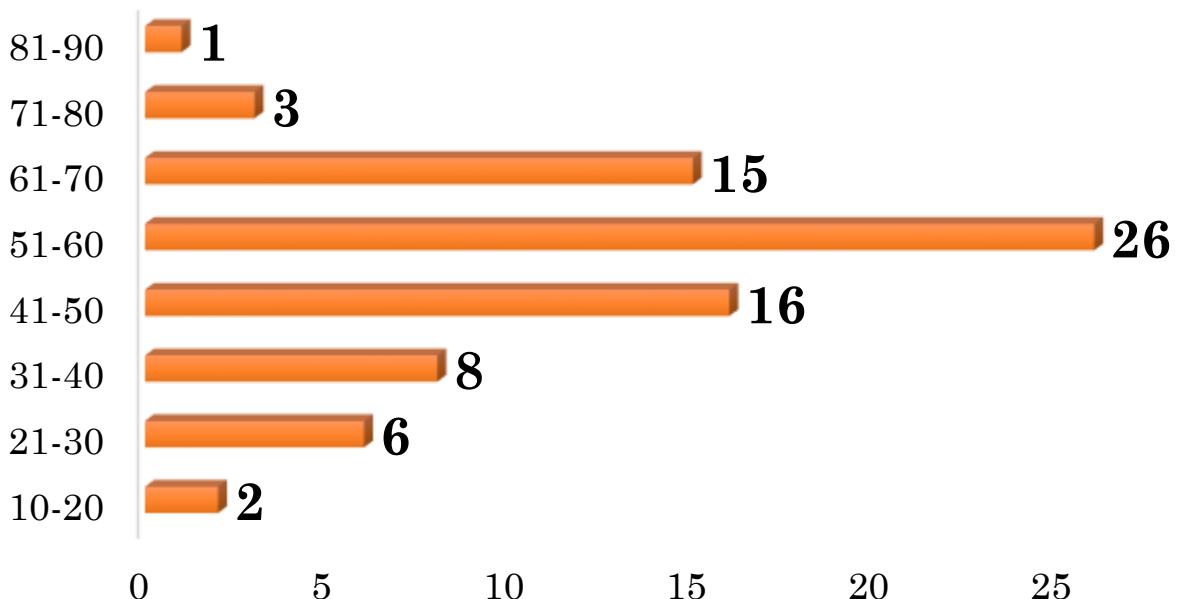
TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

| | |
|----------------------|----|
| Total No of Patients | 77 |
| Male | 38 |
| Female | 39 |

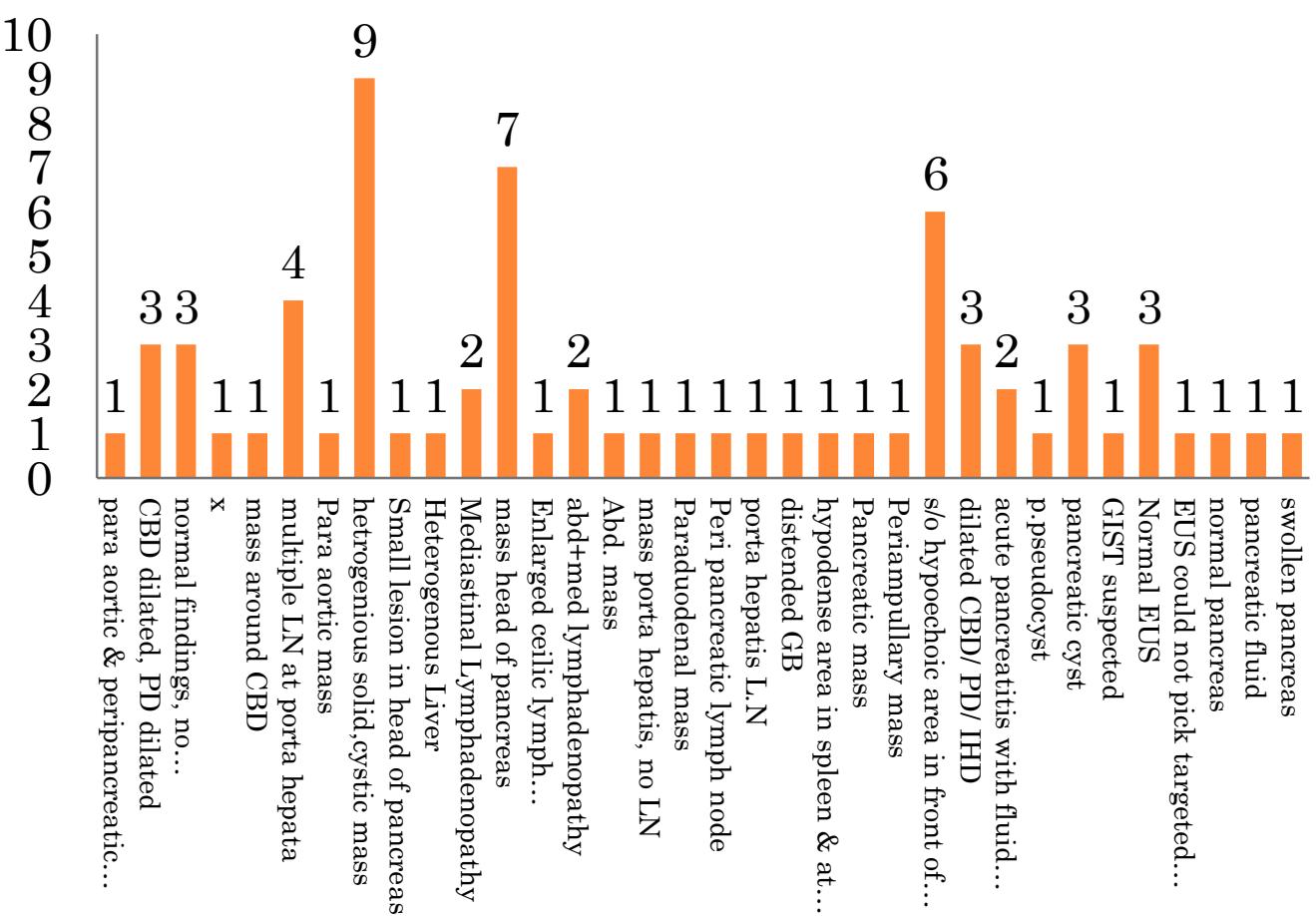
Gender Distribution



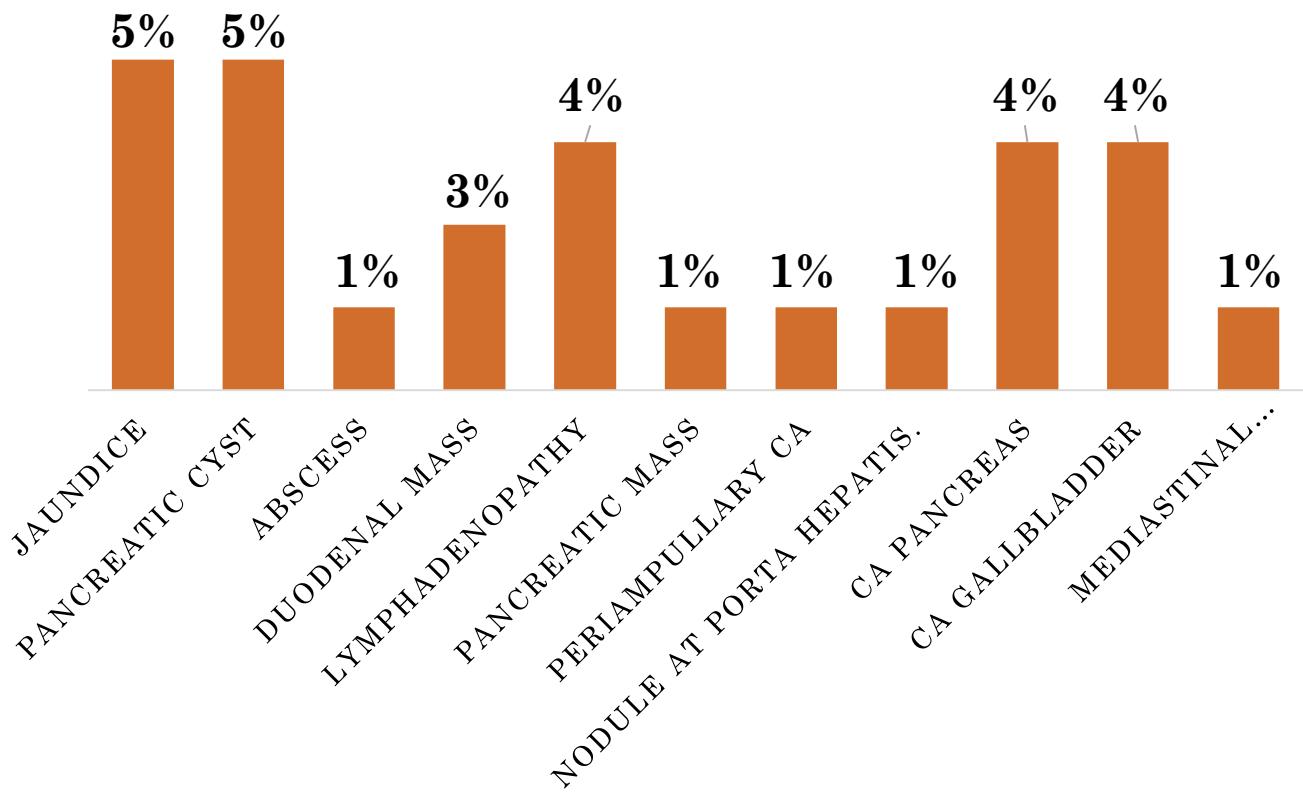
Age Distribution:



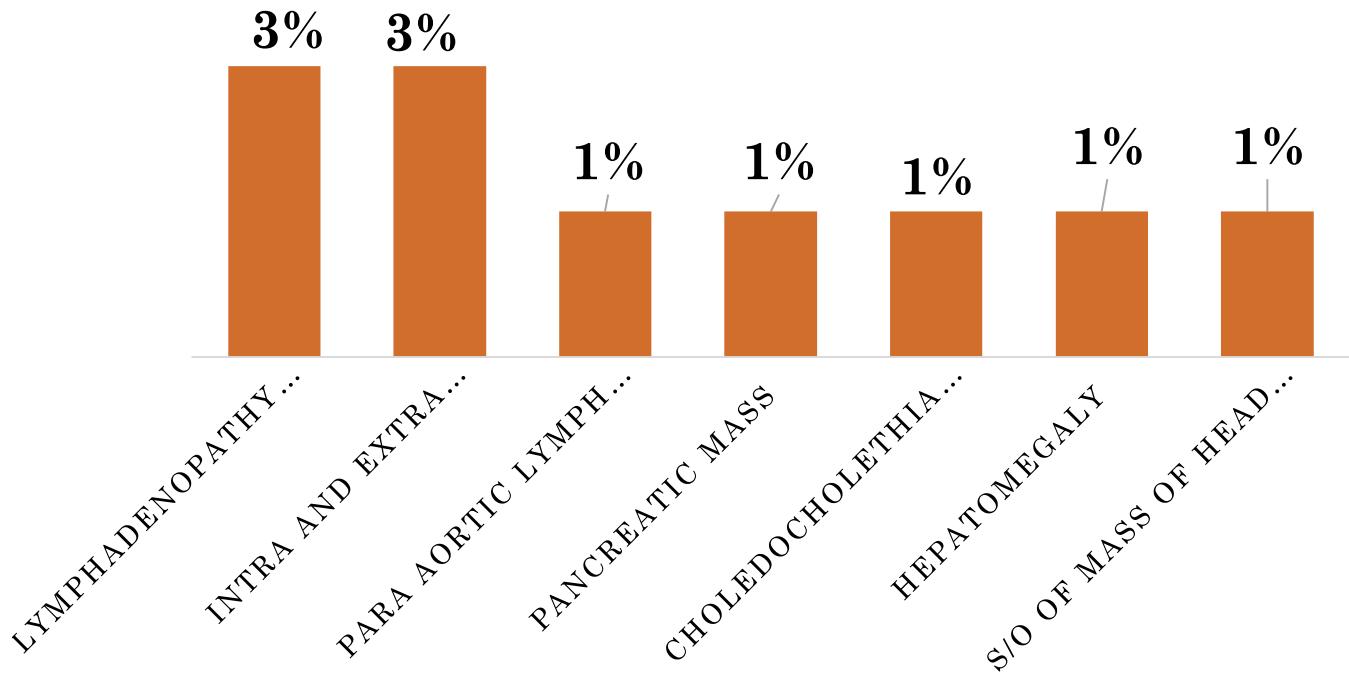
PROCEDURAL FINDINGS



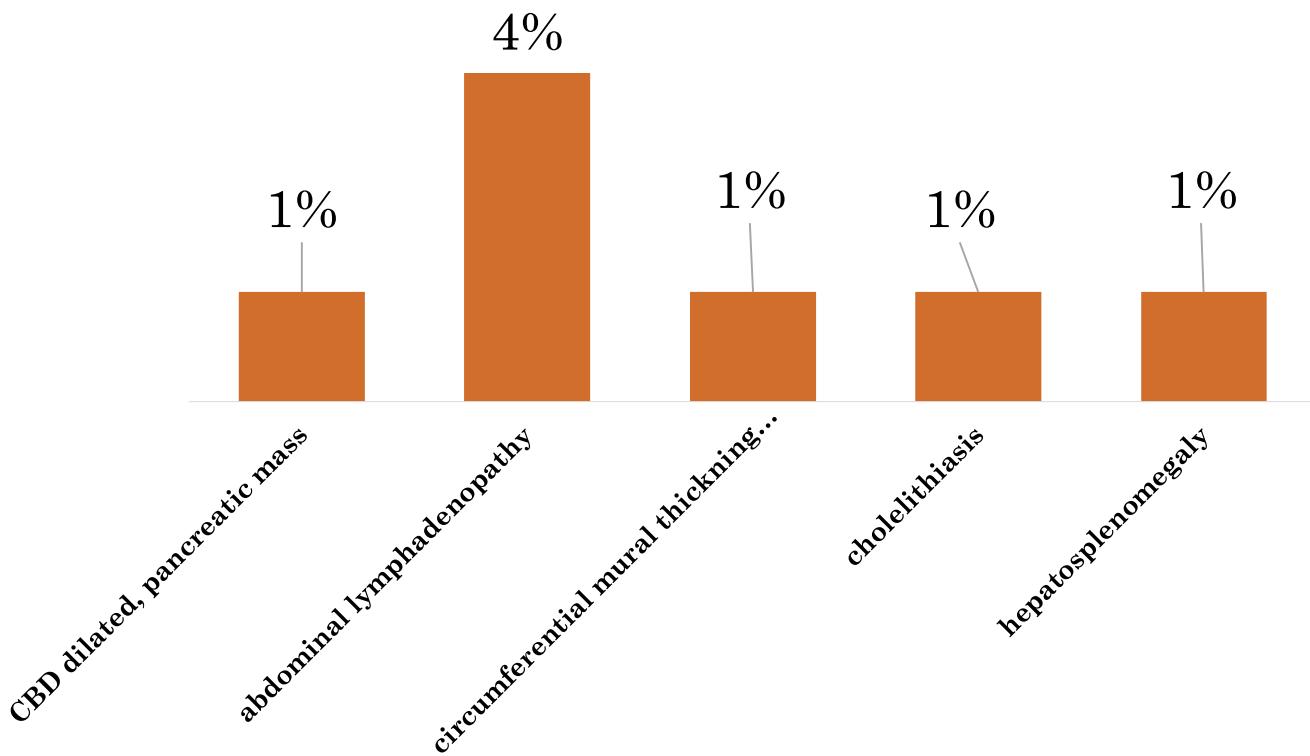
INDICATION



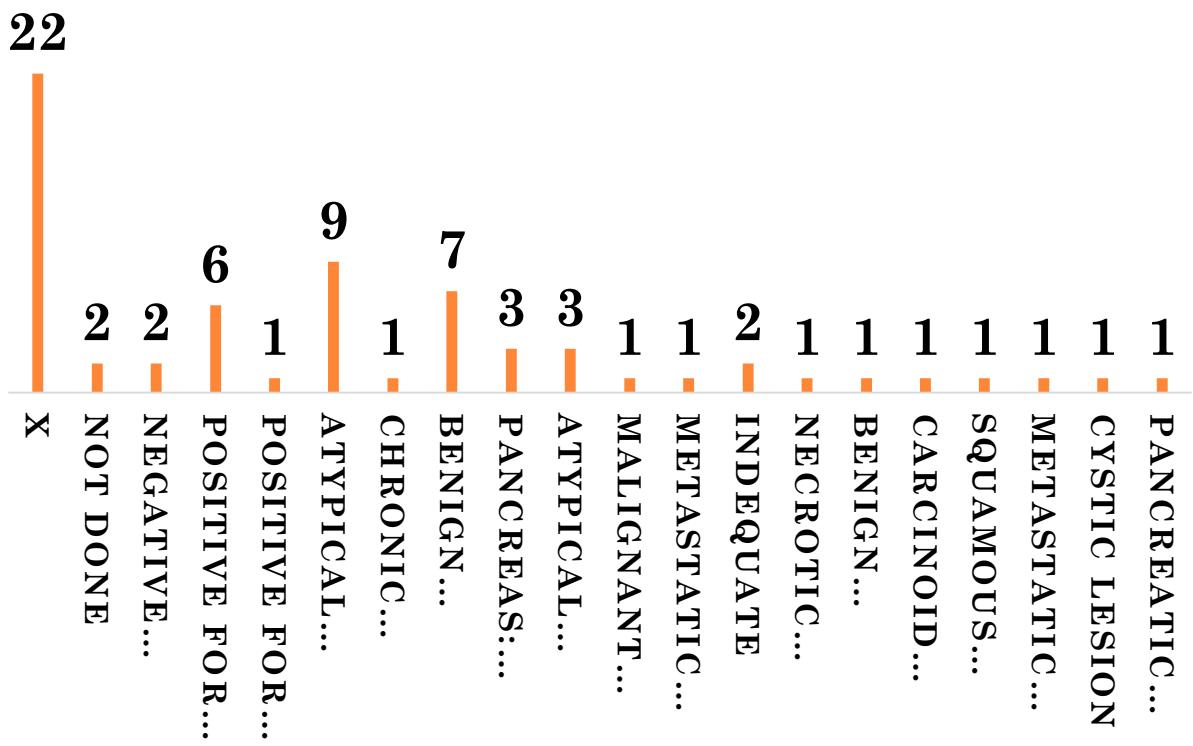
USG FINDINGS



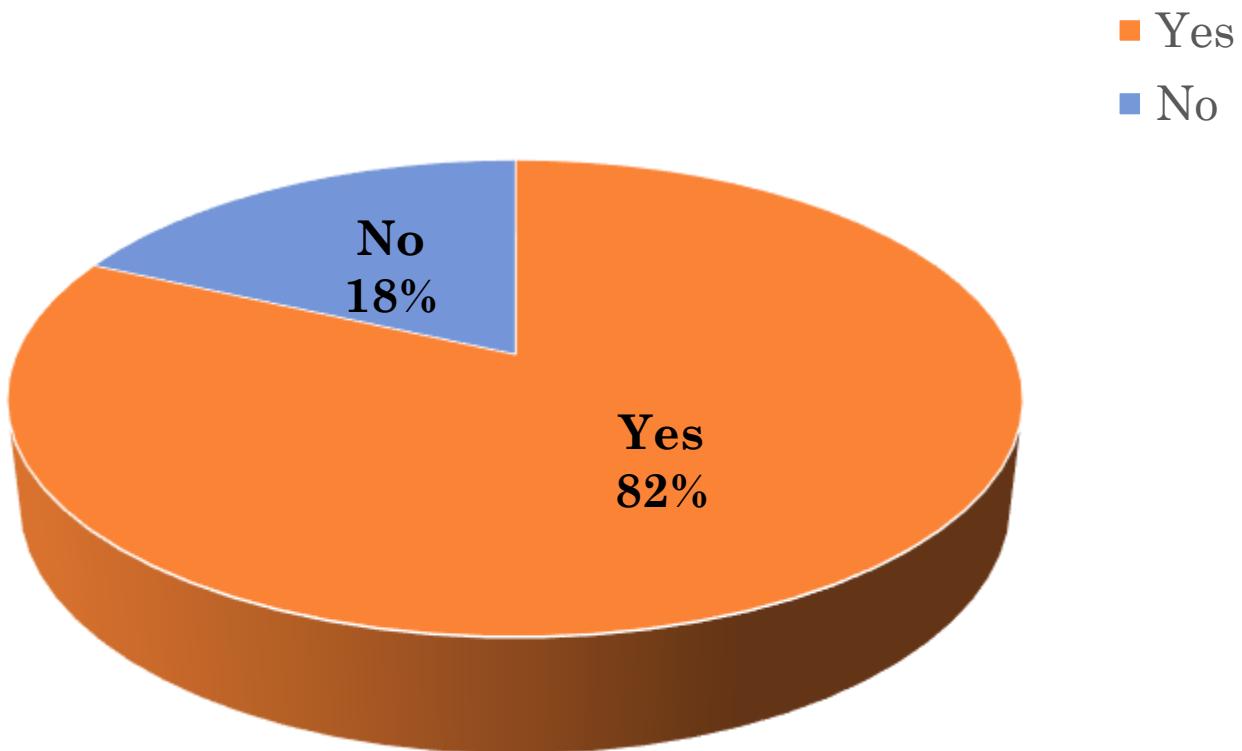
CT SCAN FINDINGS



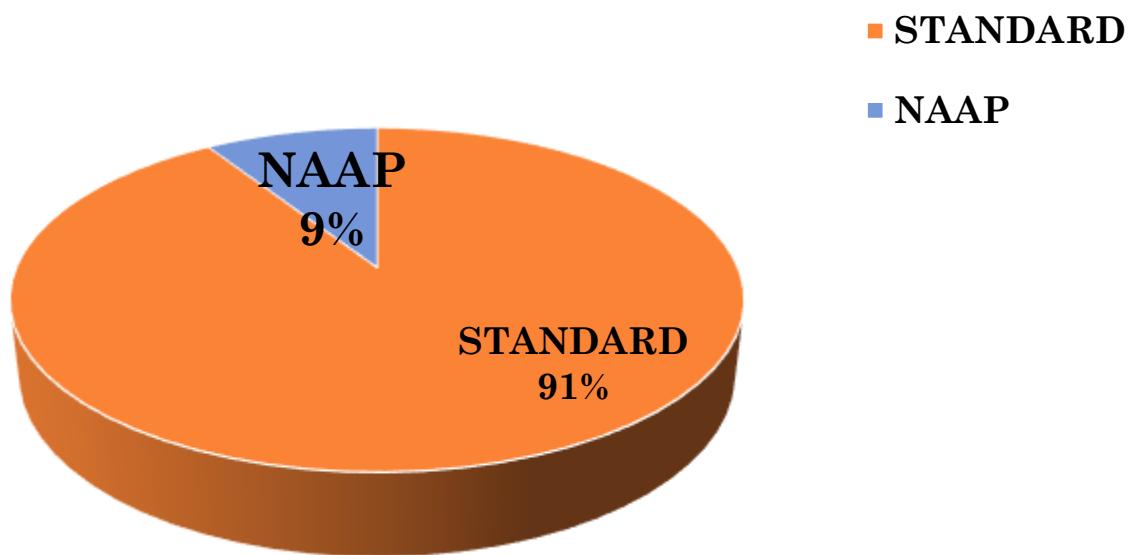
HISTOPATHOLOGY FINDINGS



BIOPSY PROCEDURE



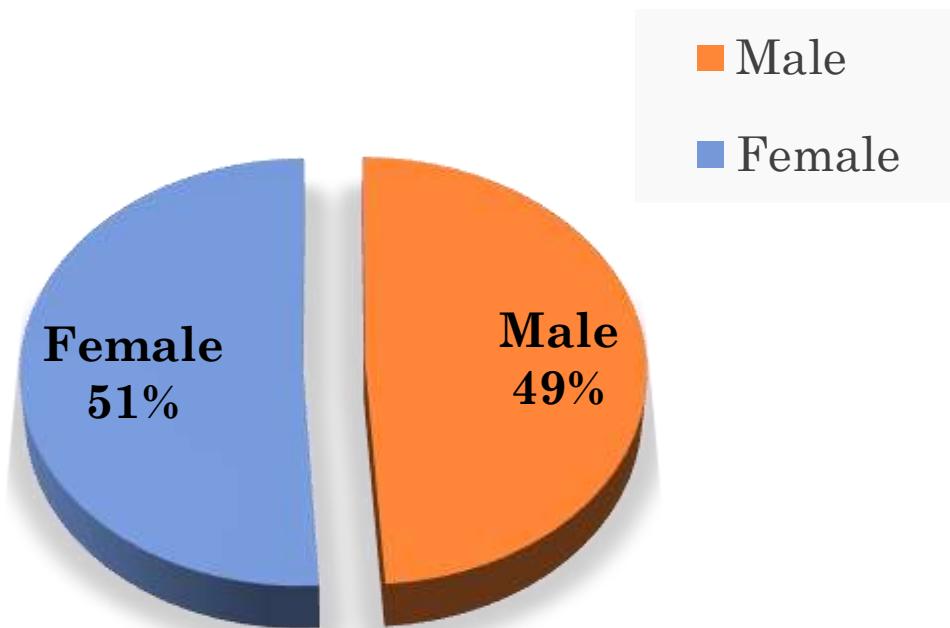
TYPE OF SEDATION



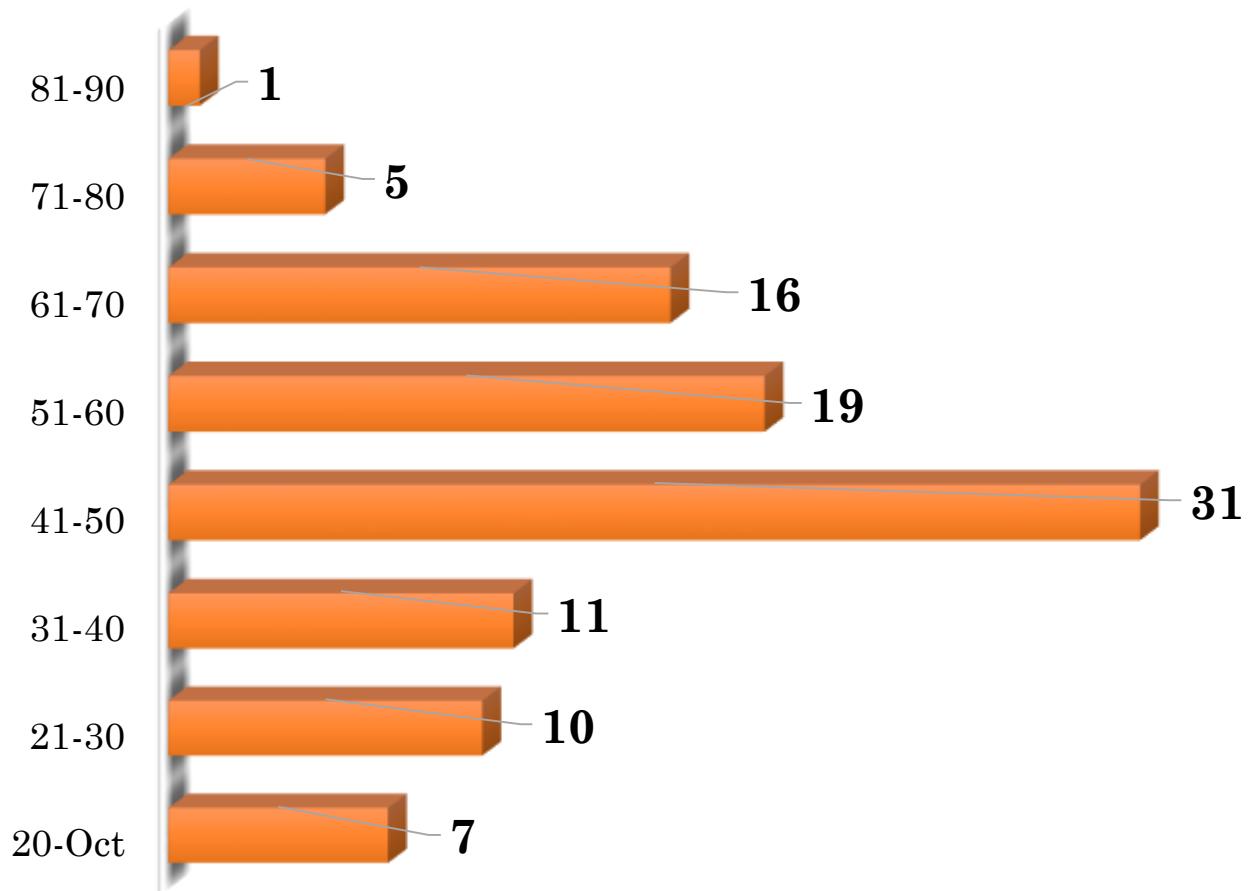
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

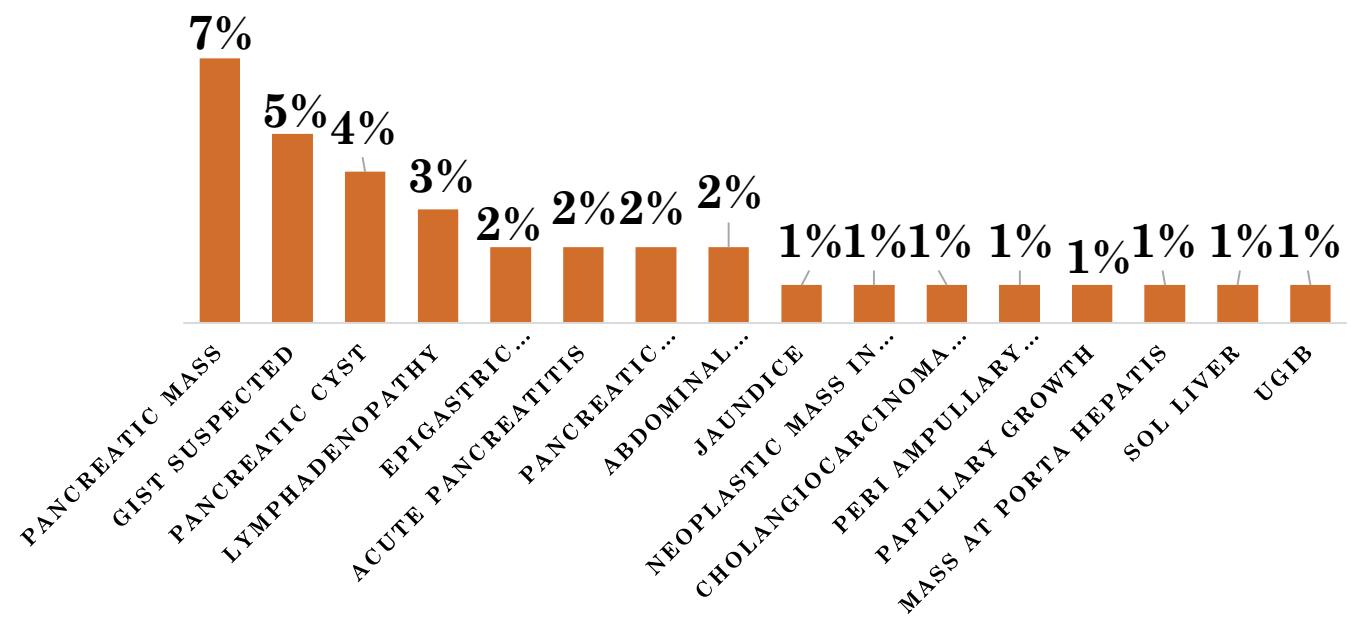
| | |
|----------------------|-----|
| Total No of Patients | 100 |
| Male | 49 |
| Female | 51 |



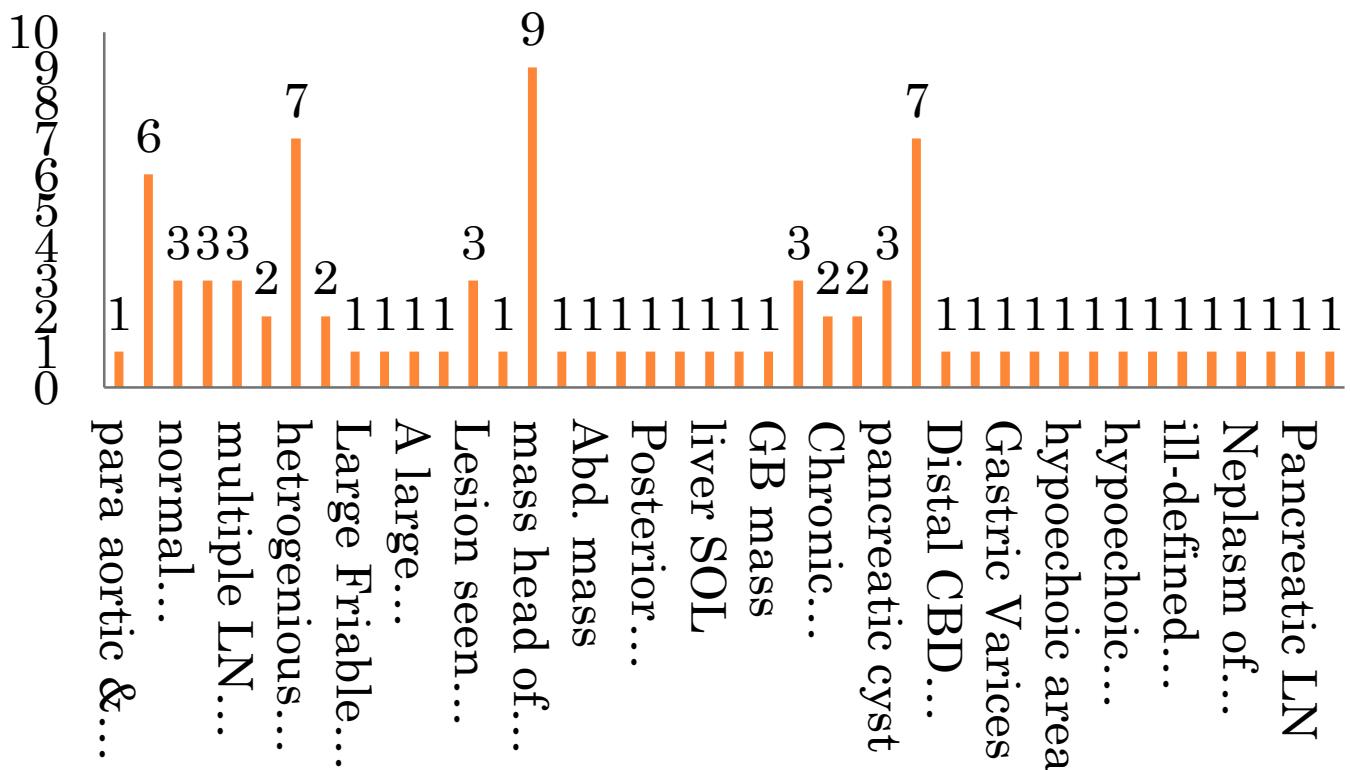
Age Distribution:



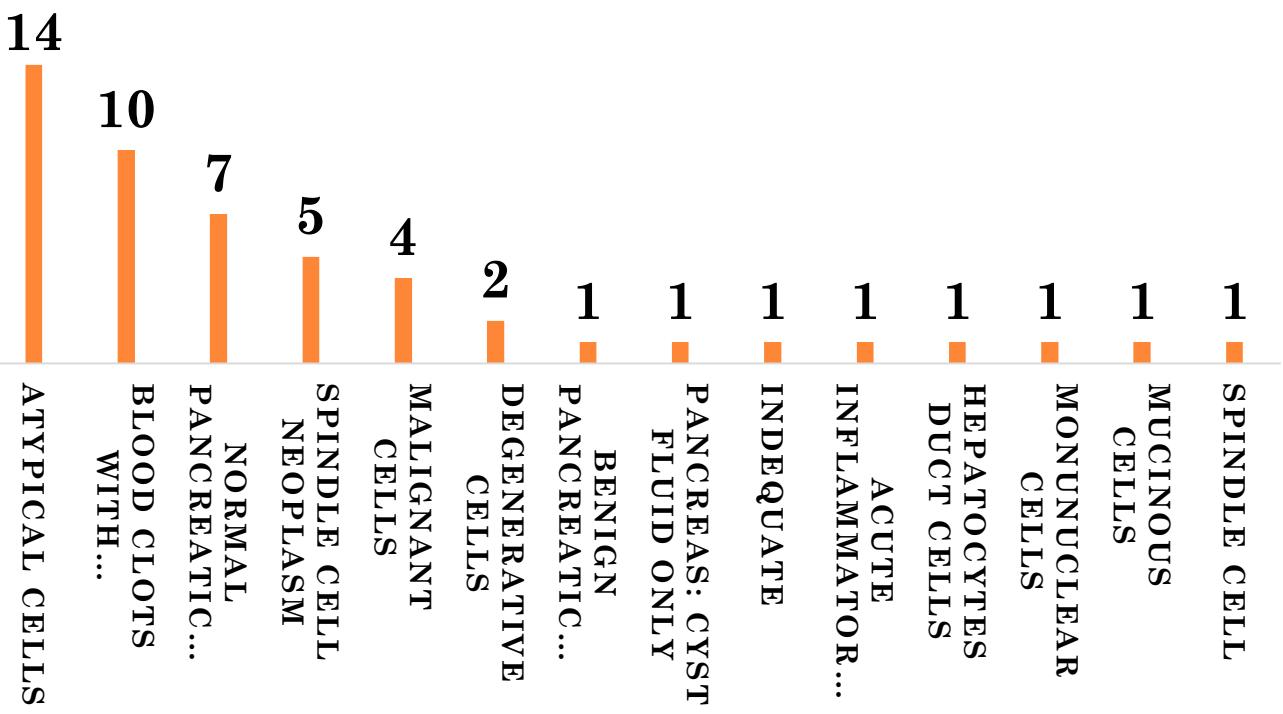
INDICATION



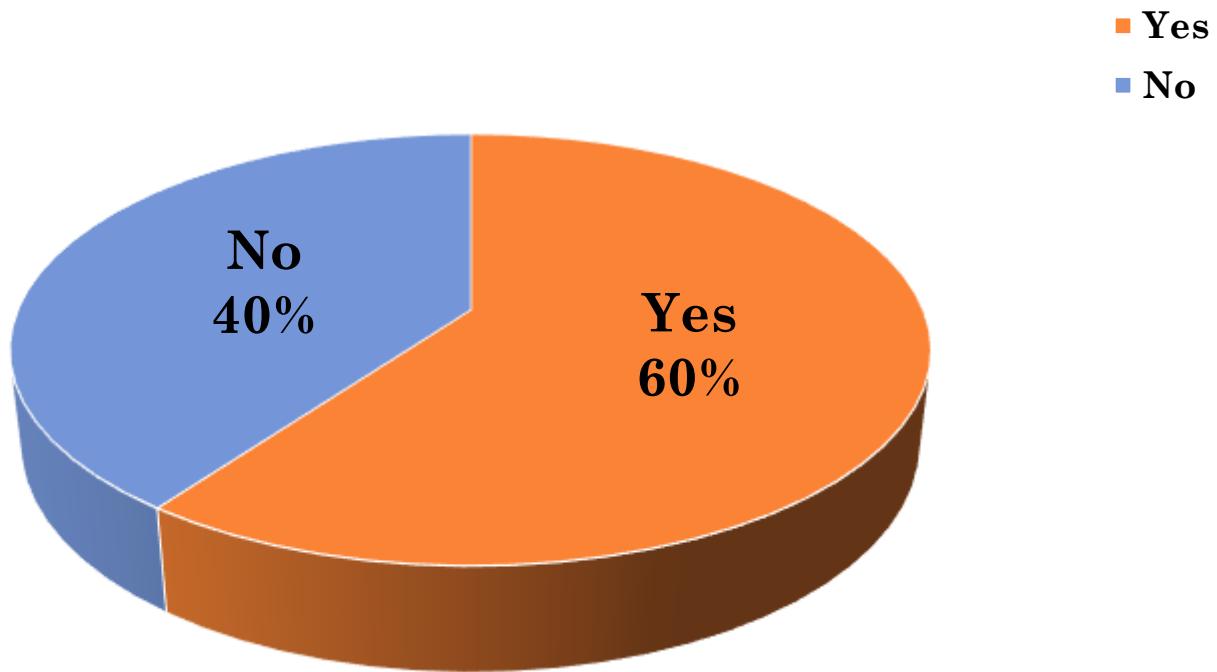
PROCEDURAL FINDINGS



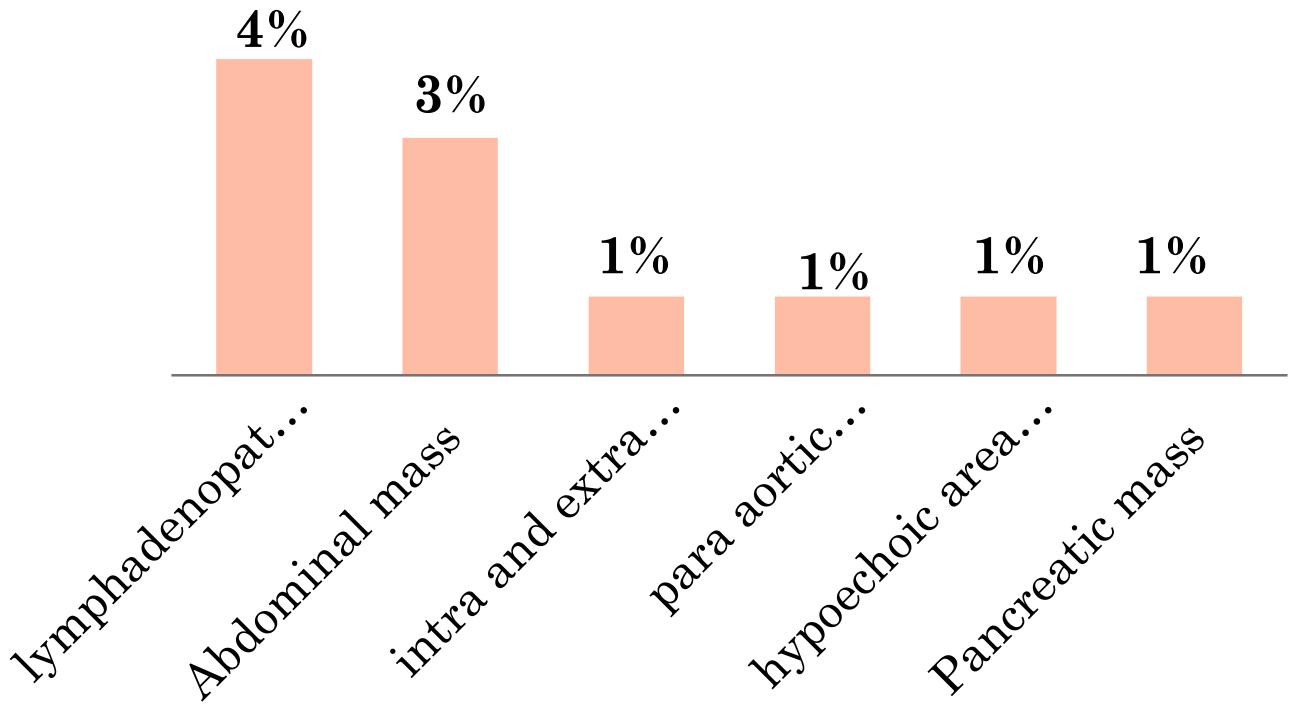
HISTOPATHOLOGY FINDINGS



BIOPSY PROCEDURE



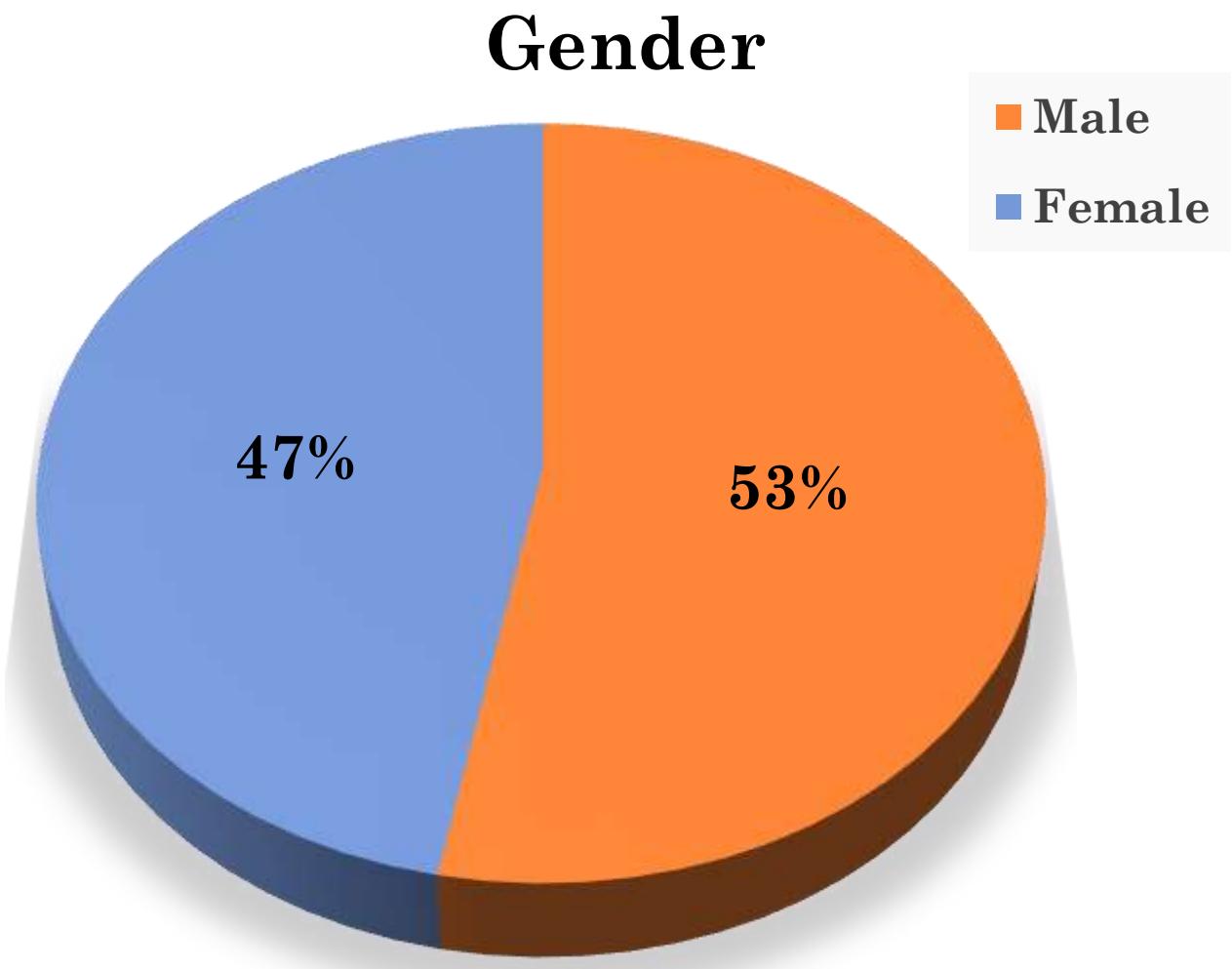
USG FINDINGS



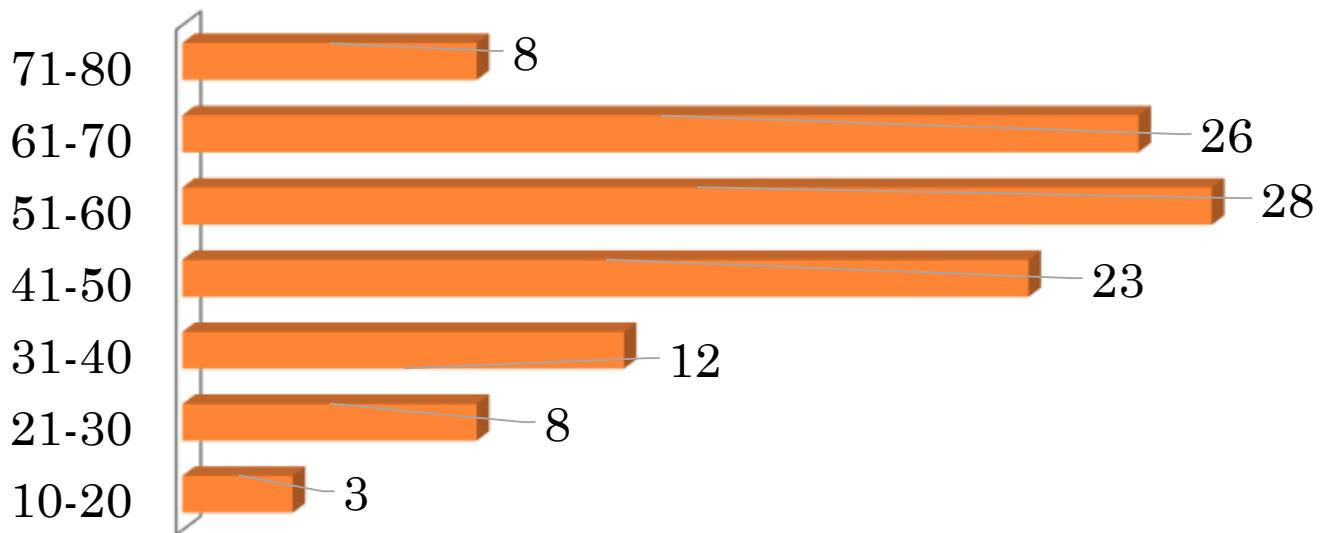
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

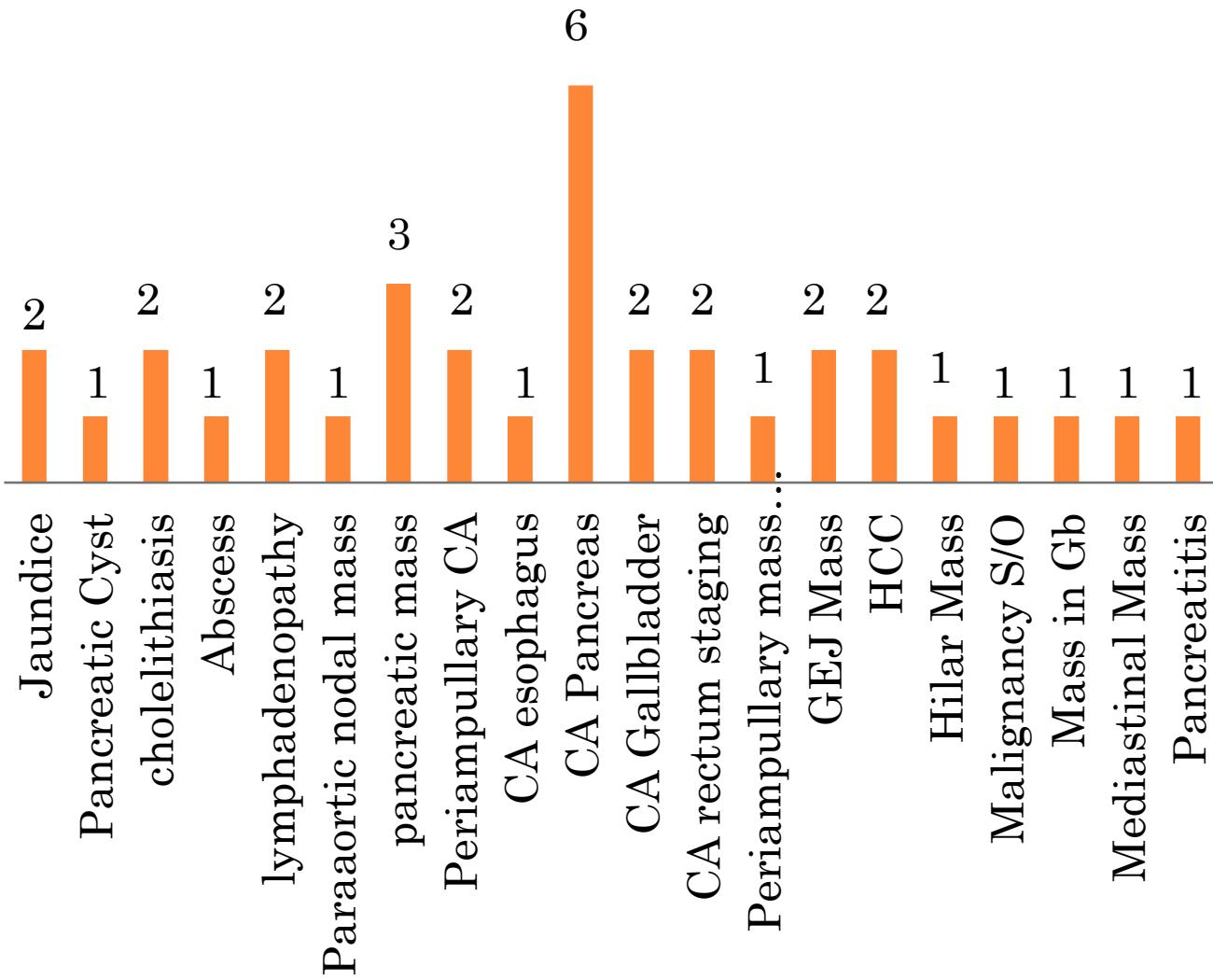
| | |
|----------------------|-----|
| Total No of Patients | 181 |
| Male | 96 |
| Female | 85 |



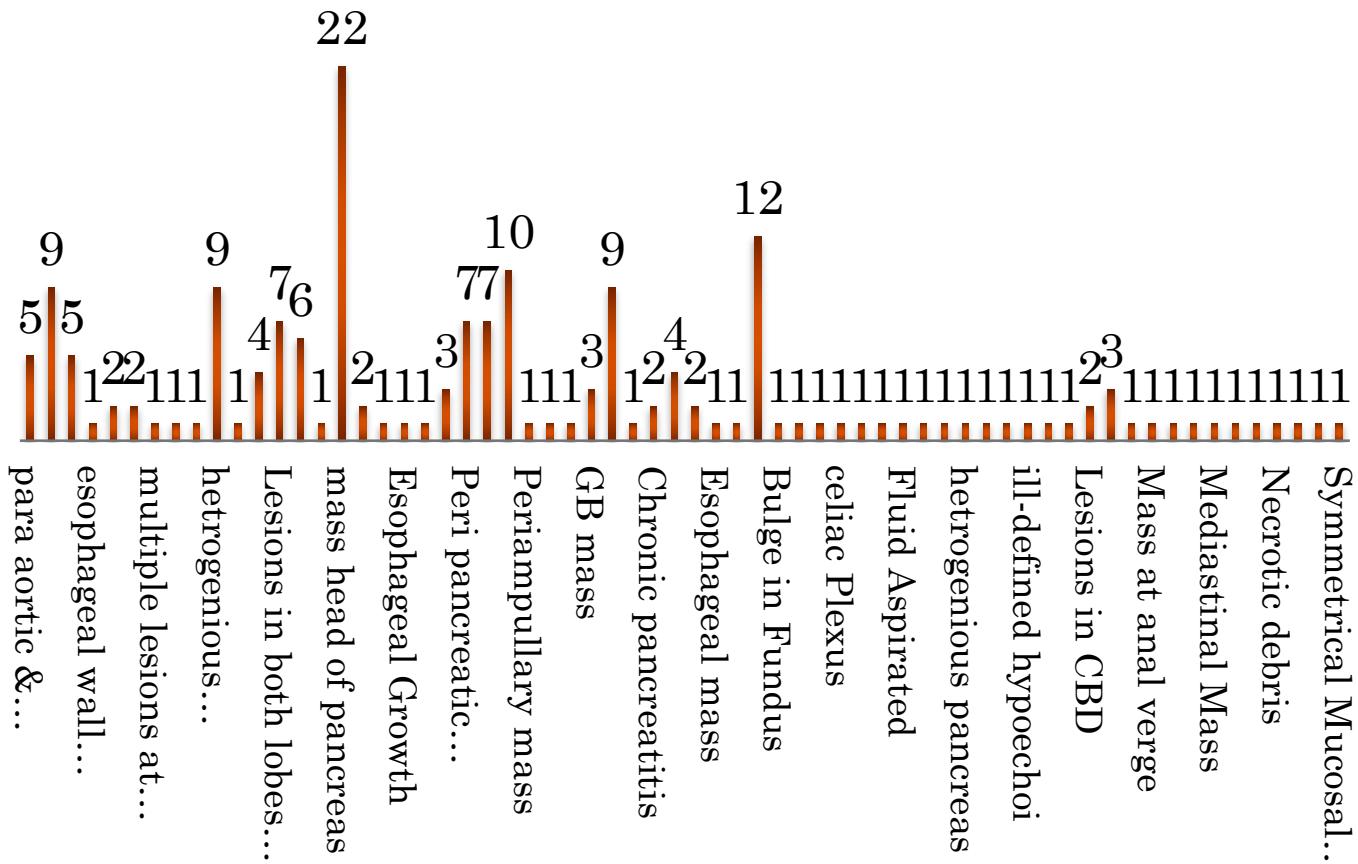
Age Distribution:



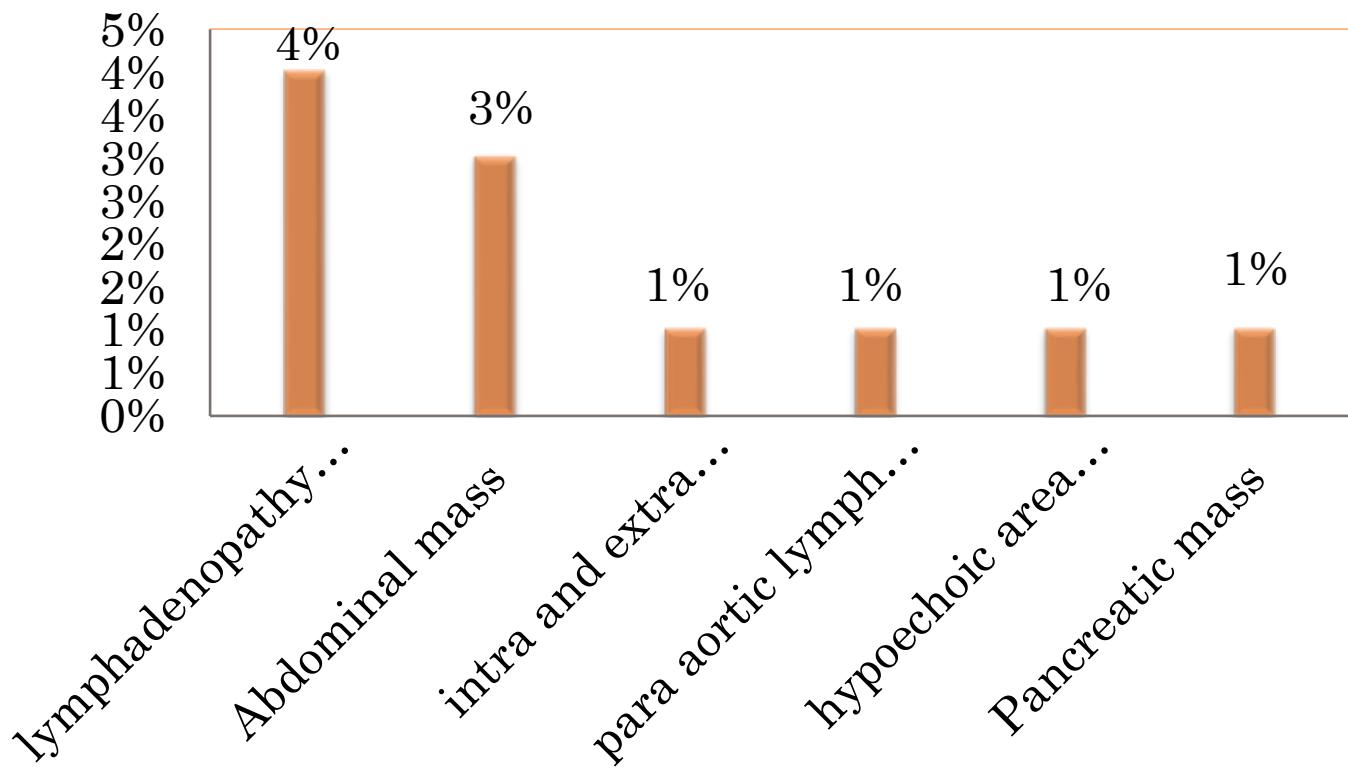
INDICATION



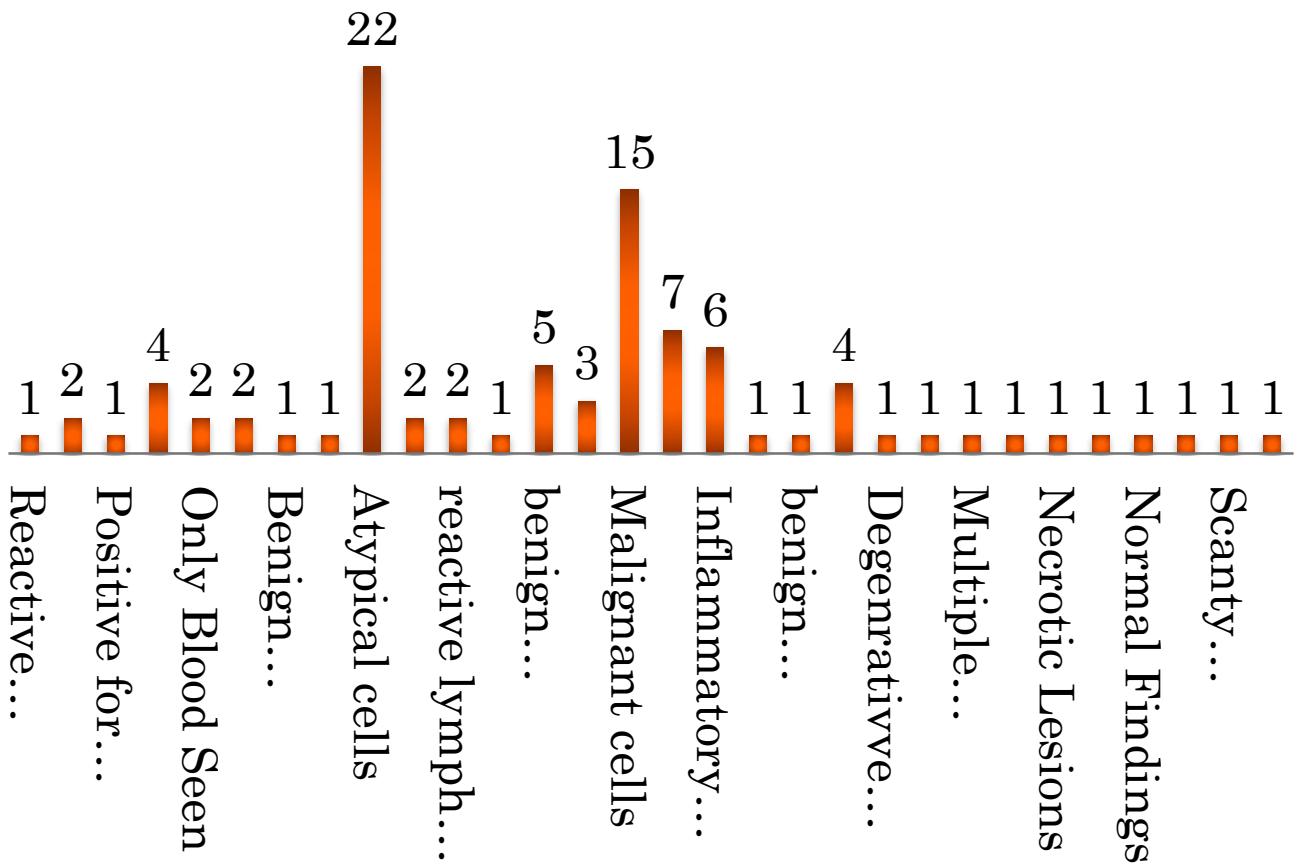
PROCEDURAL FINDINGS



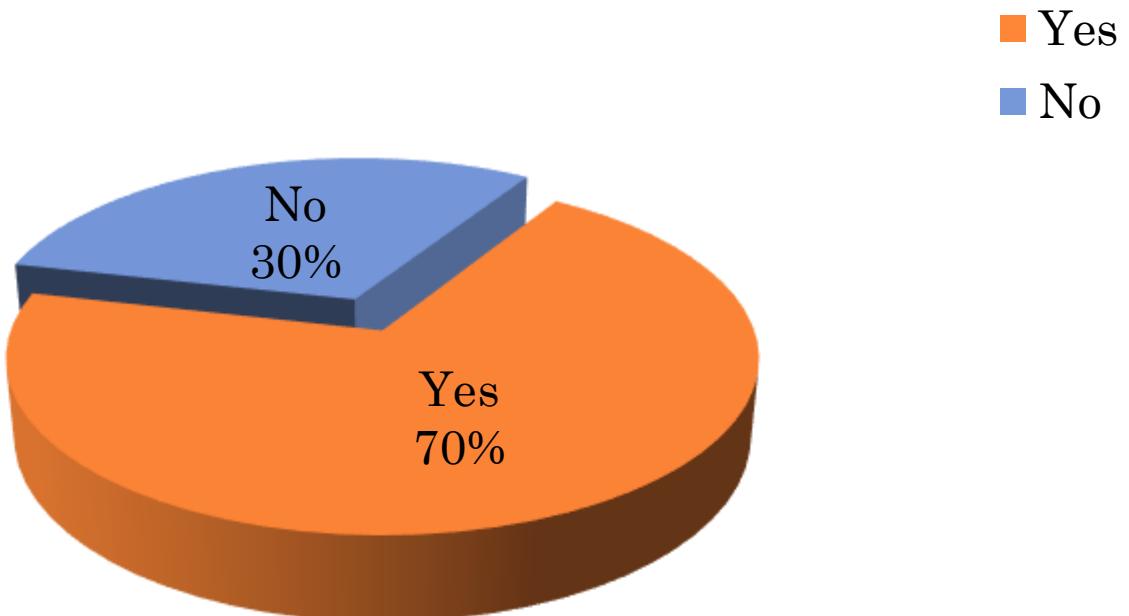
USG FINDINGS



HISTOPATHOLOGY FINDINGS

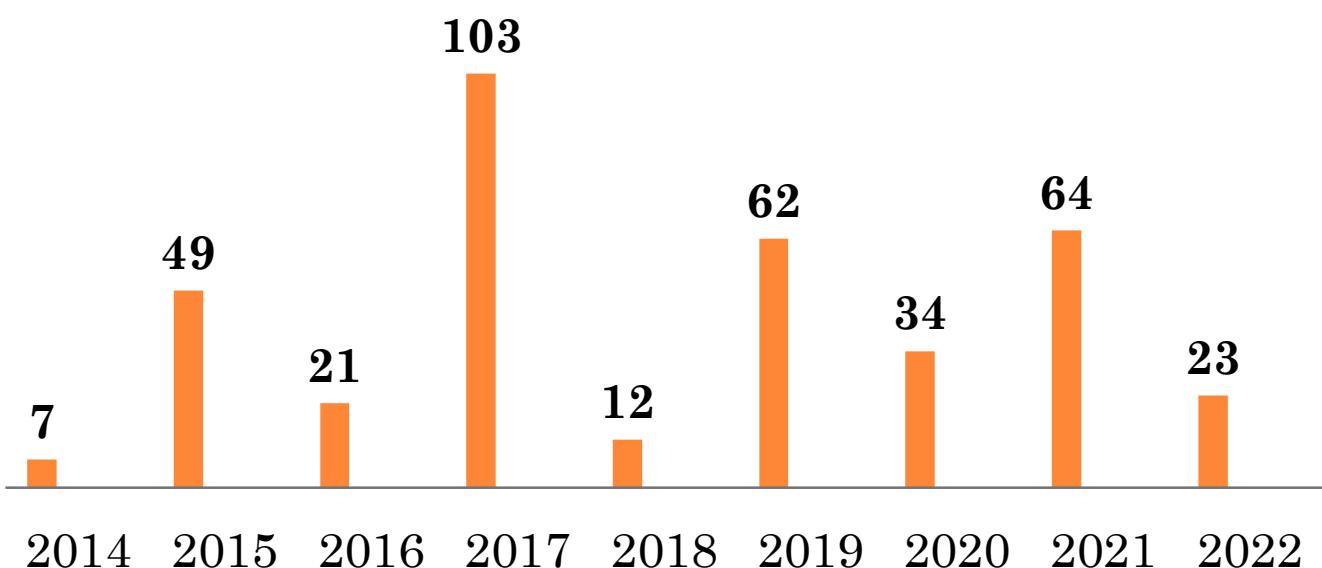


BIOPSY Procedure



Manometry Audit

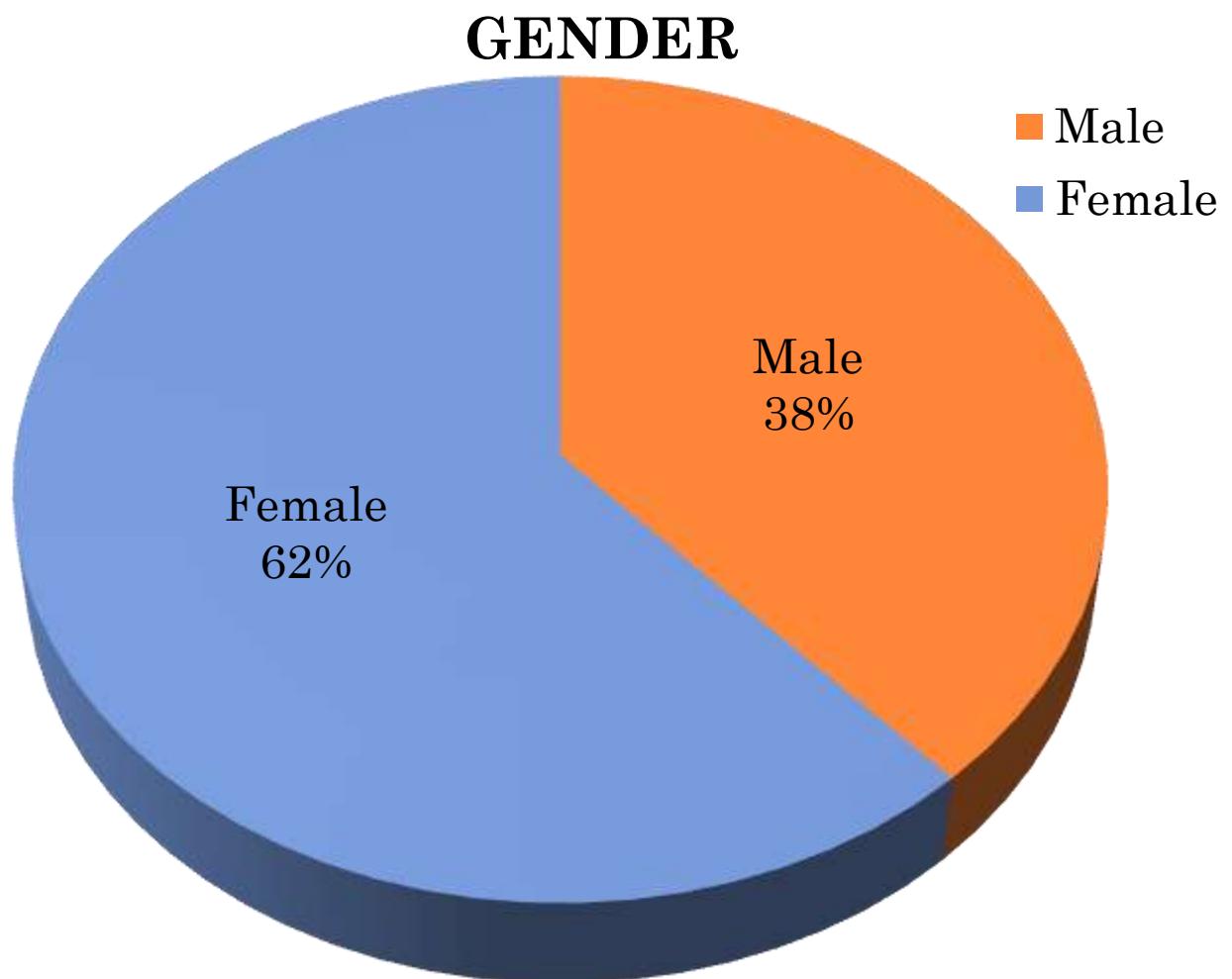
Incidence of esophageal motility disorders in patients with dysphagia and chest pain ranges from 25% to 63%. The gold standard diagnostic tool is high resolution impedance manometry. It is a diagnostic modality with limited availability in Pakistan and center for liver and GI diseases, holy family hospital Rawalpindi is the first public sector hospital which has an experience of more than 9 years in conducting this procedure. During the COVID year 34 patients were entertained following all precautionary measures. The number improved to 64 in 2021 as the COVID conditions improved. In the year 2022 our motility lab underwent upgradation with the latest HRM system and software's. In 2022 our center also started motility services for anorectal disorders. Achalasia remained the commonest diagnosis. Most of the achalasia patients under went pneumatic dilation successfully at our center and are being followed up in the dedicated motility disorder clinic on every Wednesday. The center is also providing patient support program for Achalasia cases through social media platform <https://www.facebook.com/Achalasia-Support-Group-Pakistan-108419877757357/>



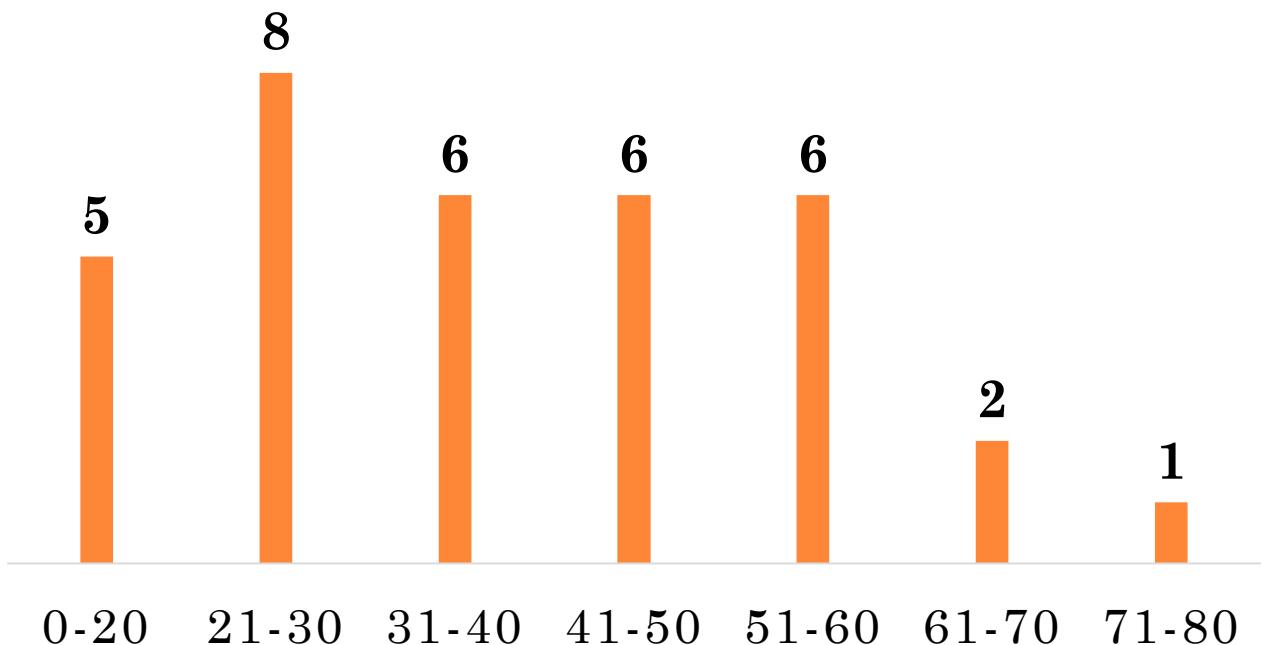
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

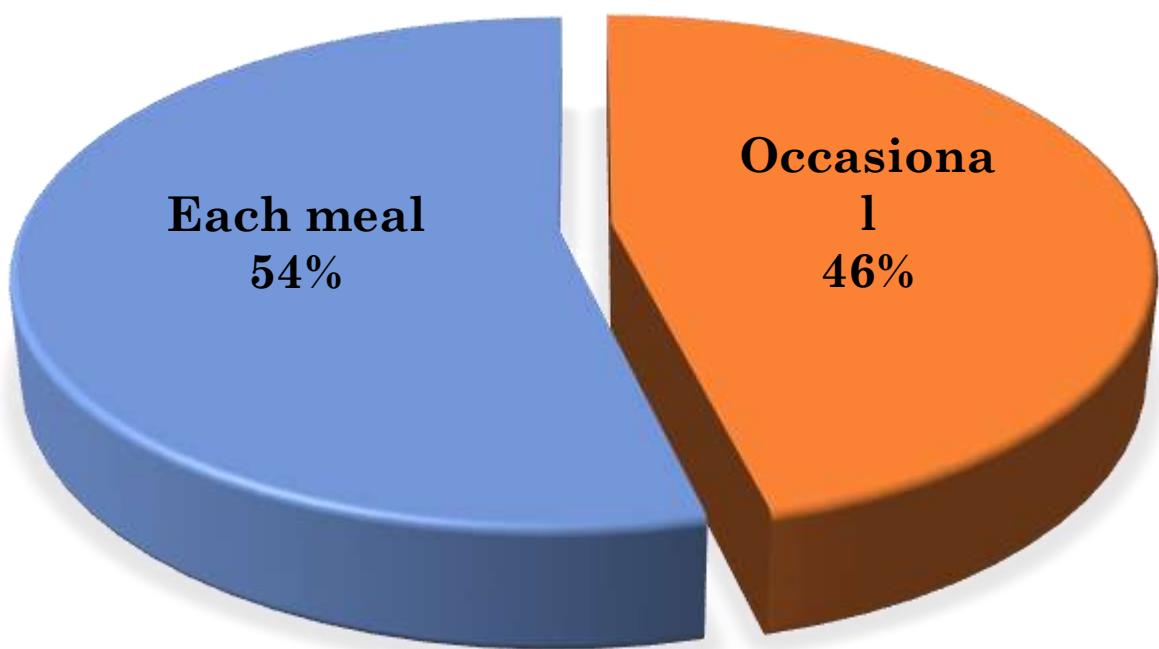
| | |
|----------------------|----|
| Total No of Patients | 34 |
| Male | 13 |
| Female | 21 |



AGE WISE DISTRIBUTION



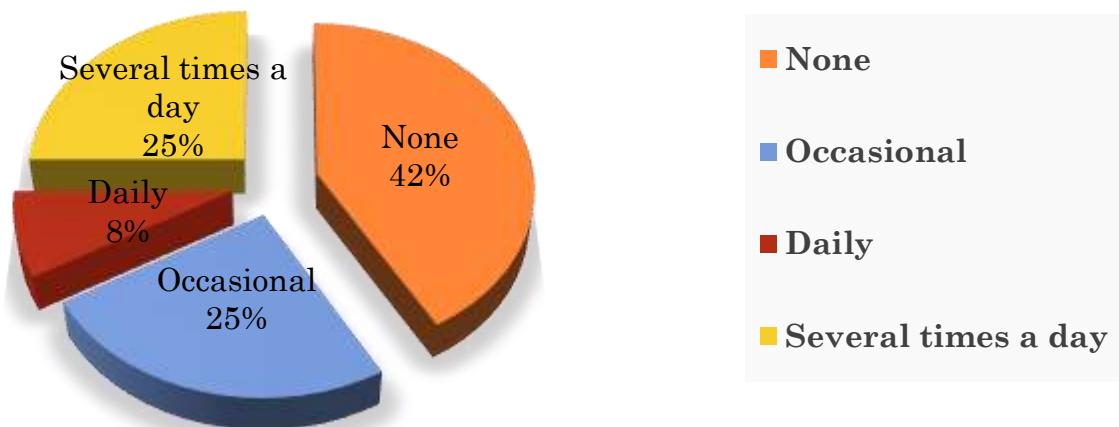
PRESENTING COMPLAINT (DYSPHAGIA SEVERITY)



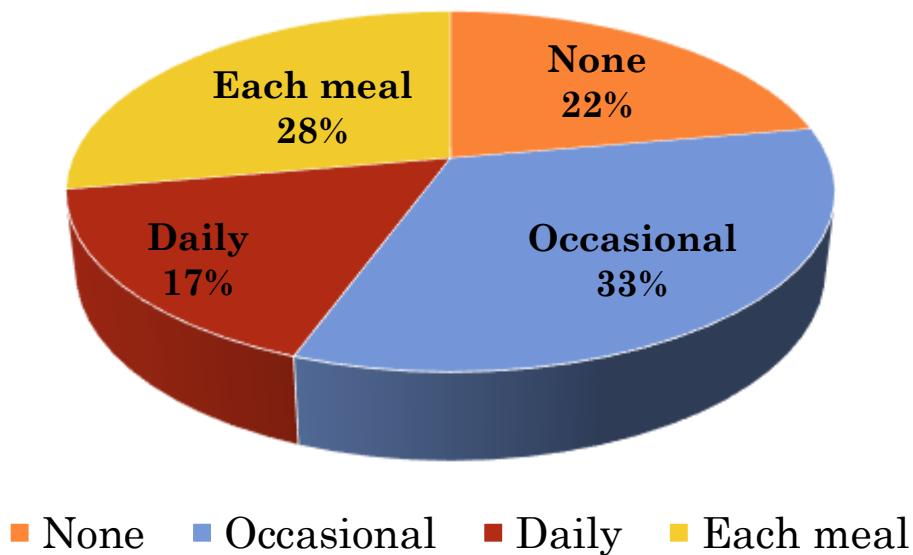
WEIGHT LOSS



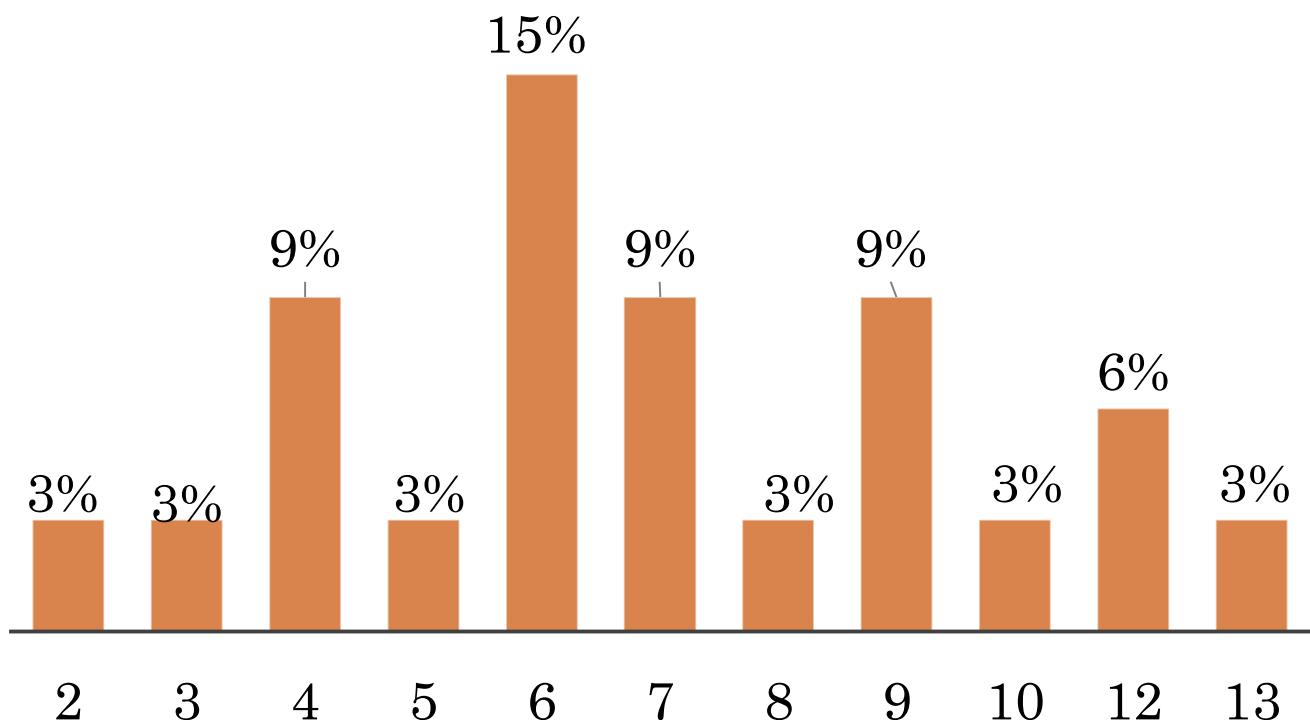
RETROSTERNAL PAIN



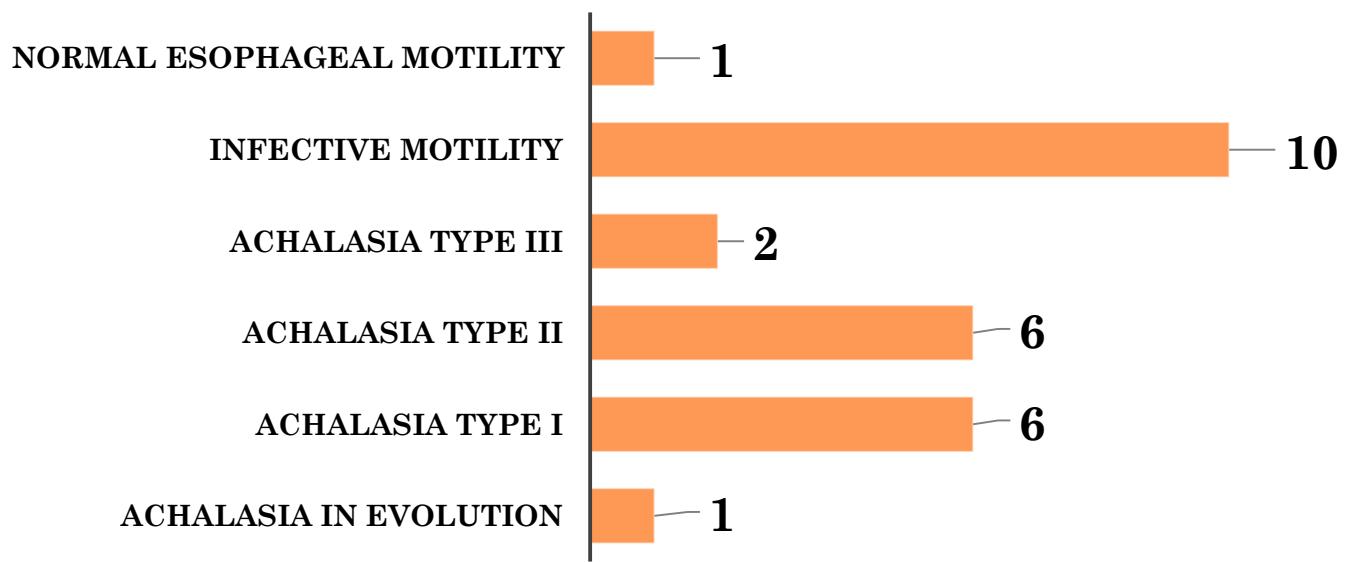
Regurgitation



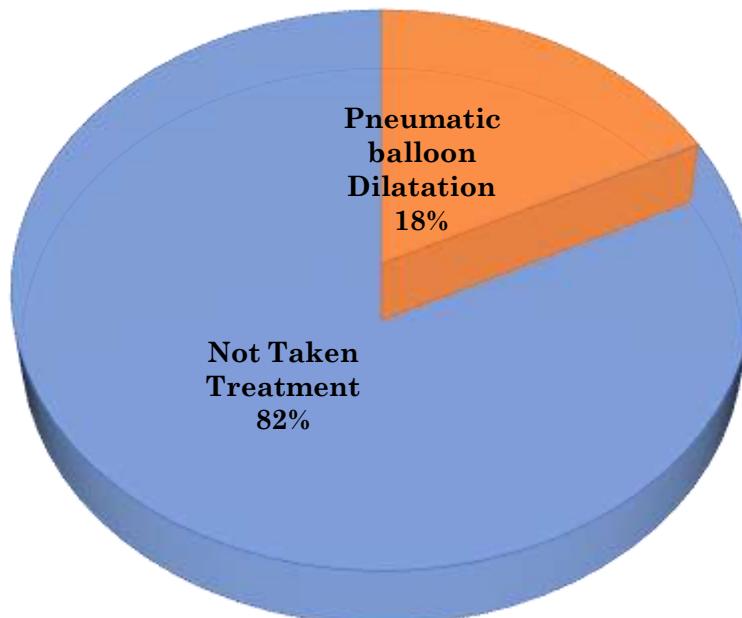
ECKARDT SCORE



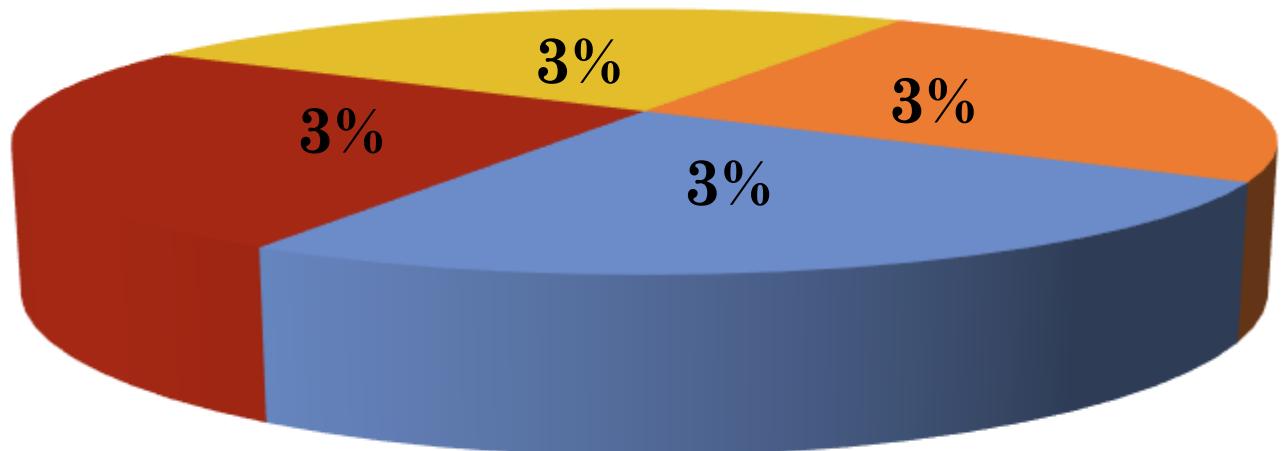
HRM DIAGNOSIS (CHICAGO CLASSIFICATION)



ACHALASIA PATIENTS WHO OPTED PNEUMETIC DILATATION IN OUR CENTRE



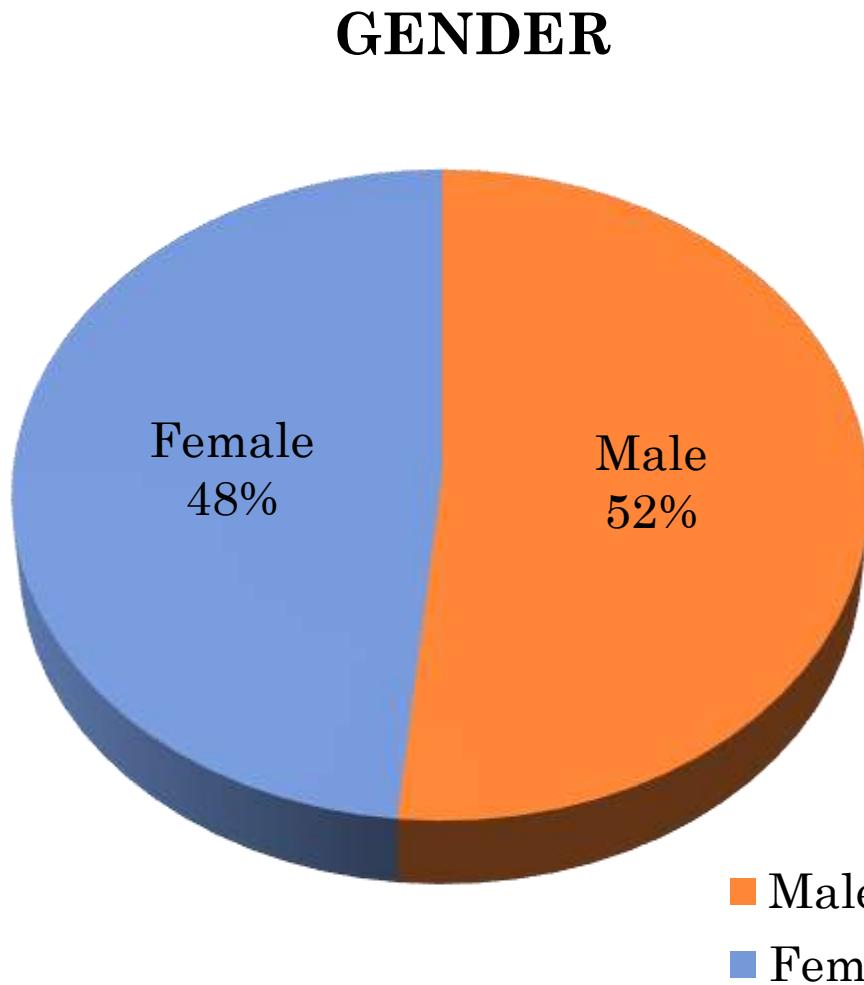
PRESSURE USED DURING PROCEDURE BALLOON DILATATION IN ACHALASIA PATIENTS



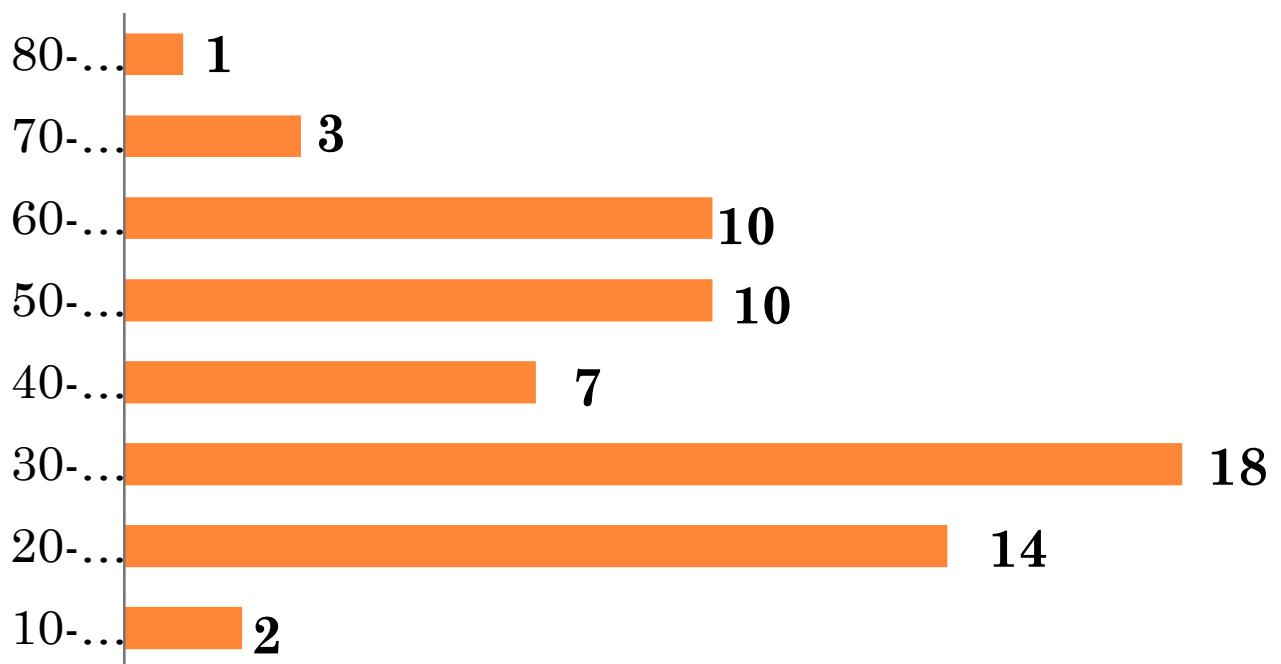
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

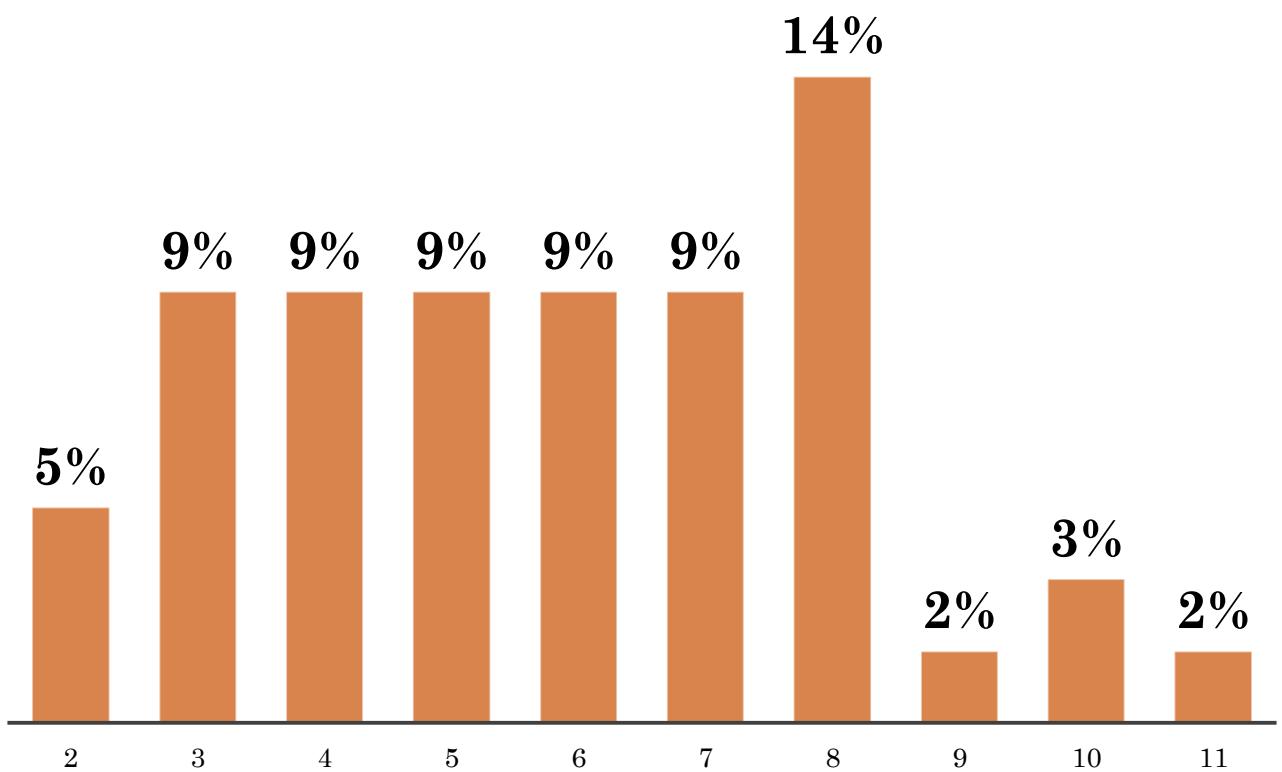
| Total No of Patients | 64 |
|----------------------|----|
| Male | 33 |
| Female | 31 |



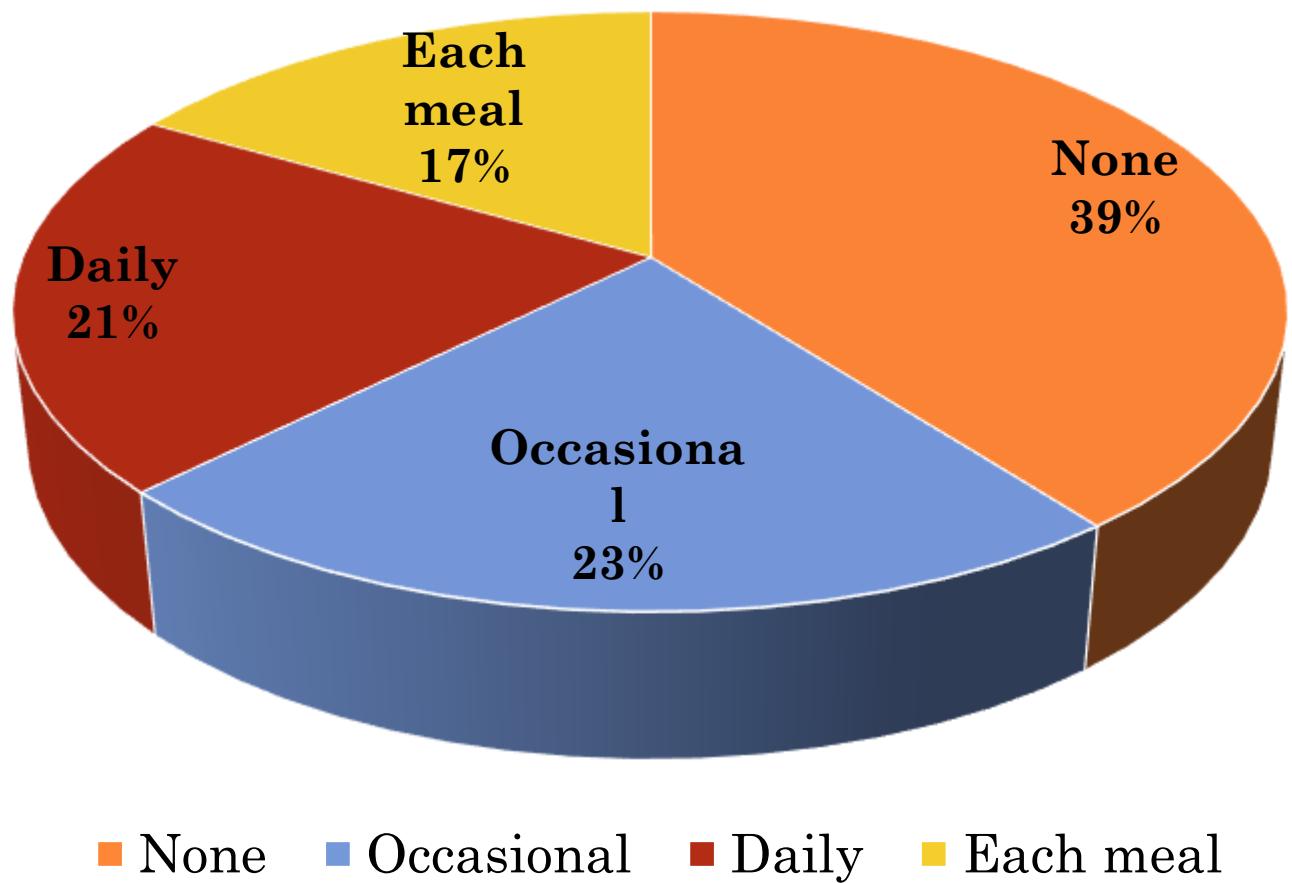
AGE WISE DISTRIBUTION



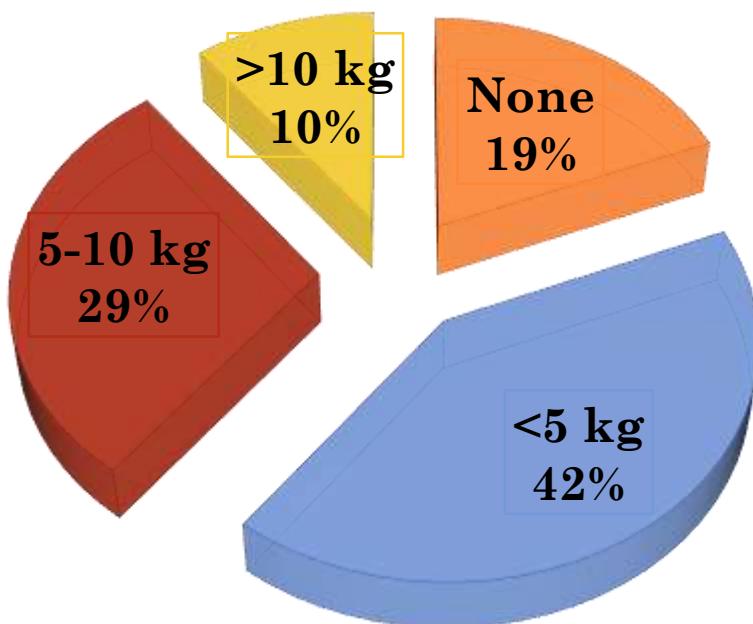
ECKARDT_SCORE



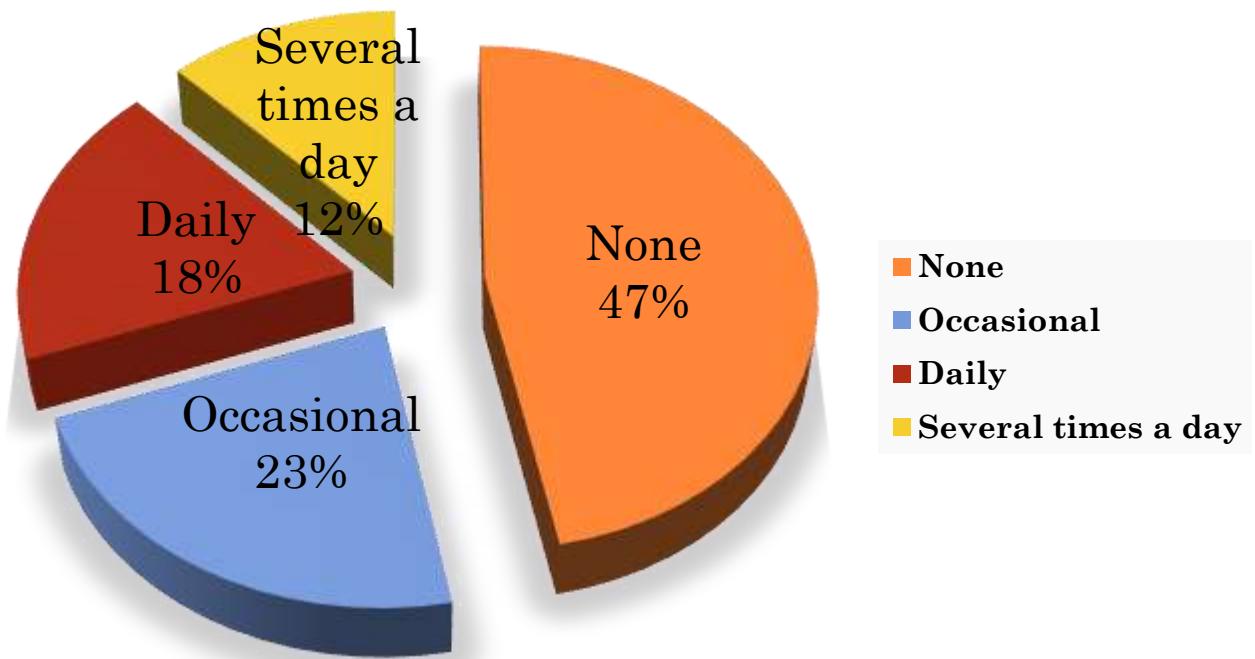
REGURGITATION



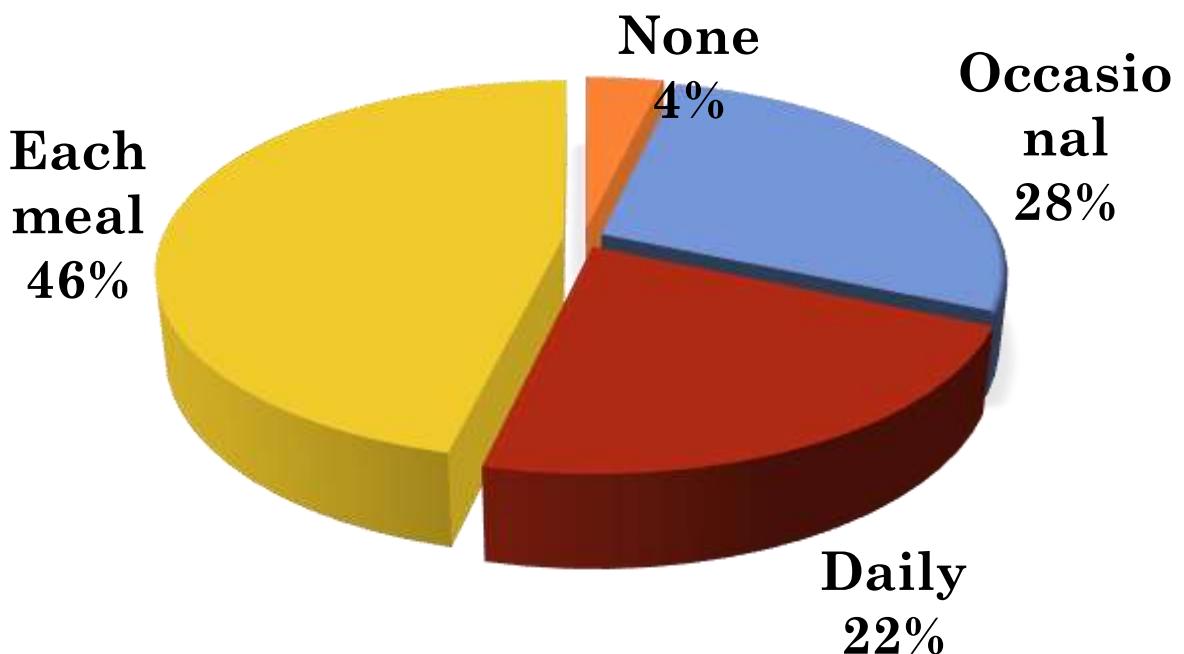
WEIGHT LOSS



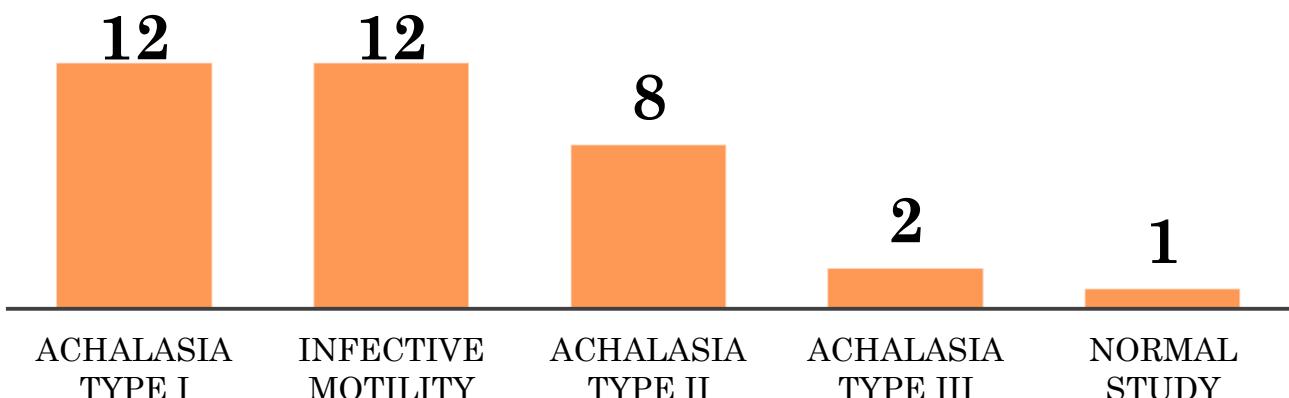
RETROSTERNAL PAIN



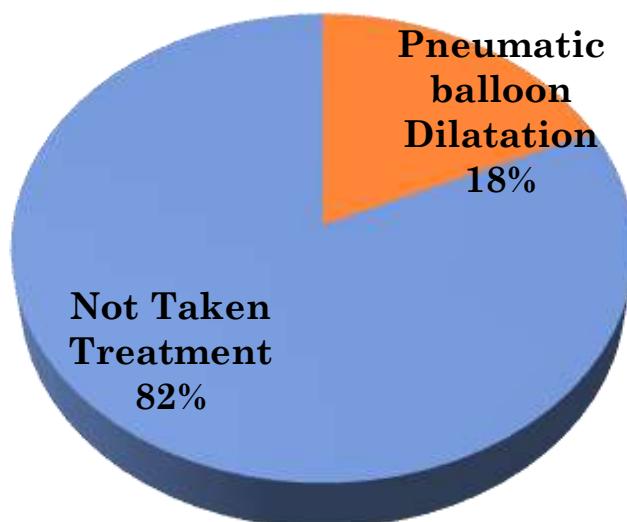
PRESENTING COMPLAINT (DYSPHAGIA SEVERITY)



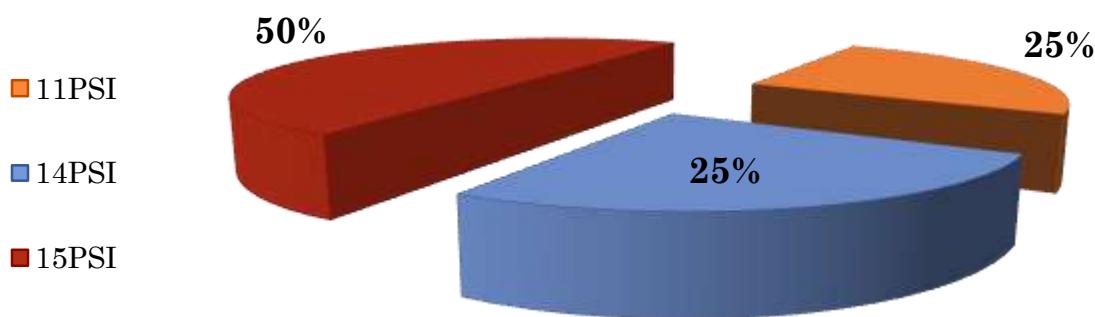
HRM_DIAGNOSIS_(CHICAGO CLASSIFICATION)



ACHALASIA PATIENTS WHO OPTED PNEUMETIC DILATATION IN OUR CENTRE



PRESSURE USED DURING PROCEDURE BALLOON DILATATION IN ACHALASIA PATIENTS

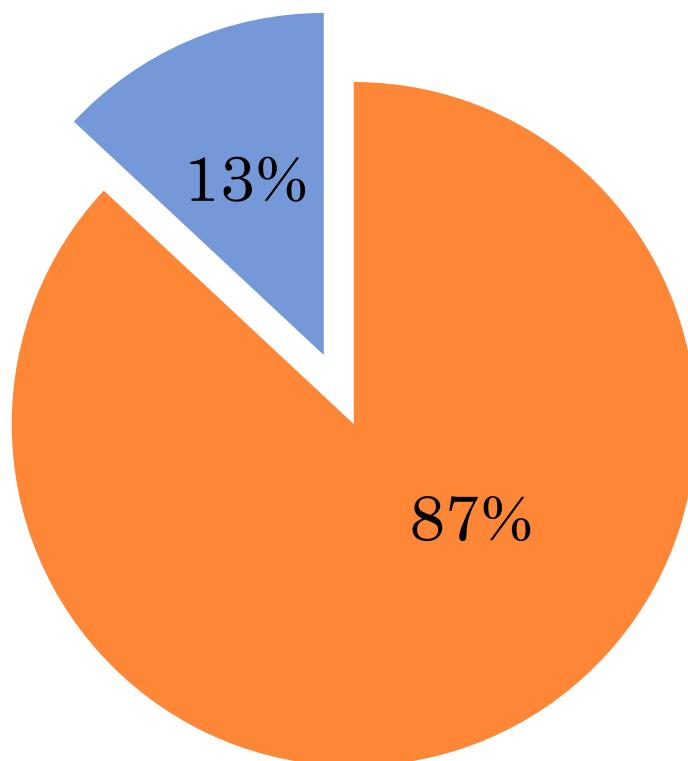


2022

TOTAL NUMBER OF PATIENTS WITH ESOPHAGEAL AND ANORECTAL MANOMETRY DISTRIBUTION.

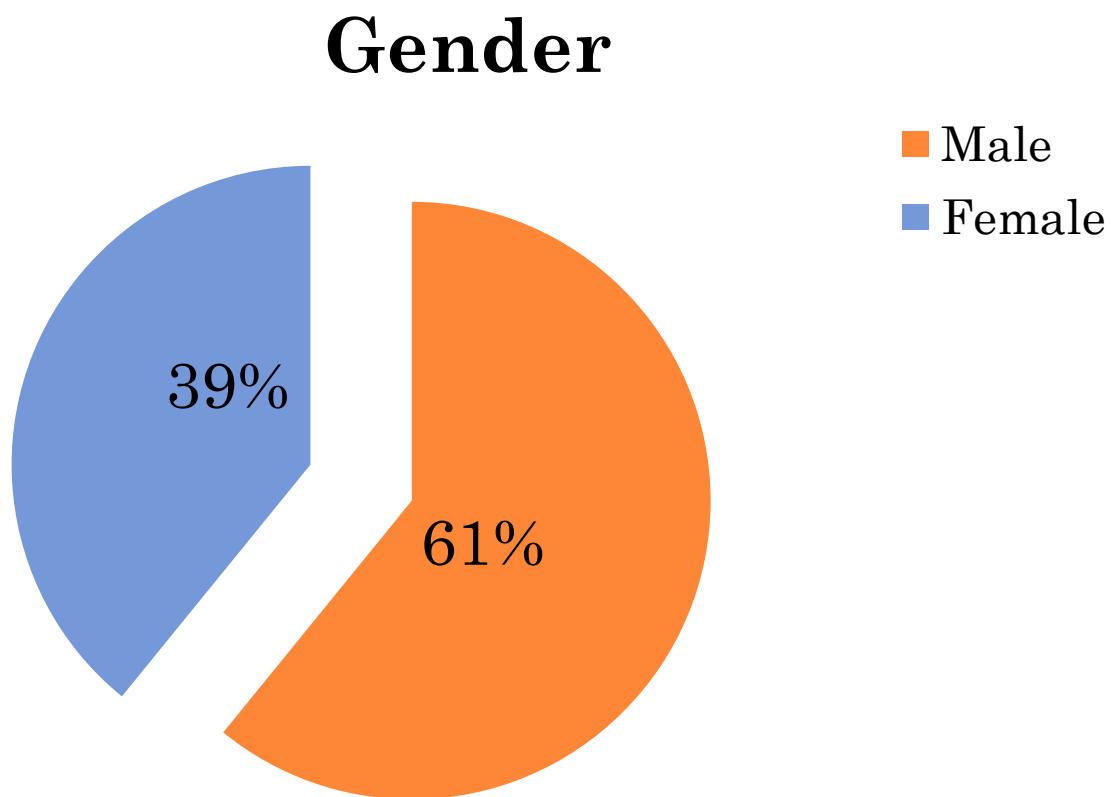
| | |
|-----------------------------|-----------|
| Total No of Patients | 23 |
| Esophageal Manometry | 20 |
| Anorectal Manometry | 03 |

■ Esophageal Manometry ■ Anorectal Manometry

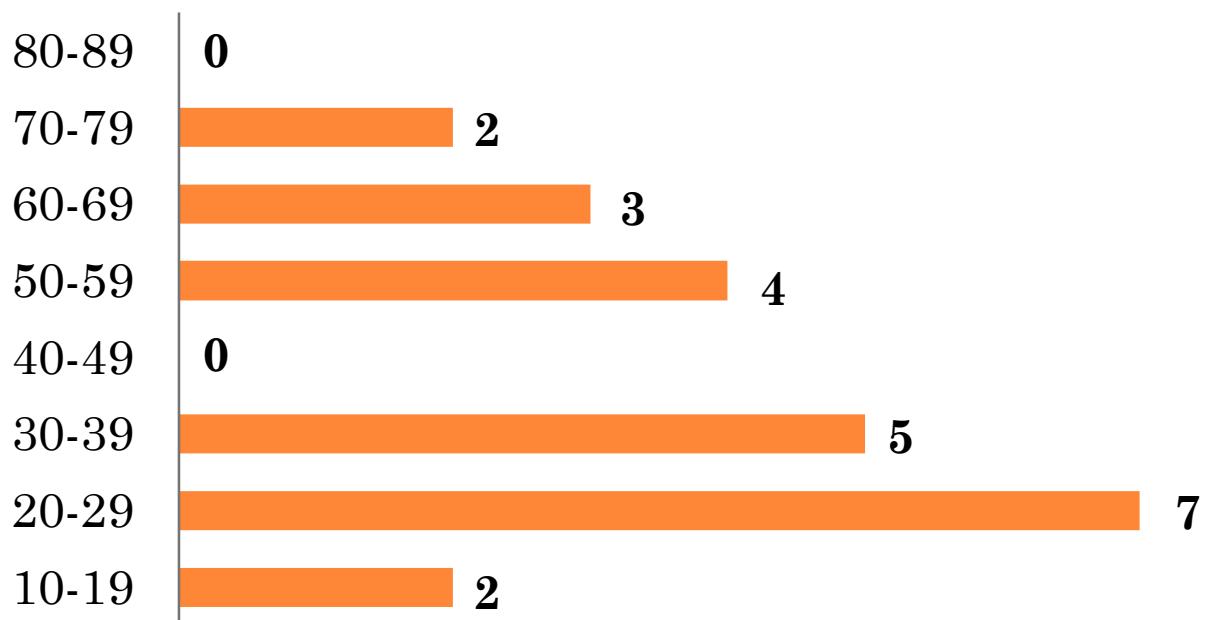


TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

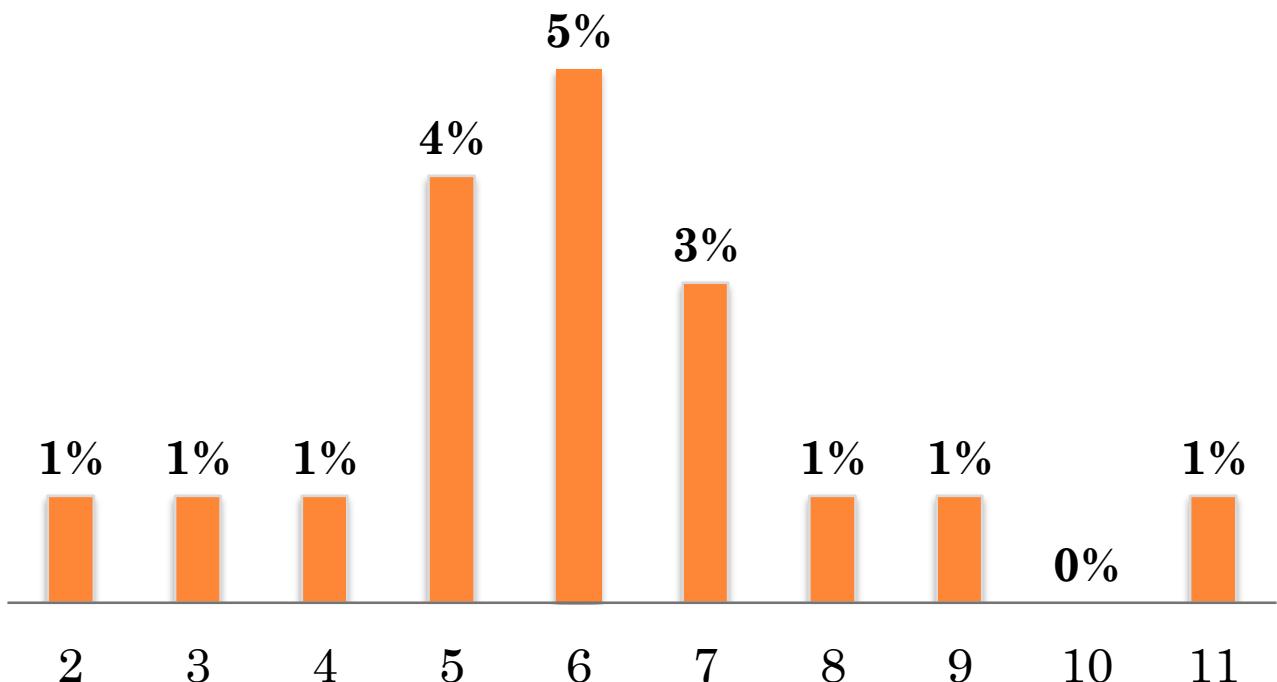
| | |
|-----------------------------|-----------|
| Total No of Patients | 23 |
| Male | 14 |
| Female | 09 |



AGE WISE DISTRIBUTION

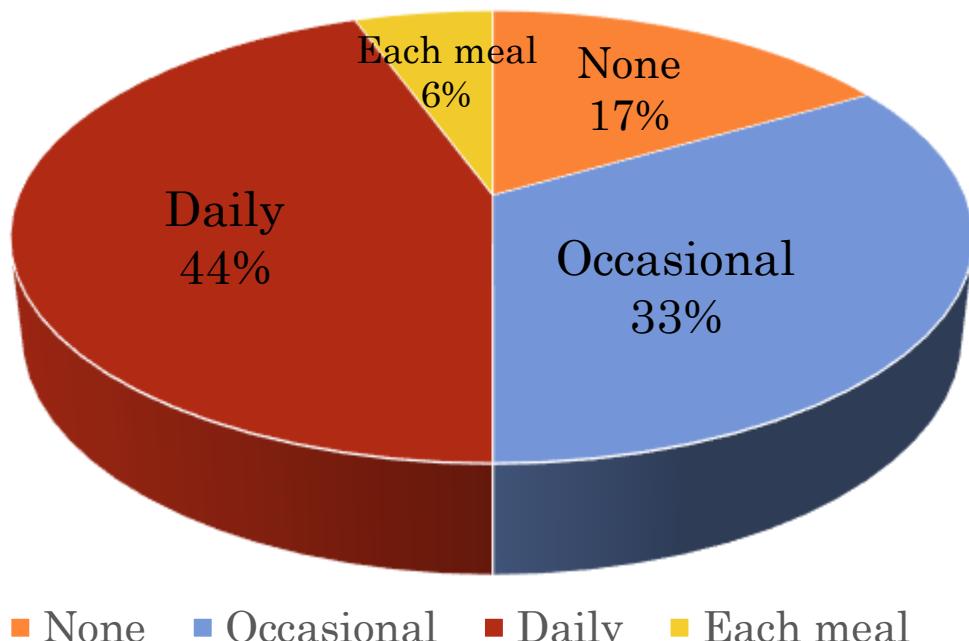


ECKARDT SCORE

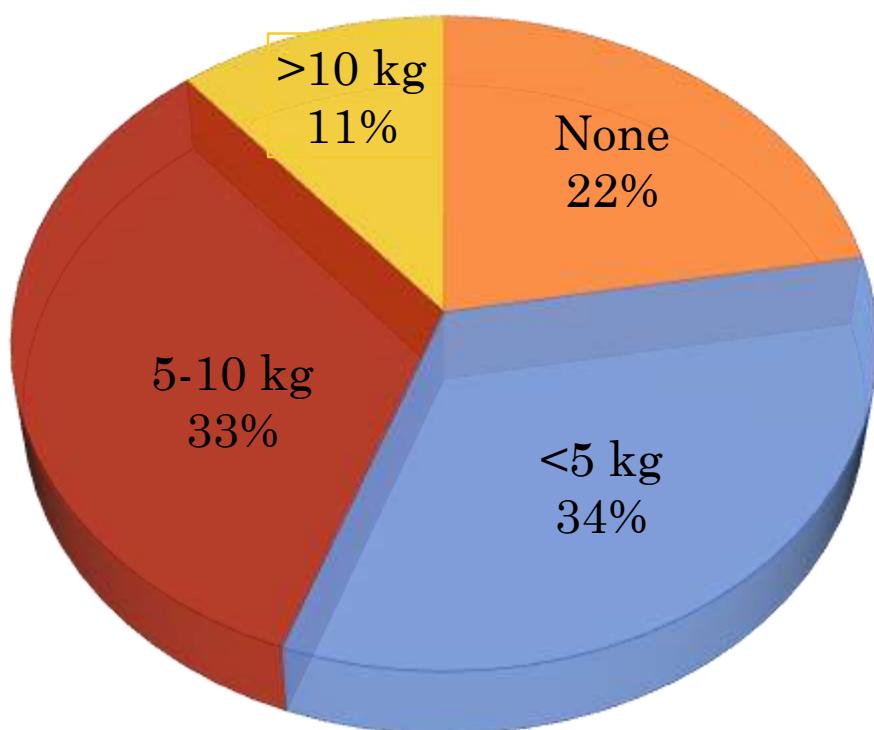


PRESENTING COMPLAINT

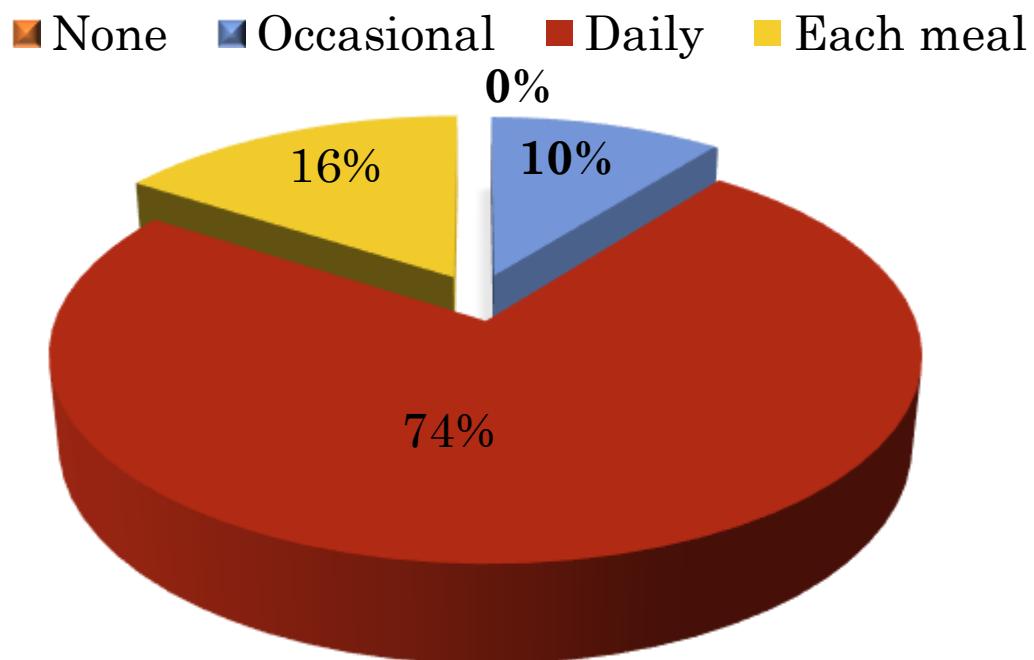
REGURGITATION



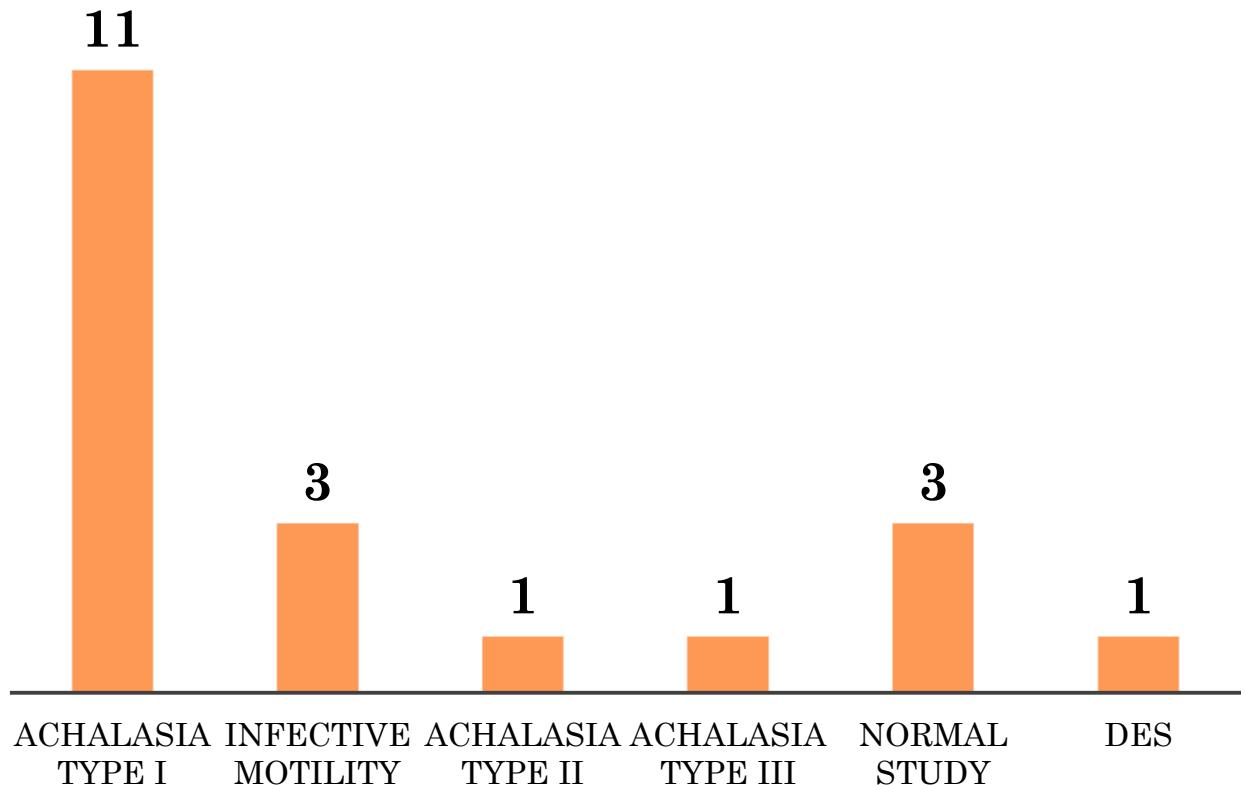
WEIGHT LOSS



DYSPHAGIA SEVERITY

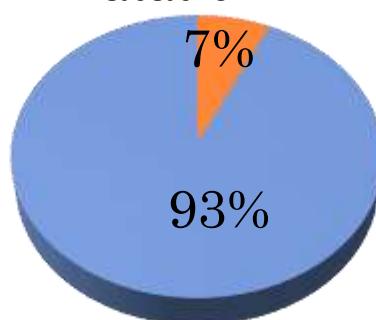


HRM DIAGNOSIS (CHICAGO CLASSIFICATION)

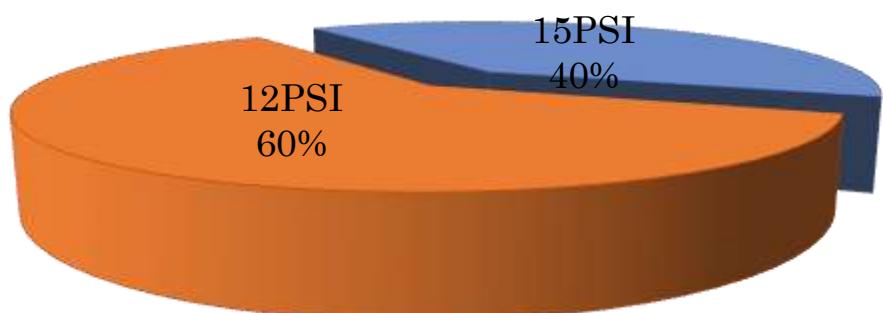


ACHALASIA PATIENTS WHO OPTED PNEUMETIC DILATATION IN OUR CENTRE

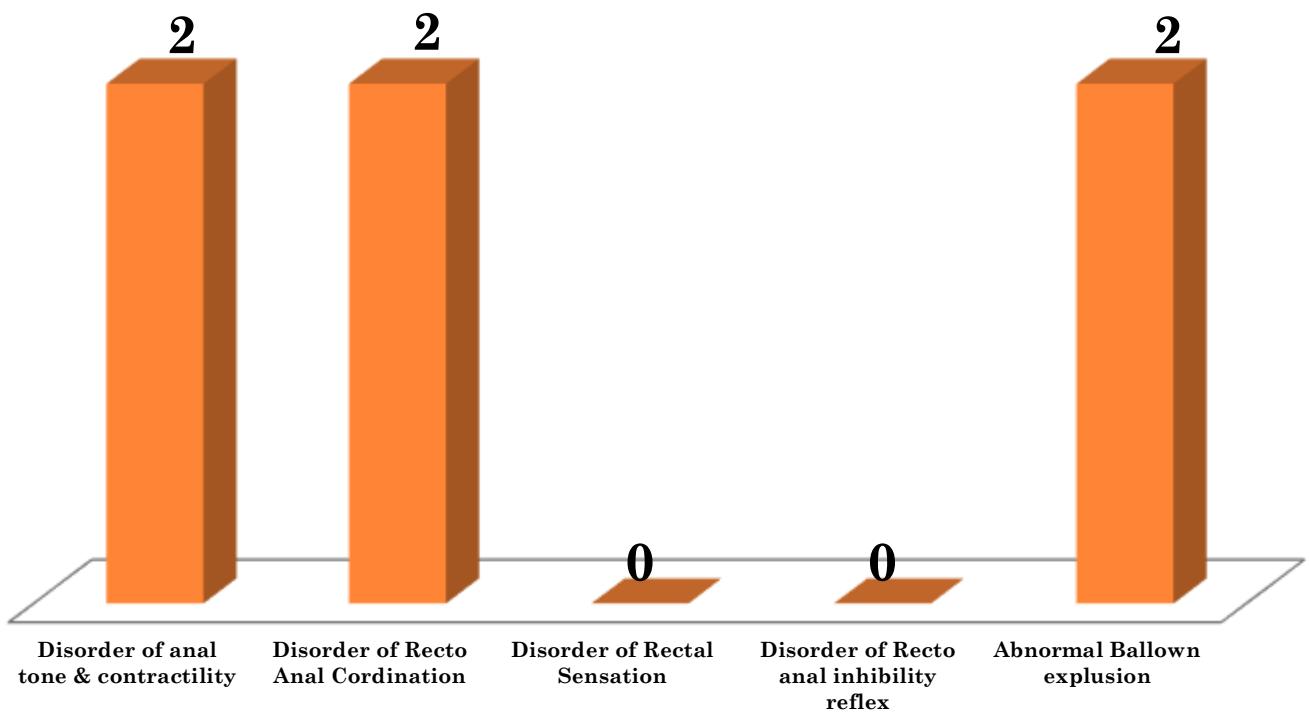
■ Pneumatic balloon Dilatation ■ Not Taken Treatment



PRESSURE USED DURING PROCEDURE BALLOON DILATATION IN ACHALASIA PATIENTS



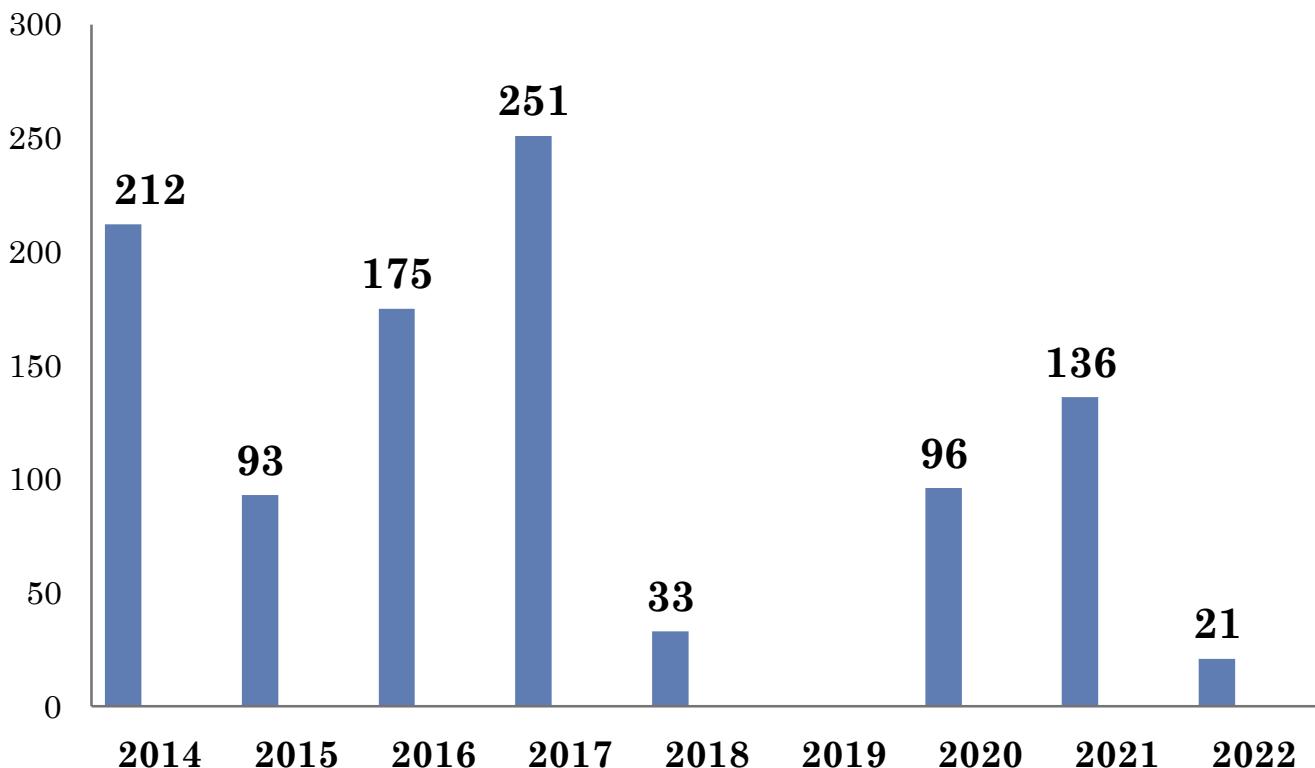
ARM DIAGNOSIS



Fibro Scan Audit

Liver biopsy has long been the gold standard to stage fibrosis, however over the last decade it has been replaced by the non-invasive technique, that works by measuring shear wave velocity. Reliability and reproducibility have been well characterized for elastography with Fibro scan, and it is important to ensure that these technical requirements are achieved to make the scan results valid. Particularly, a valid result requires 8—10 measurements with a 60% success rate and an interquartile range(IQR) less than 0.3.

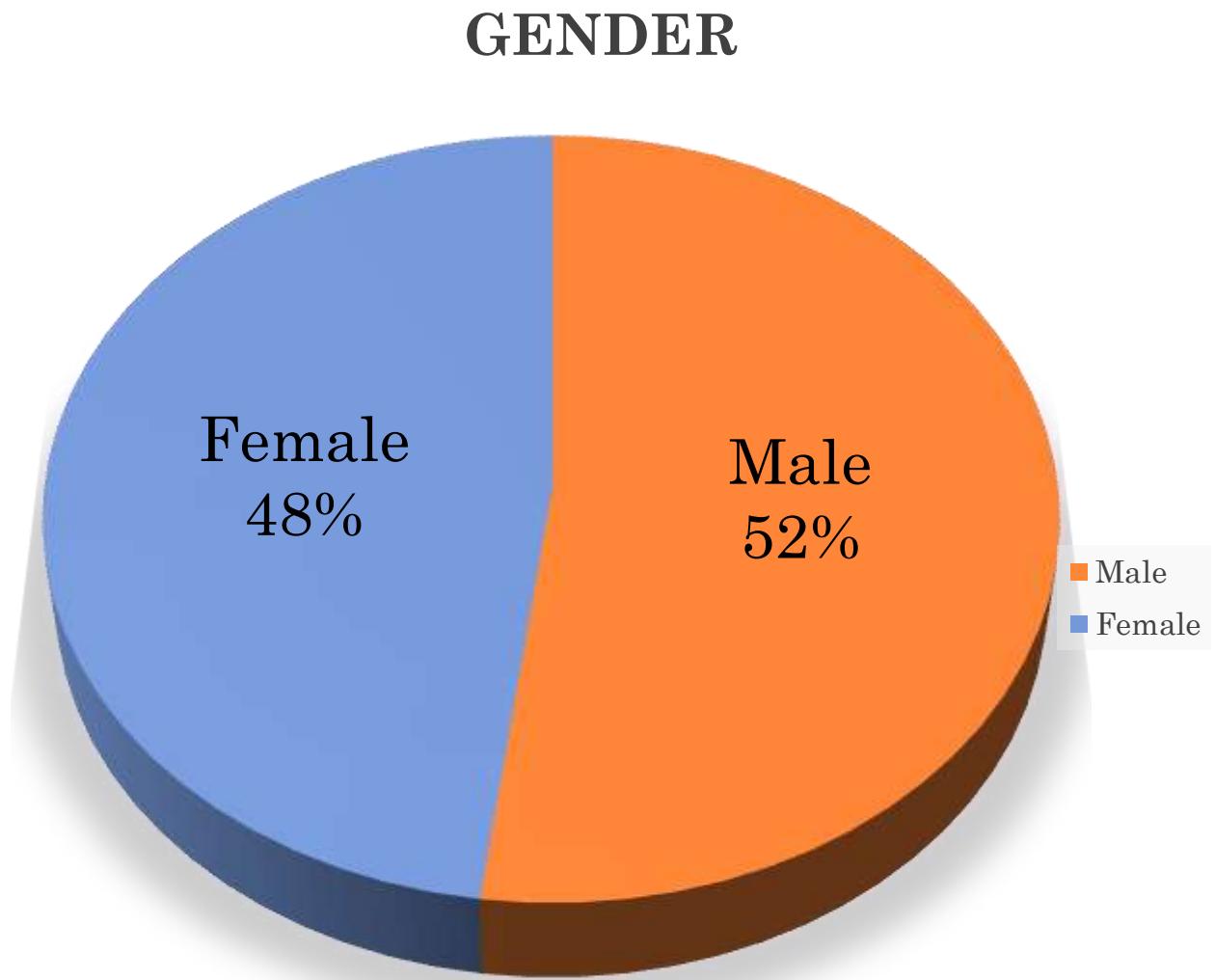
Our center was the first public sector to start this facility. This year the equipment has been upgraded to Echosens 502 that apart from liver stiffness measurement can also determine steatosis quantification.



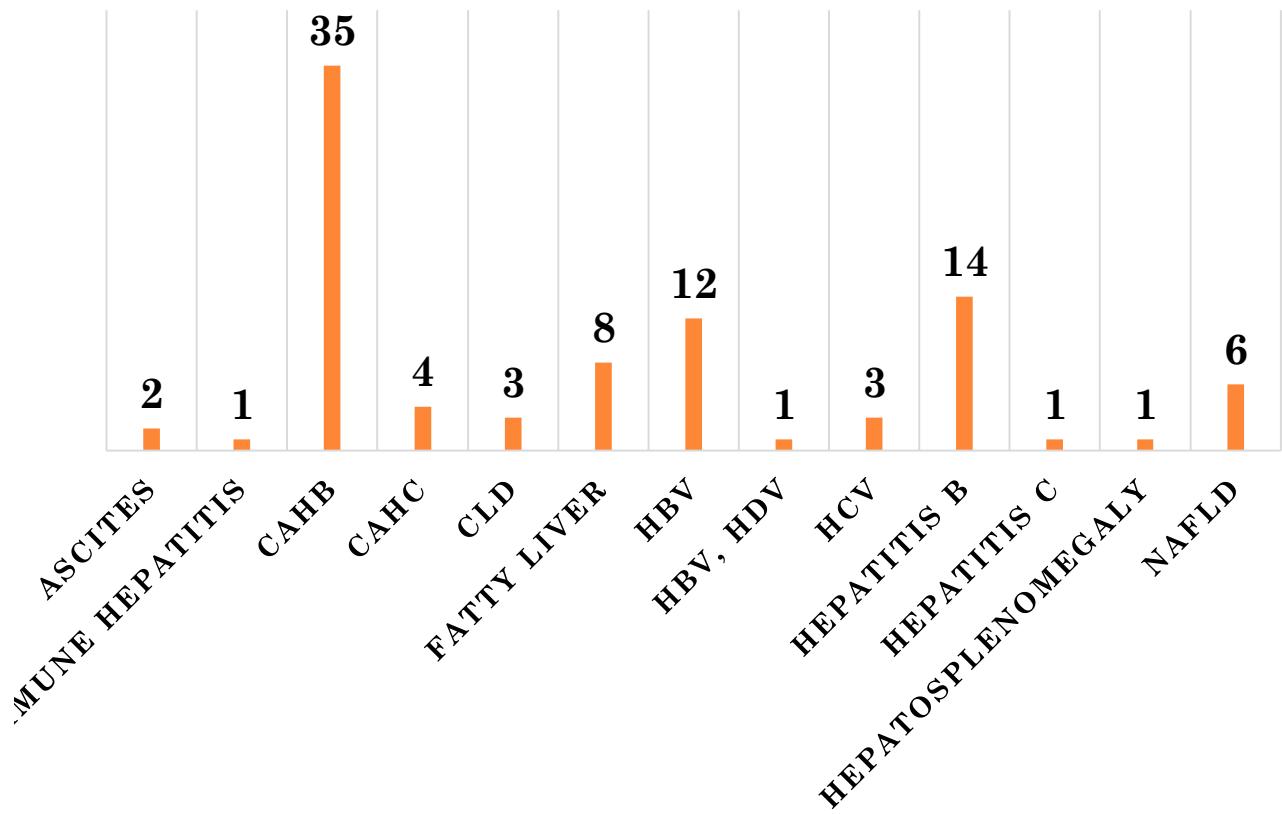
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

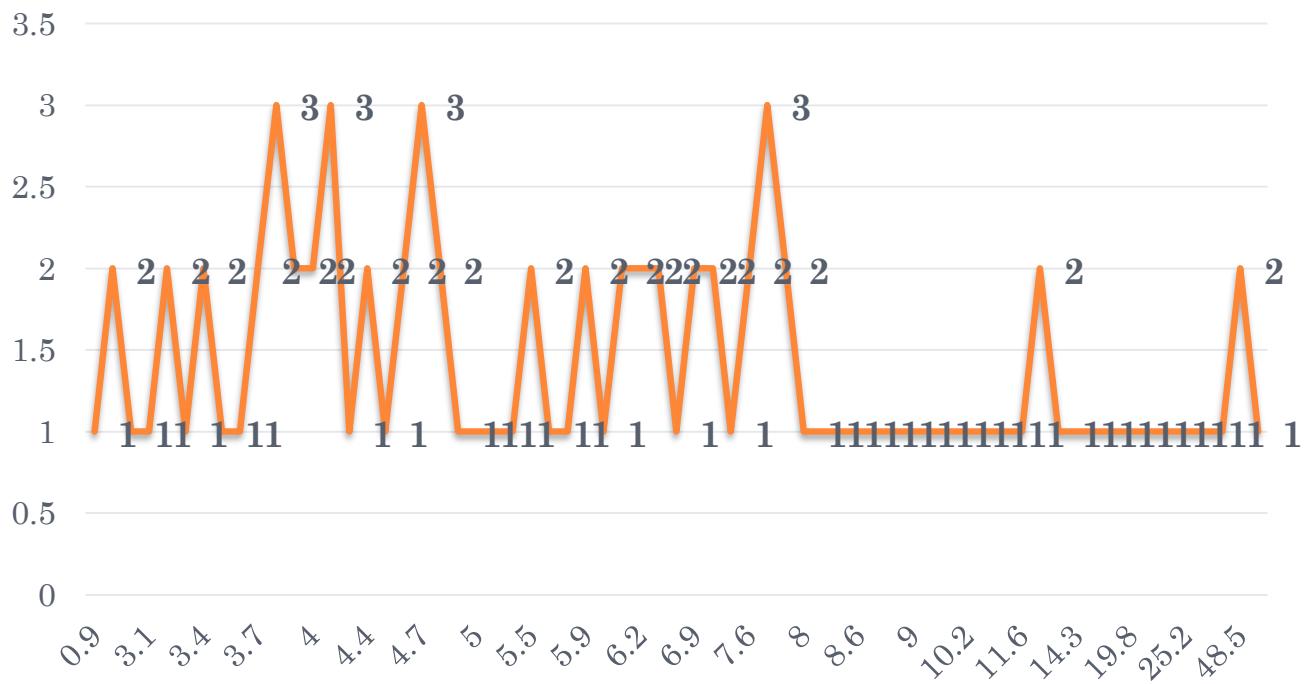
| | |
|----------------------|----|
| TOTAL NO OF PATIENTS | 96 |
| MALE | 50 |
| FEMALE | 46 |

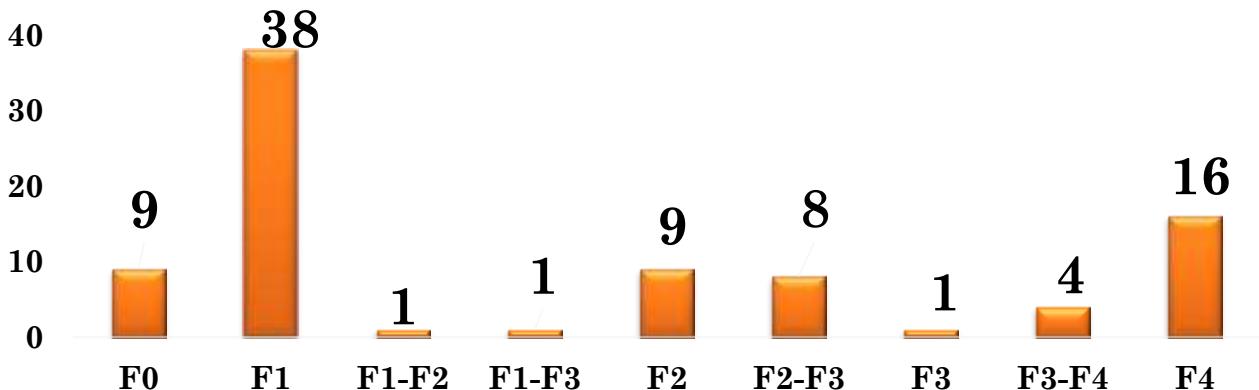
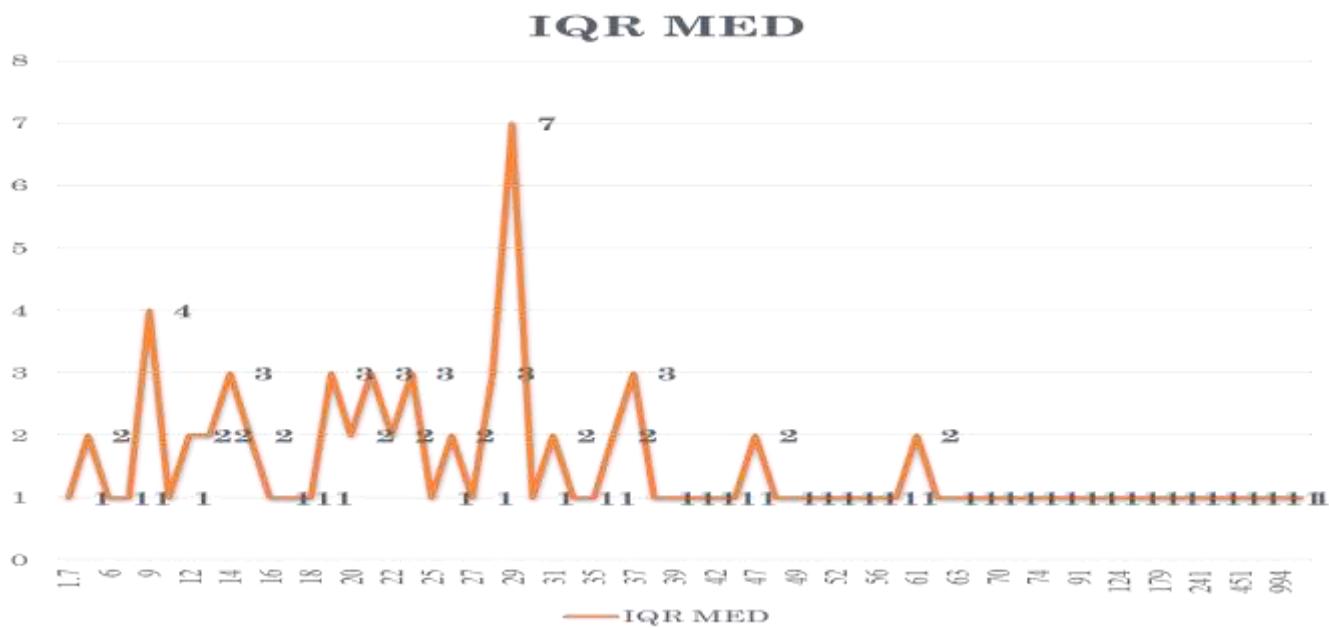
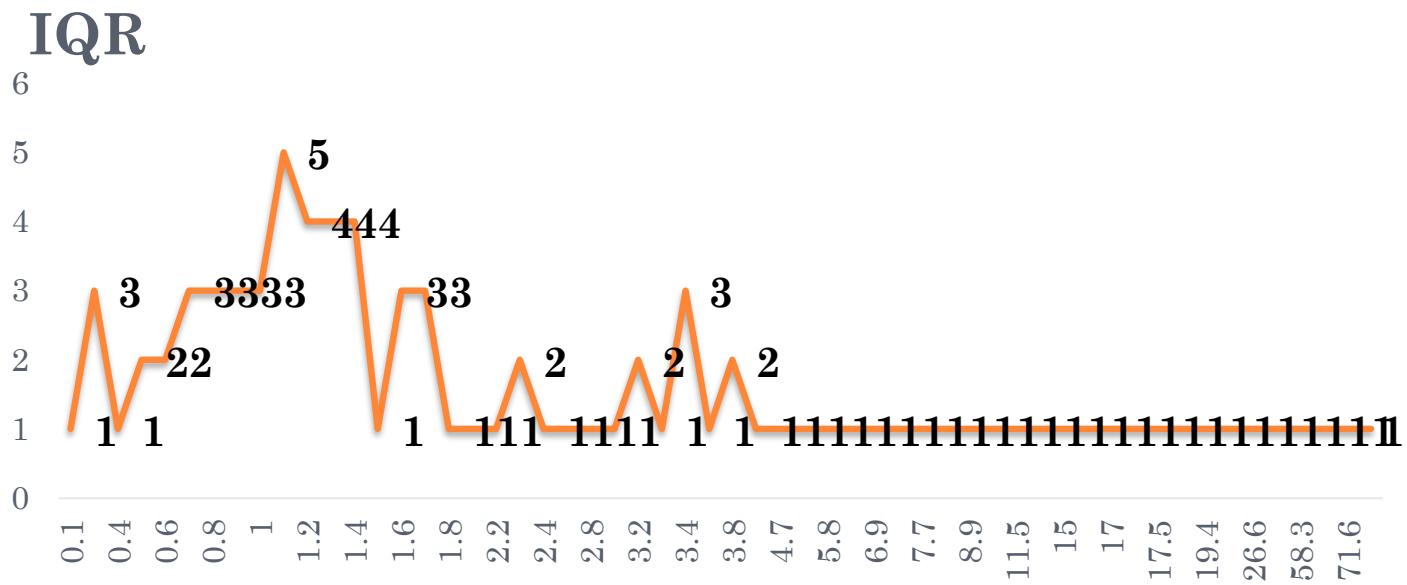


INDICATION



LSM

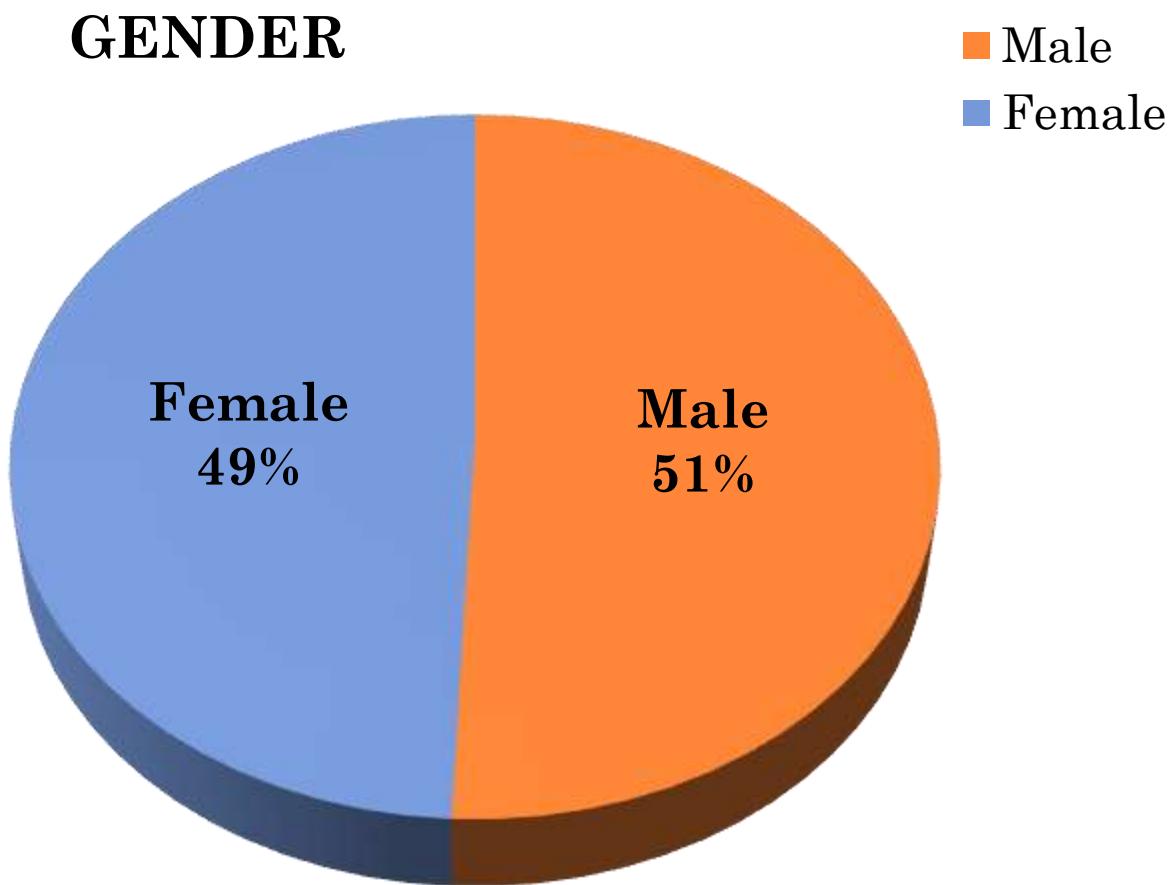




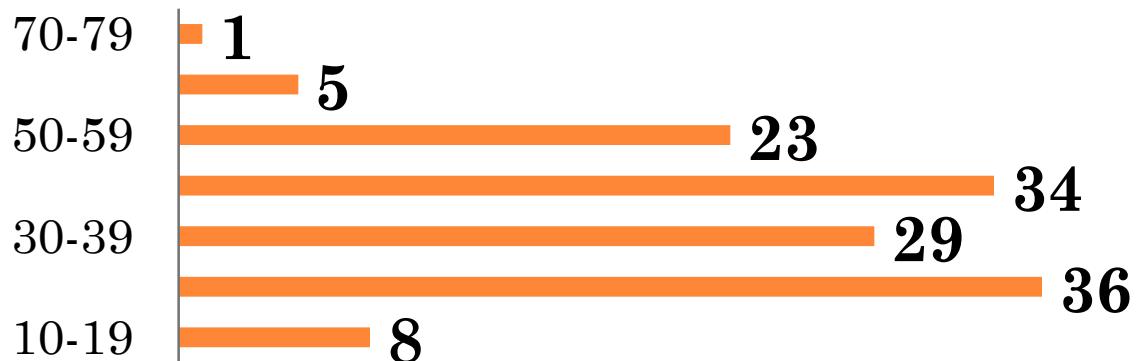
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

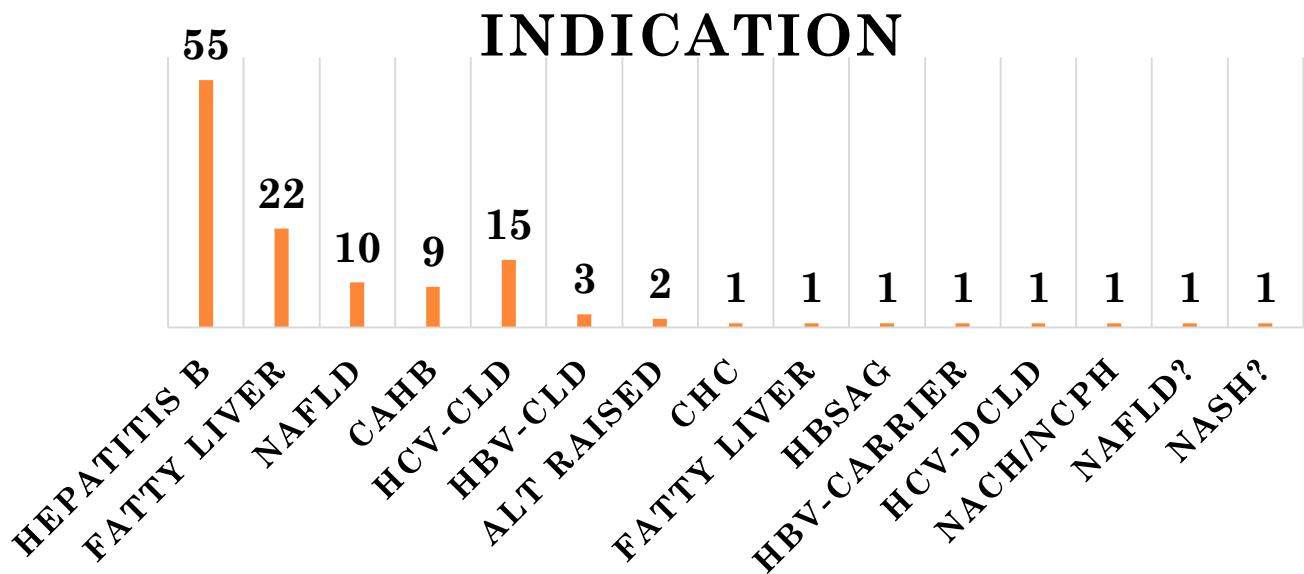
| | |
|-----------------------------|------------|
| TOTAL NO OF PATIENTS | 136 |
| MALE | 69 |
| FEMALE | 67 |



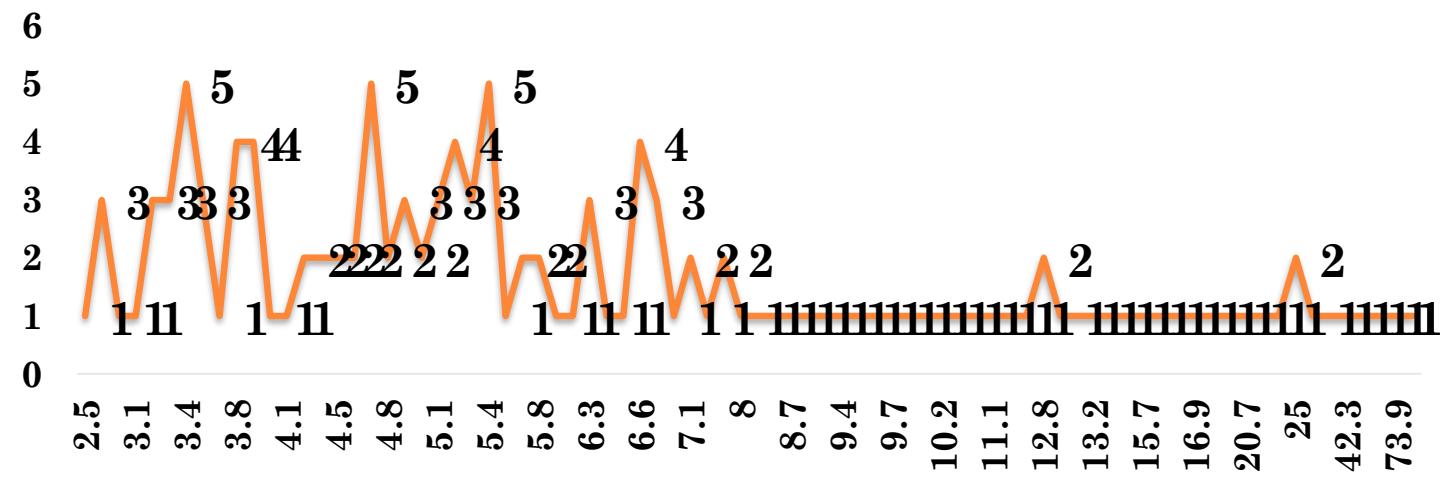
AGE WISE DISTRIBUTION



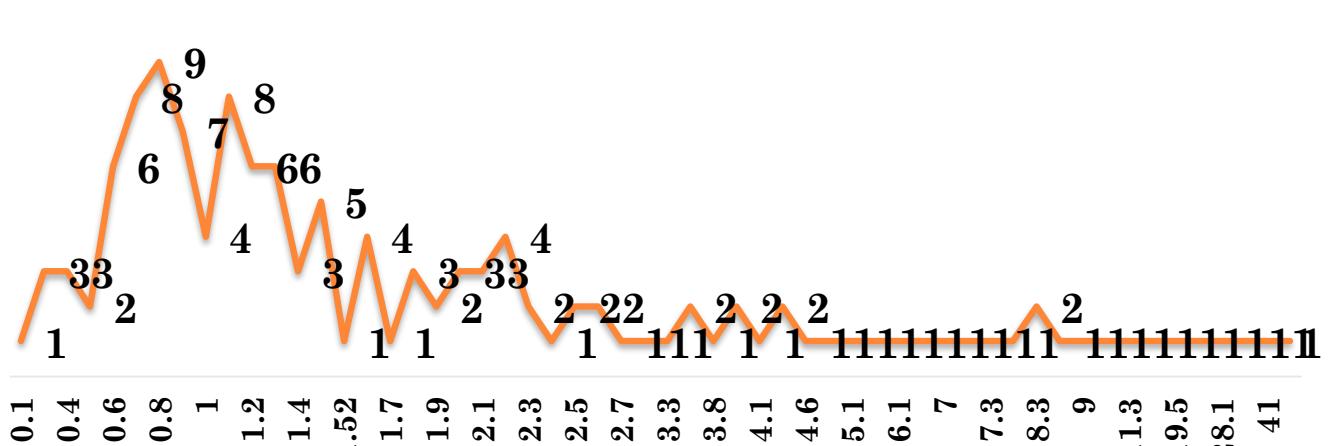
INDICATION



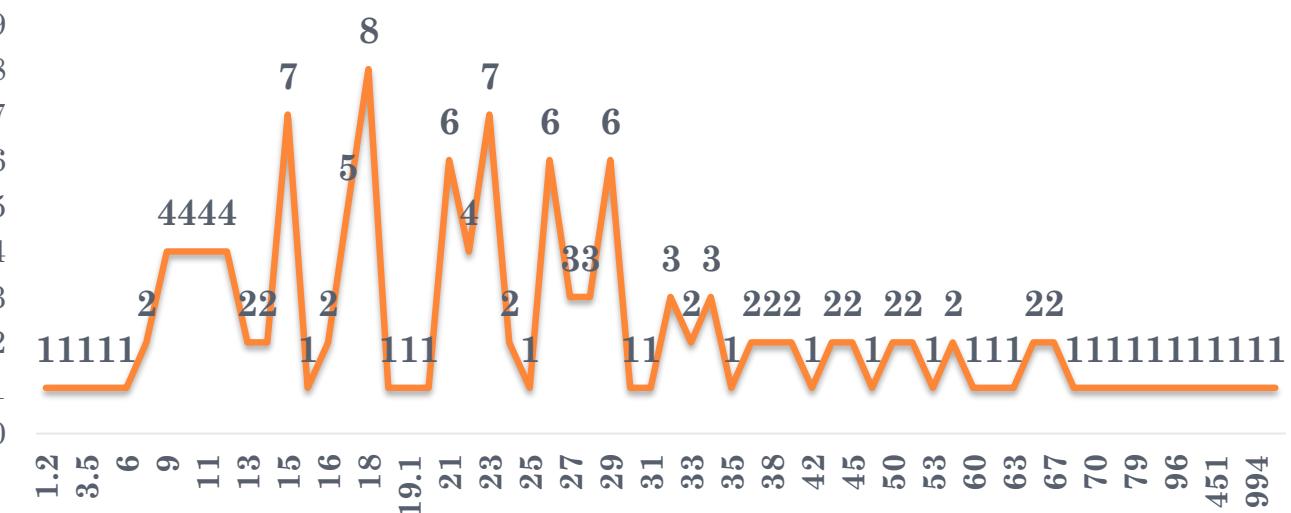
LSM



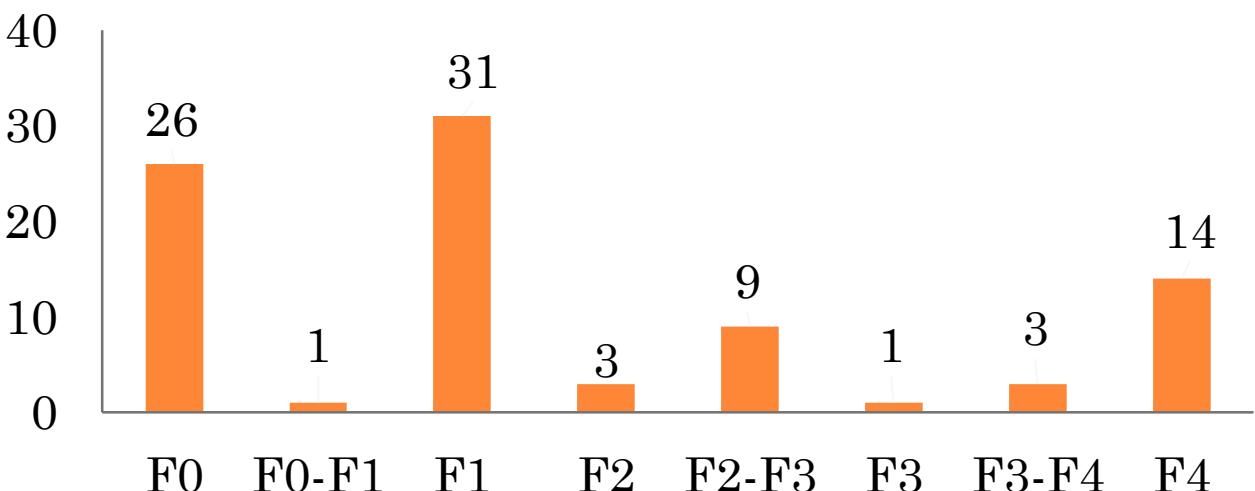
IQR



IQR MED



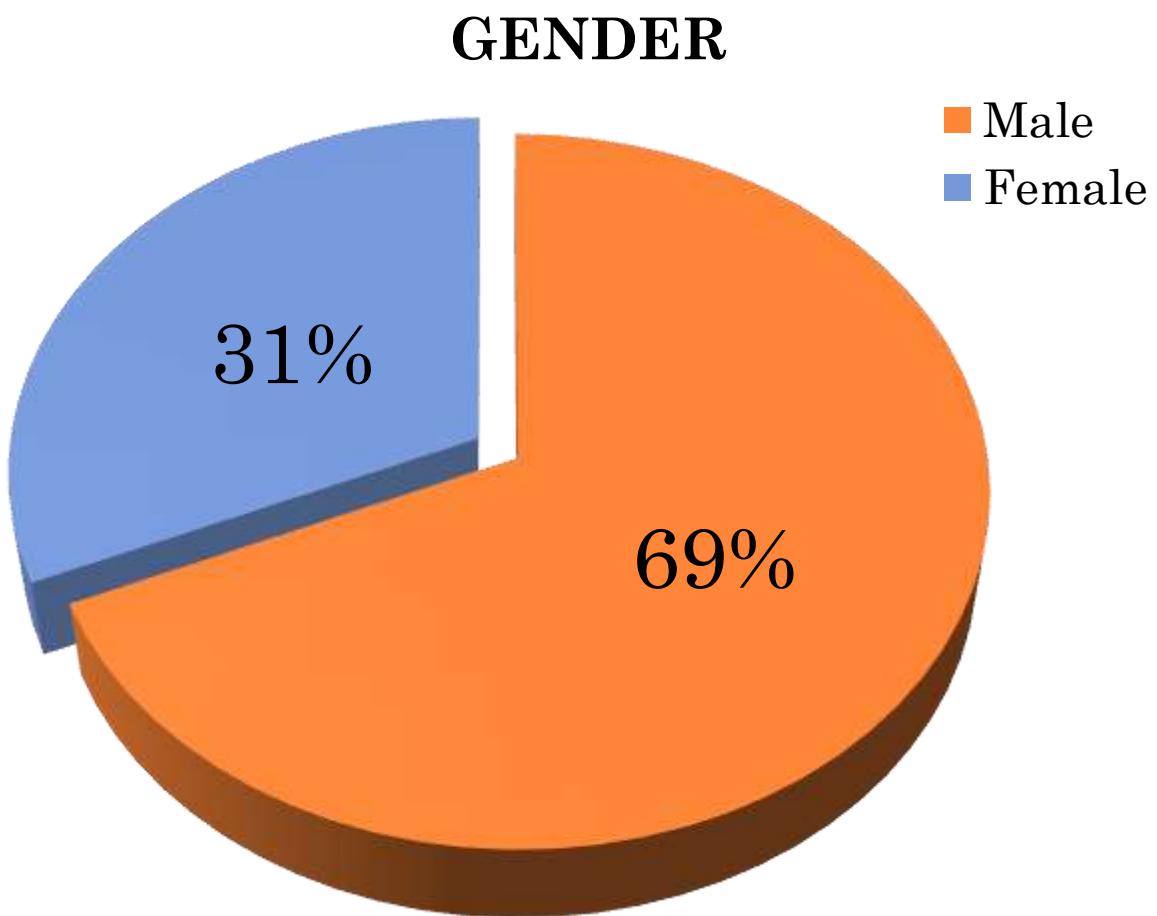
IMPRESSION



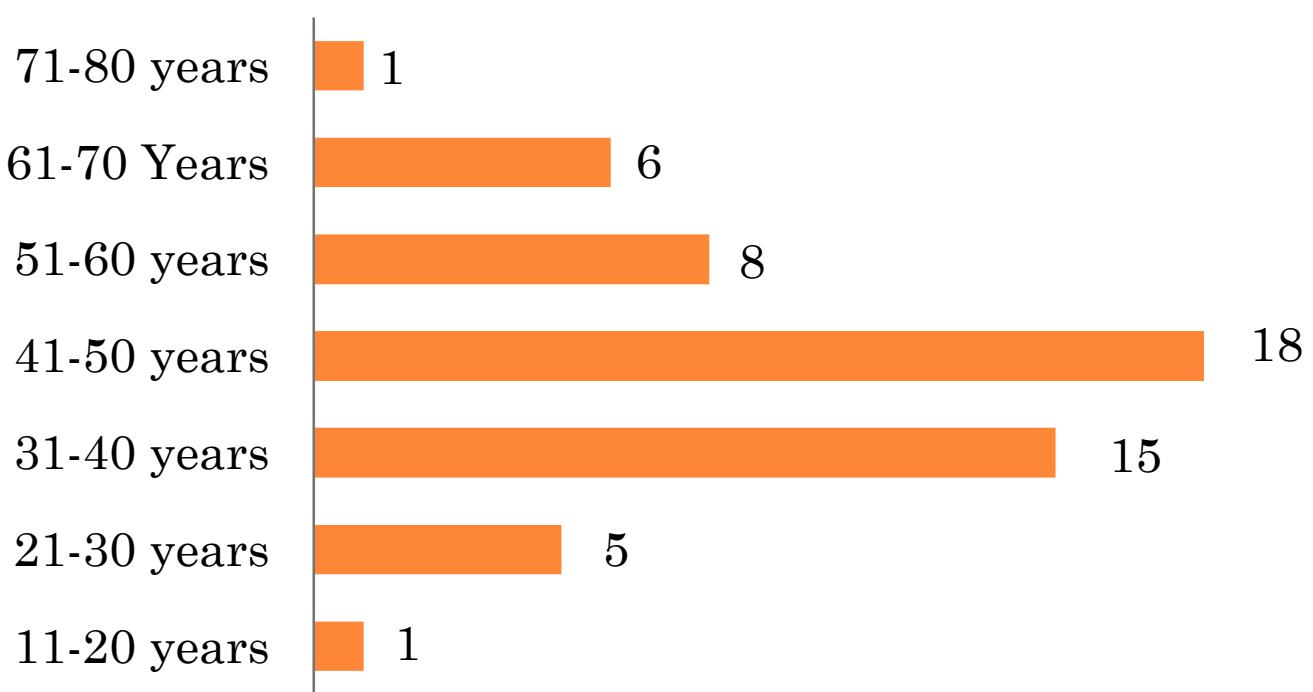
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

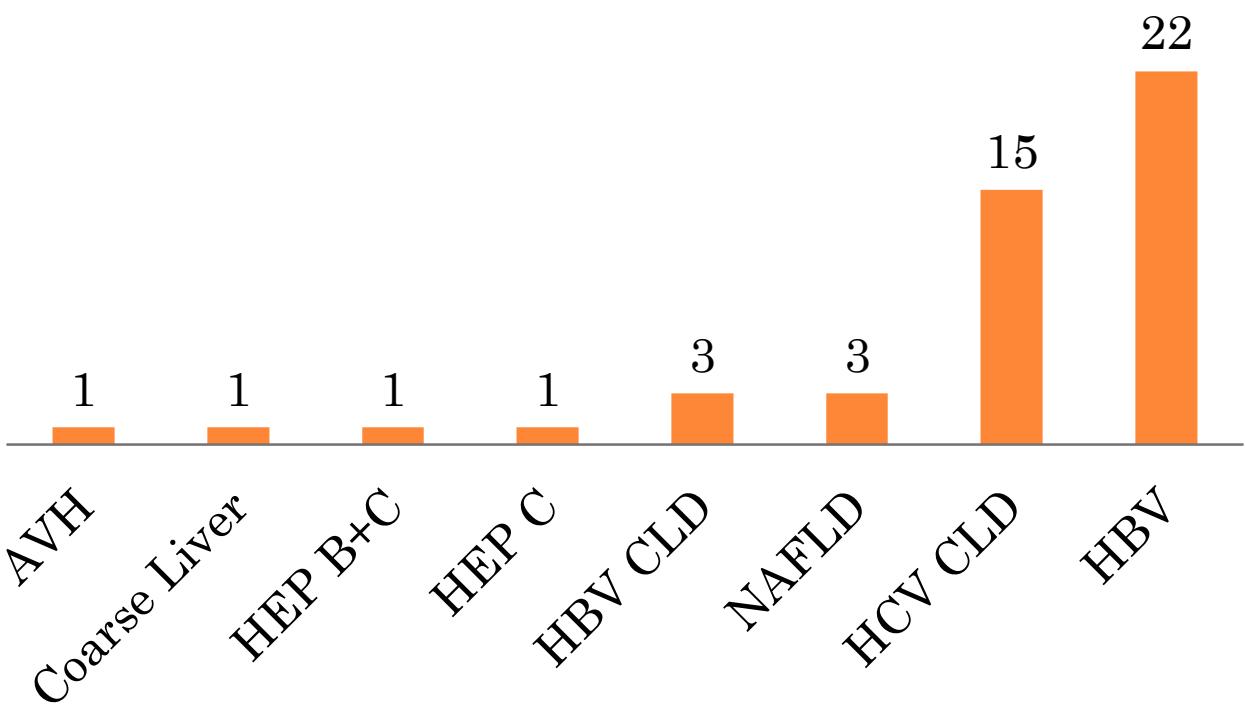
| | |
|-----------------------------|-----------|
| TOTAL NO OF PATIENTS | 54 |
| Male | 37 |
| Female | 17 |



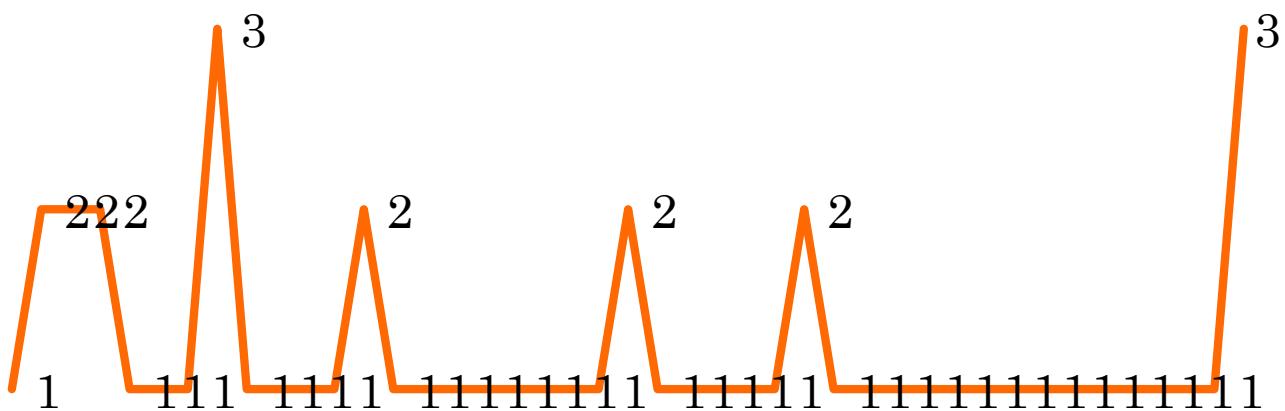
GENDER WISE DISTRIBUTION WITH INDICATION



INDICATION

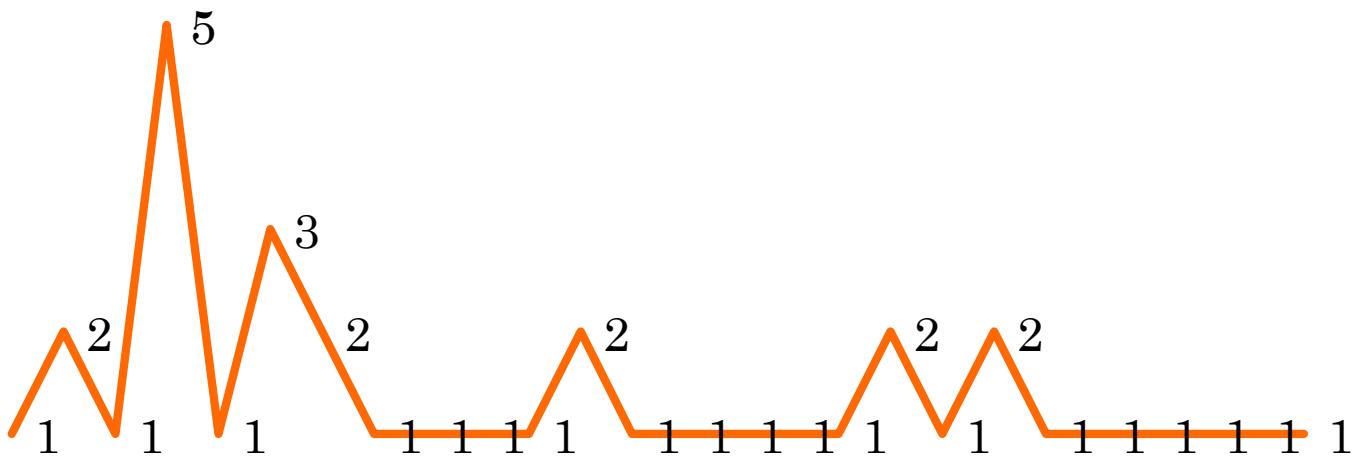


LSM



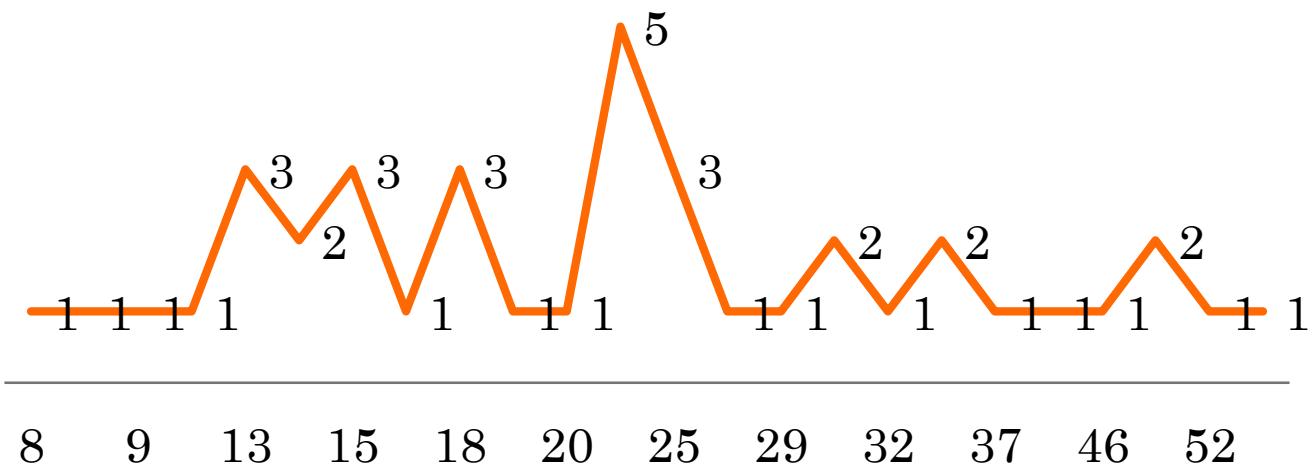
3 4.2 5.1 5.5 6.5 8.1 9.1 10.3 10.8 13.2 17.2 22.3 29 38.4 75

IQR

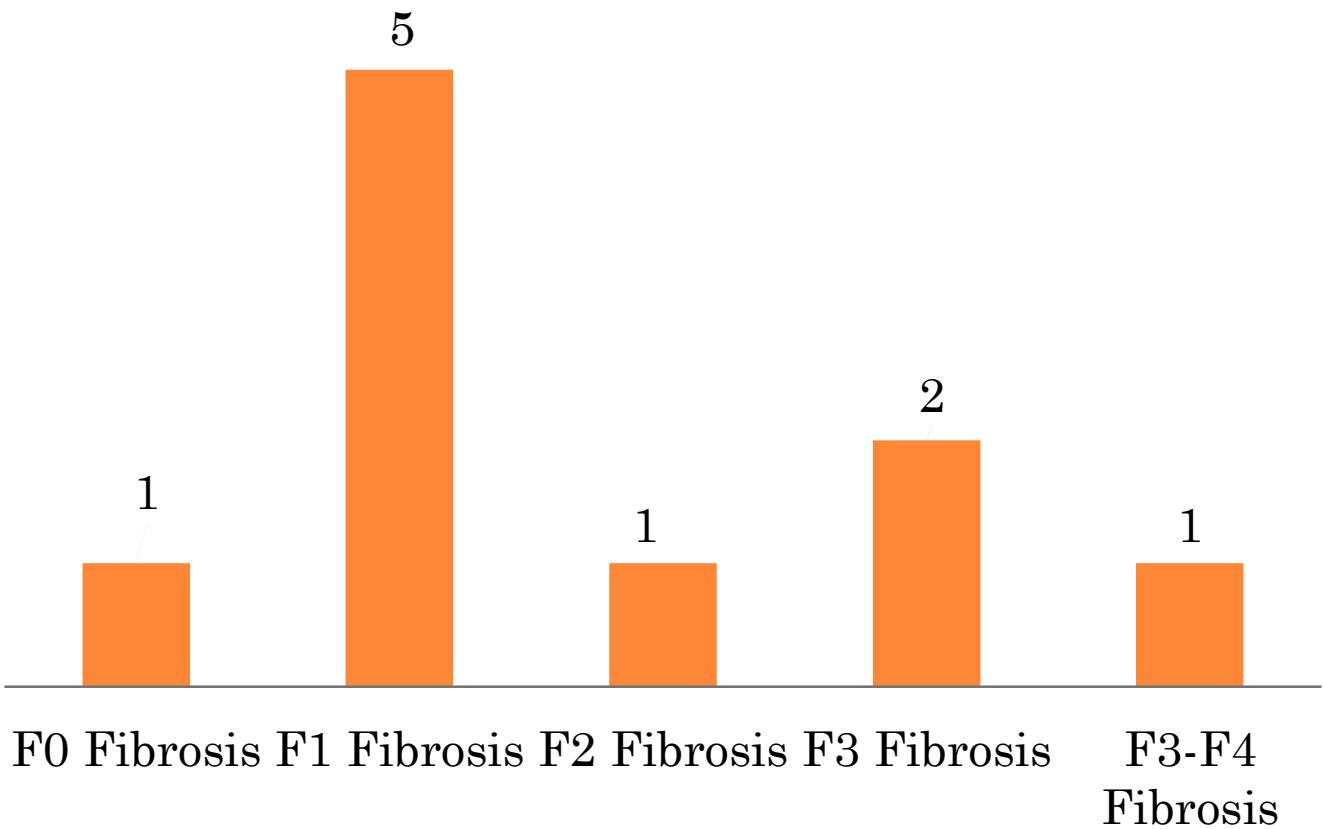


0.4 0.7 0.9 1.3 1.5 1.7 1.9 2.3 2.6 3.1 4.4 4.9 7.6

IQR MED



Impression

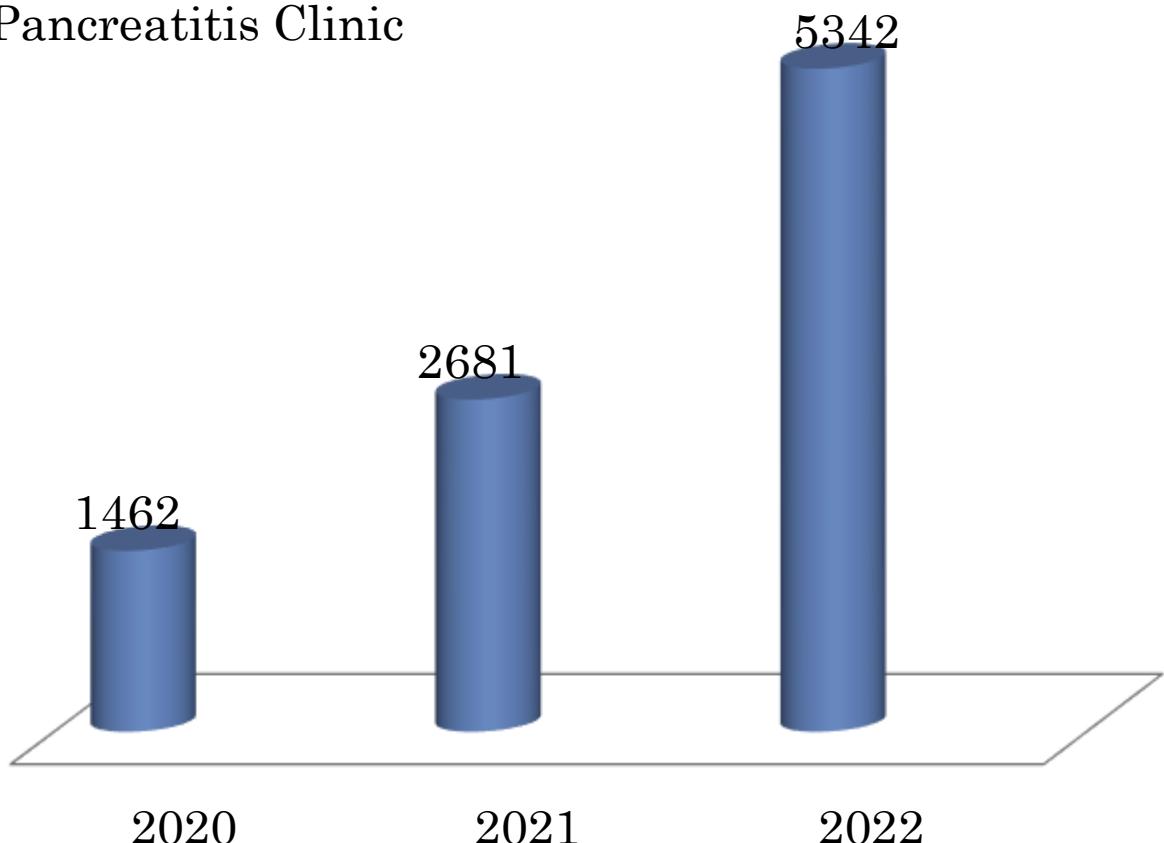


OPD Audit

Gastroenterology department apart from its specialized clinics, provides OPD services for patients 3 days a week. During the COVID years there was a relative decline in the GI OPDs, however in 2022 once the limitations were off the number increased to more than 5000. The commonest presentation is dyspepsia followed by decompensated liver disease follow-up. The age group with most foot falling is between 40-50 years.

Our department also extends the OPD services through its specialized clinics as follows:

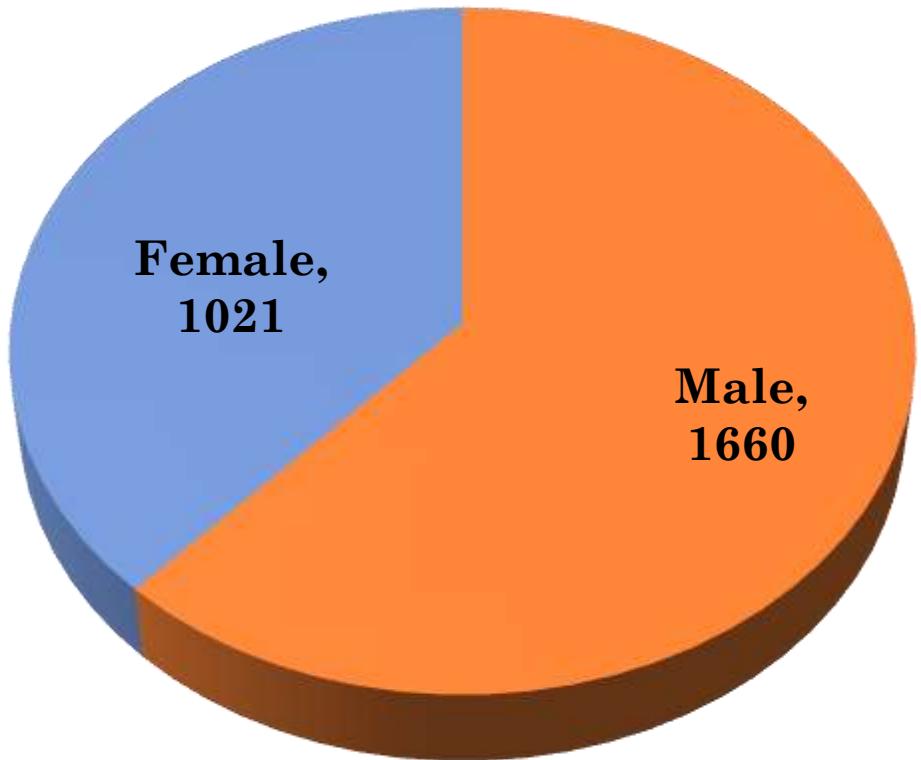
- Hepatitis Clinic
- IBD clinic
- Pancreatitis Clinic



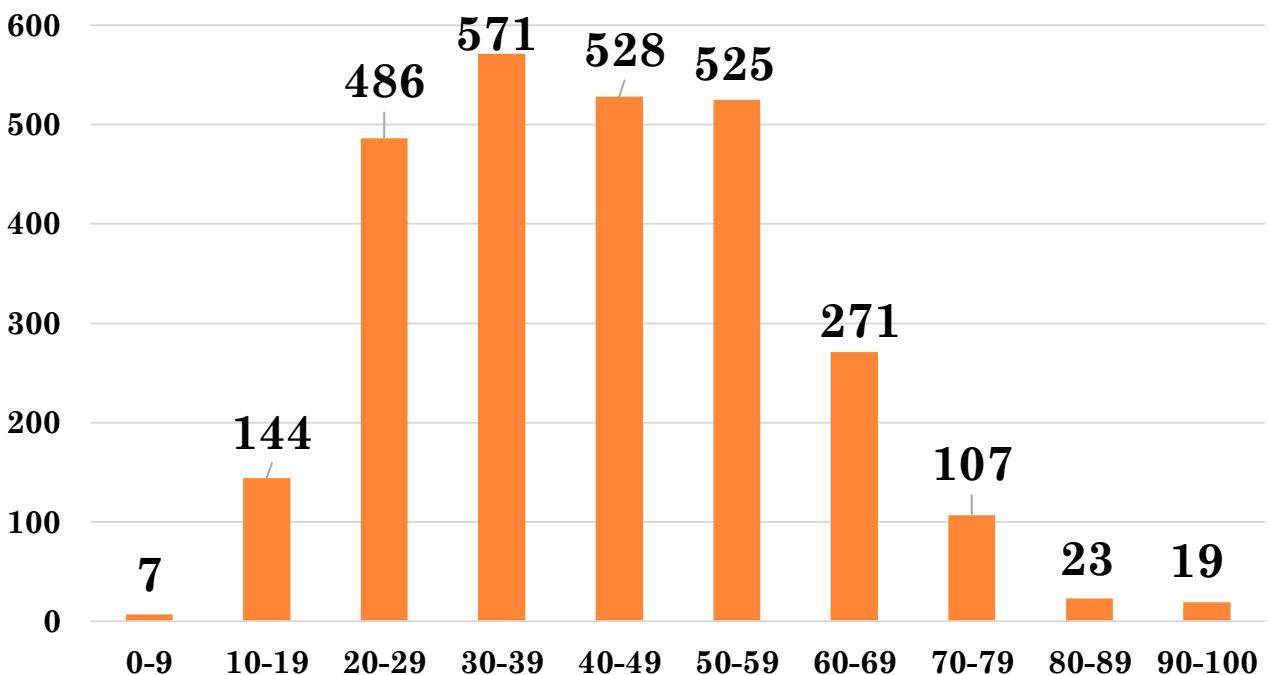
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

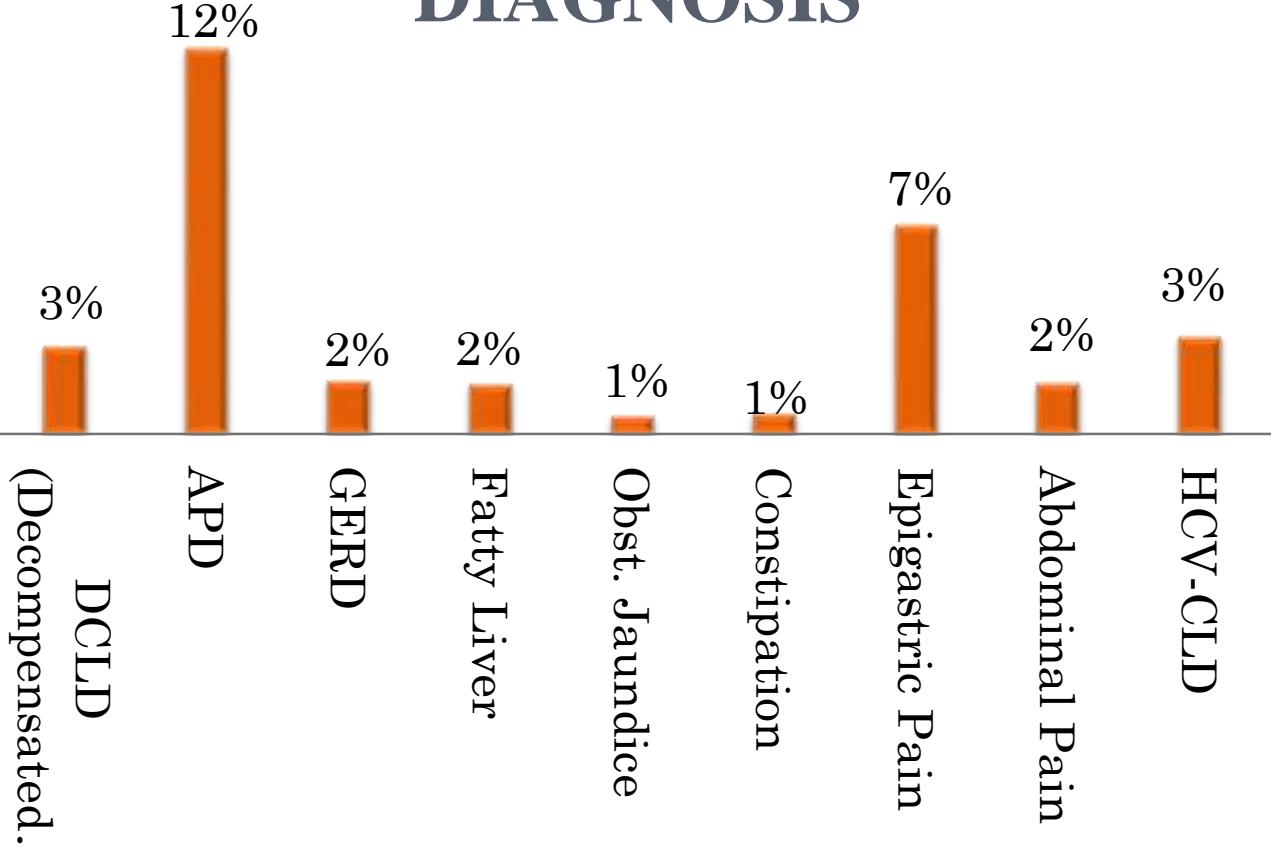
| | |
|----------------------|------|
| Total No of Patients | 2681 |
| Male | 1660 |
| Female | 1021 |



AGE WISE DISTRIBUTION



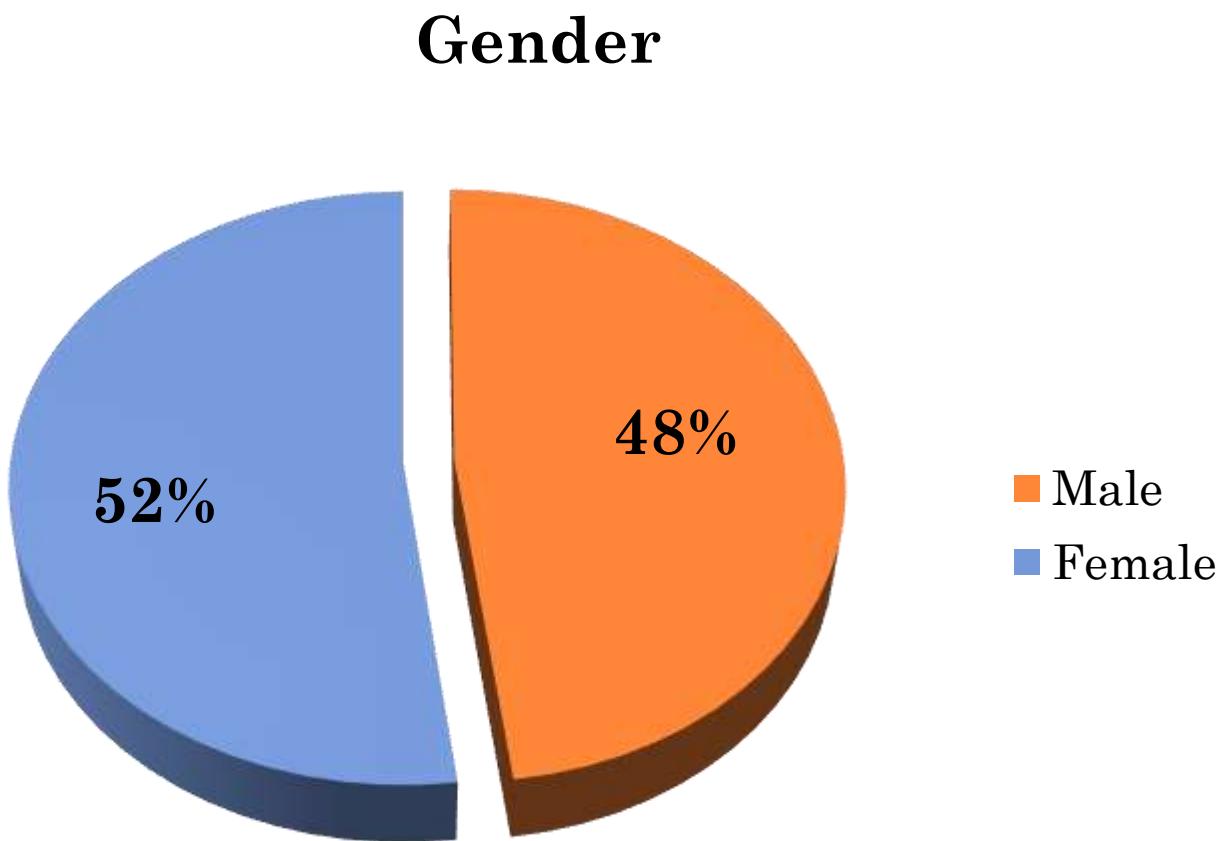
DIAGNOSIS



2022

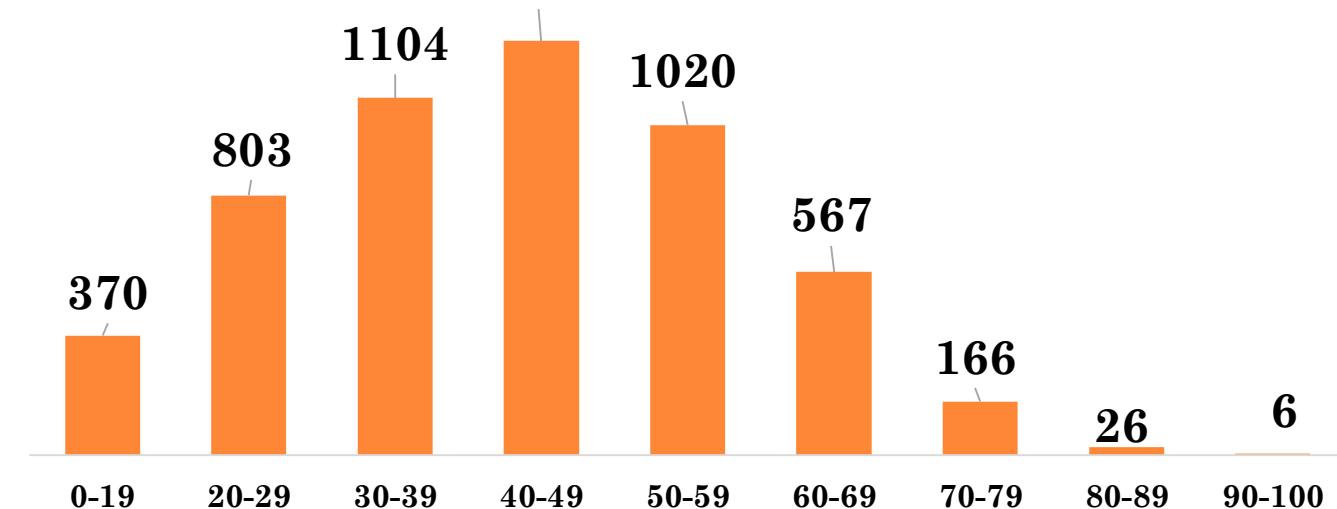
TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

| | |
|-----------------------------|-------------|
| Total No of Patients | 5342 |
| Male | 2563 |
| Female | 2779 |

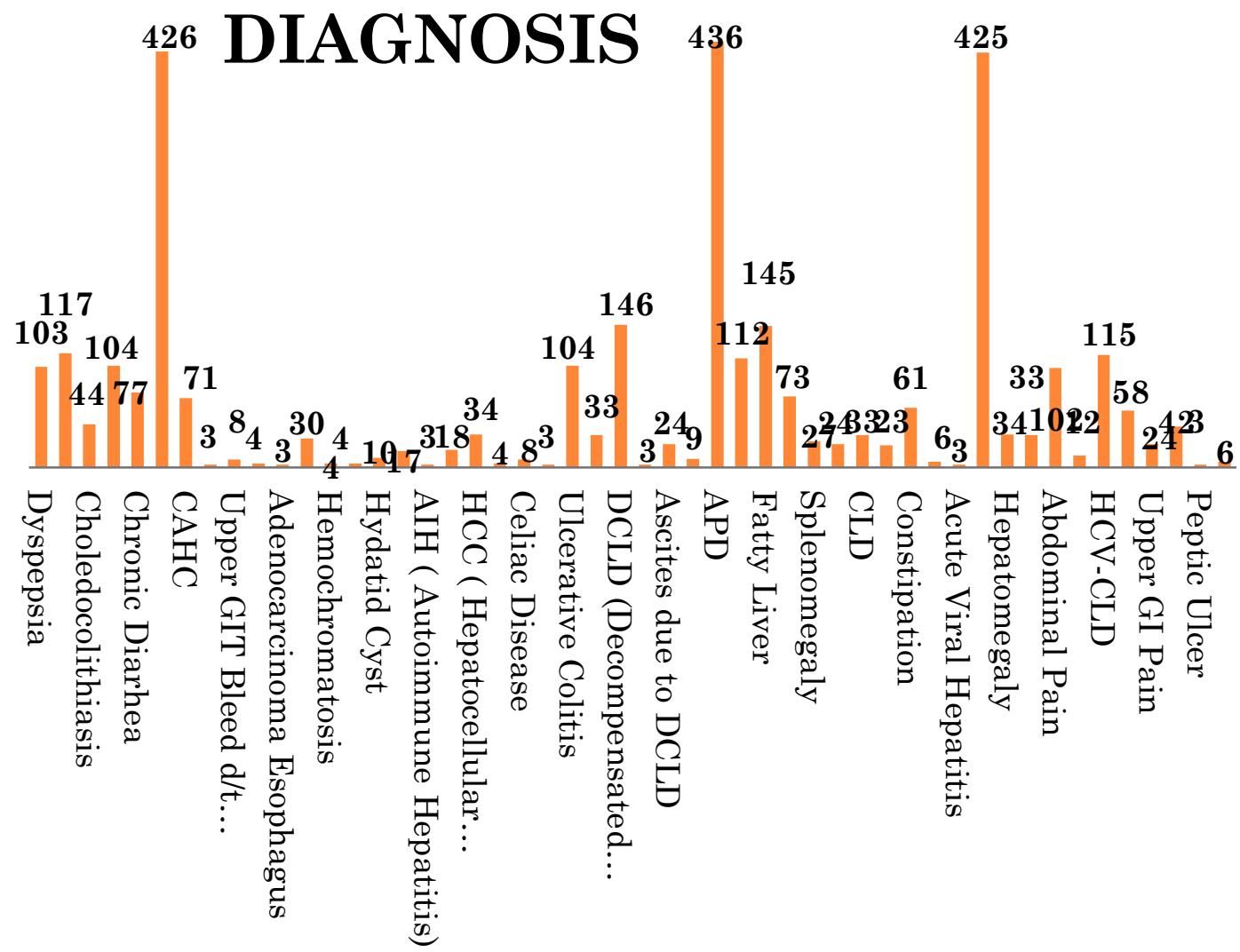


AGE WISE DISTRIBUTION

1280



DIAGNOSIS



Liver Clinic Audit

Hepatitis clinic is the most organized and well established clinic, that has been serving even before the development of center for liver and digestive diseases. The dedicated clinic enroll all new cases of hepatitis C and B patients and continued the services with same zeal and fervor even during the COVID era, hence the numbers remain the same with an average enrolment of about 1000 new cases a year. Maintain their data and follow-up. Provide them the free medications through Punjab Hepatitis Prevention program of Government of Pakistan. The clinic also provides vaccination services to the patients and their families.

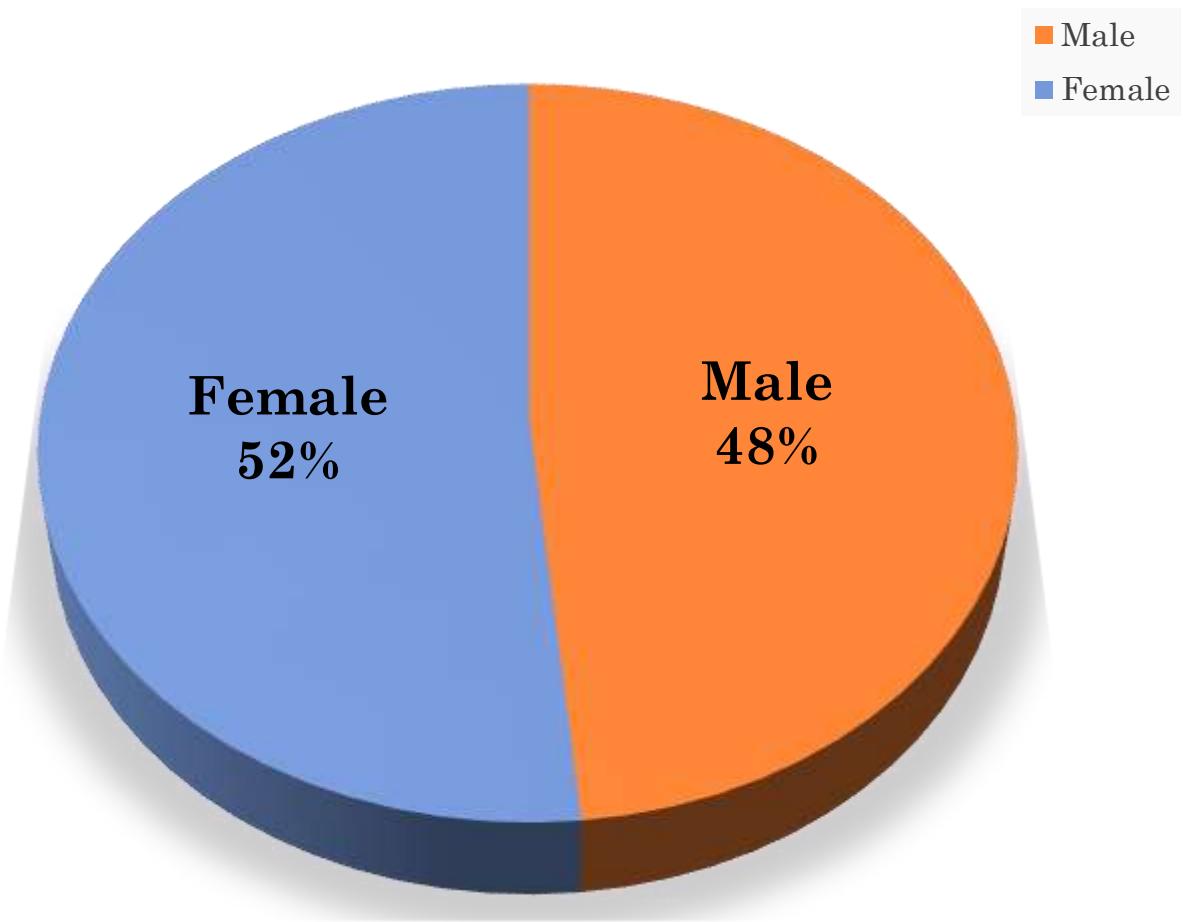


2020

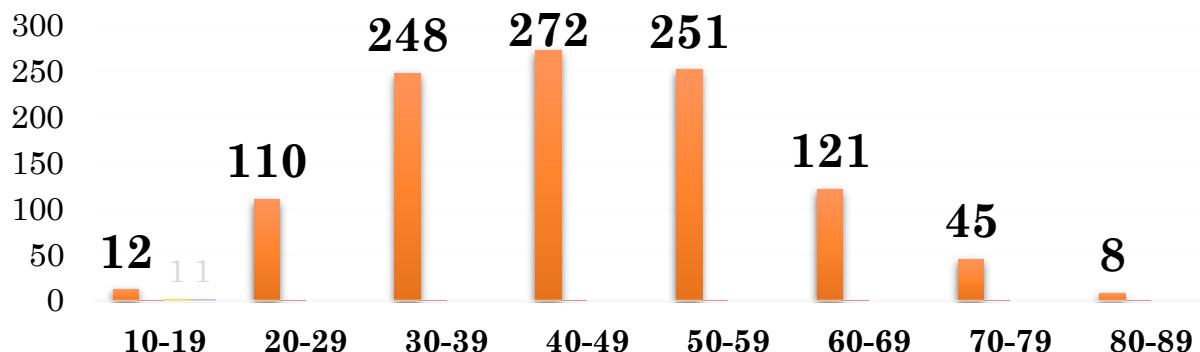
TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

| | |
|----------------------|------|
| Total No of Patients | 1067 |
| Male | 517 |
| Female | 550 |

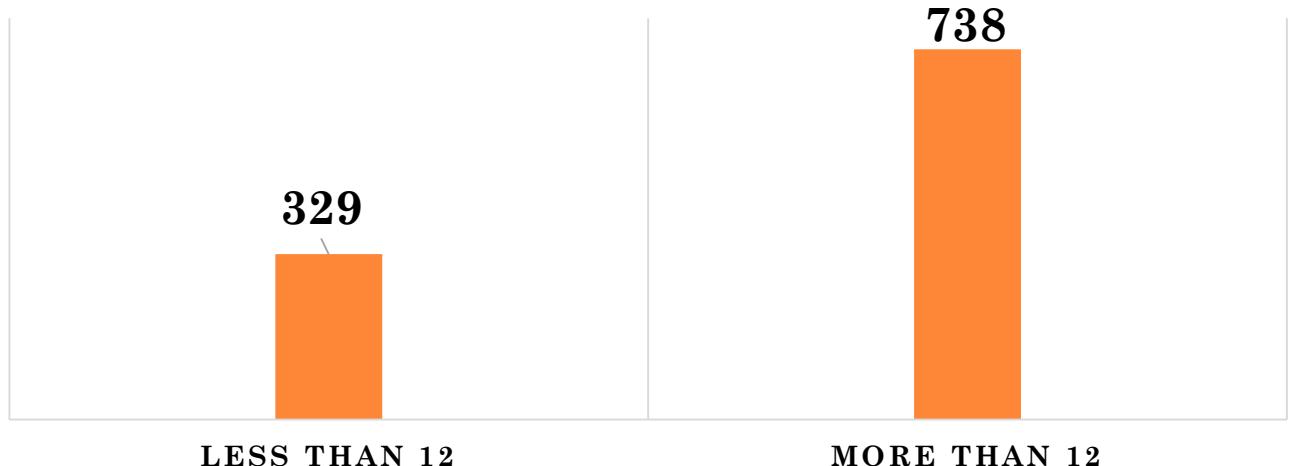
GENDER



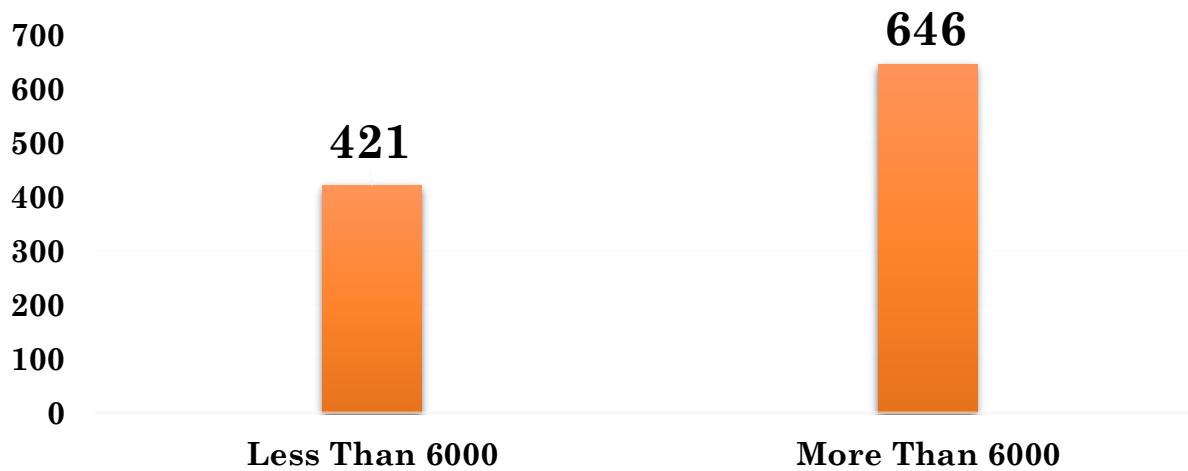
AGE WISE DISTRIBUTION



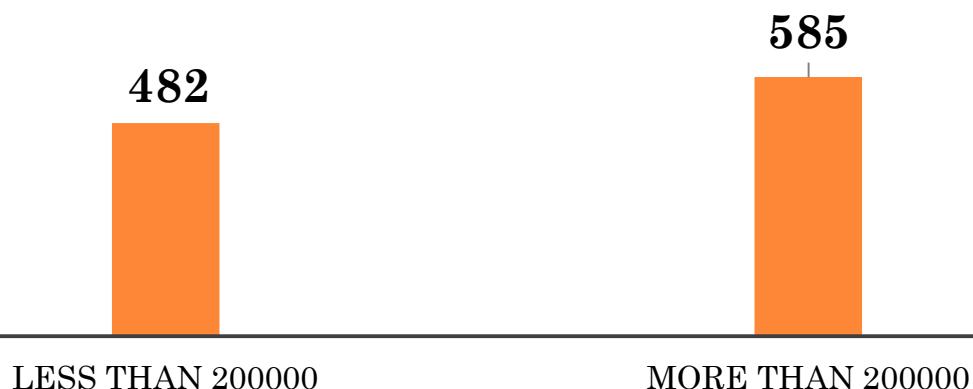
HEMOGLOBIN



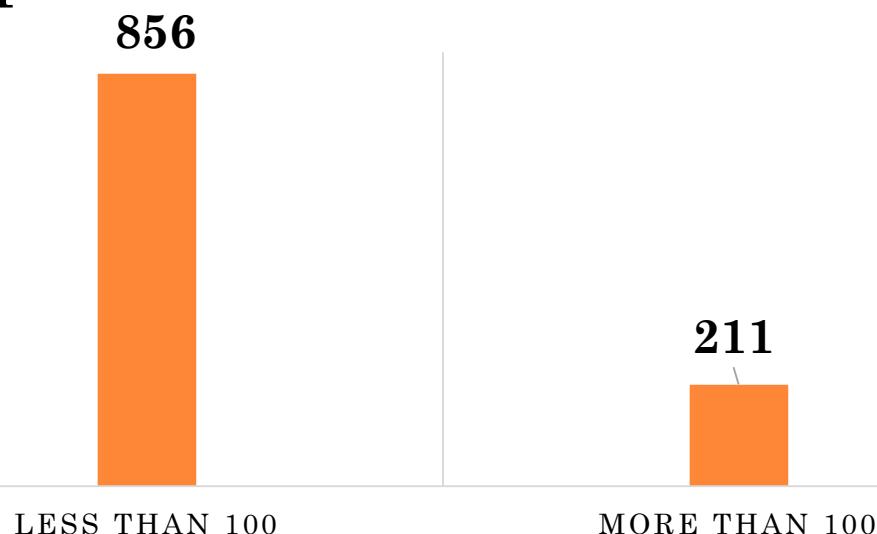
TLC



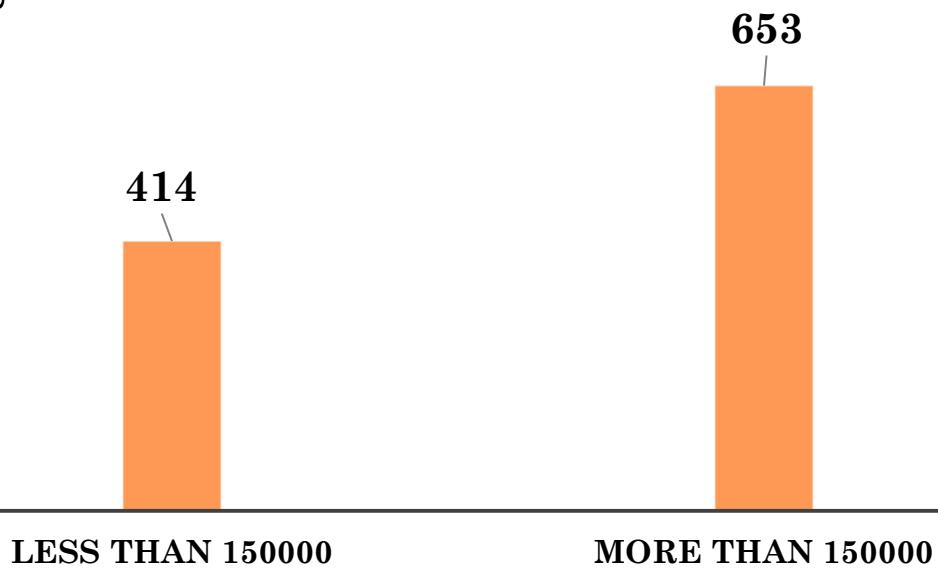
PLATELETS



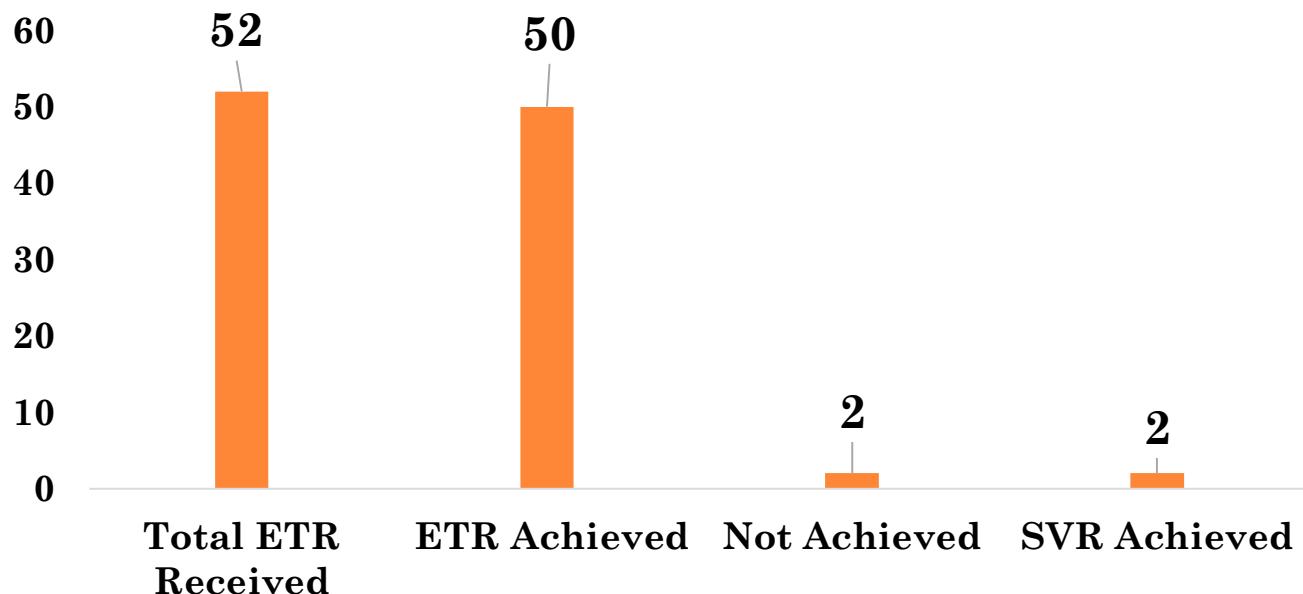
ALT



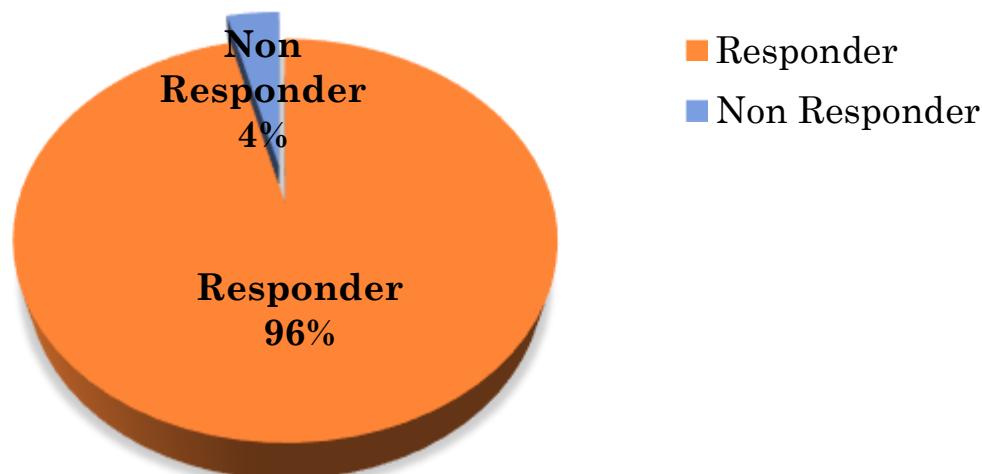
PCR



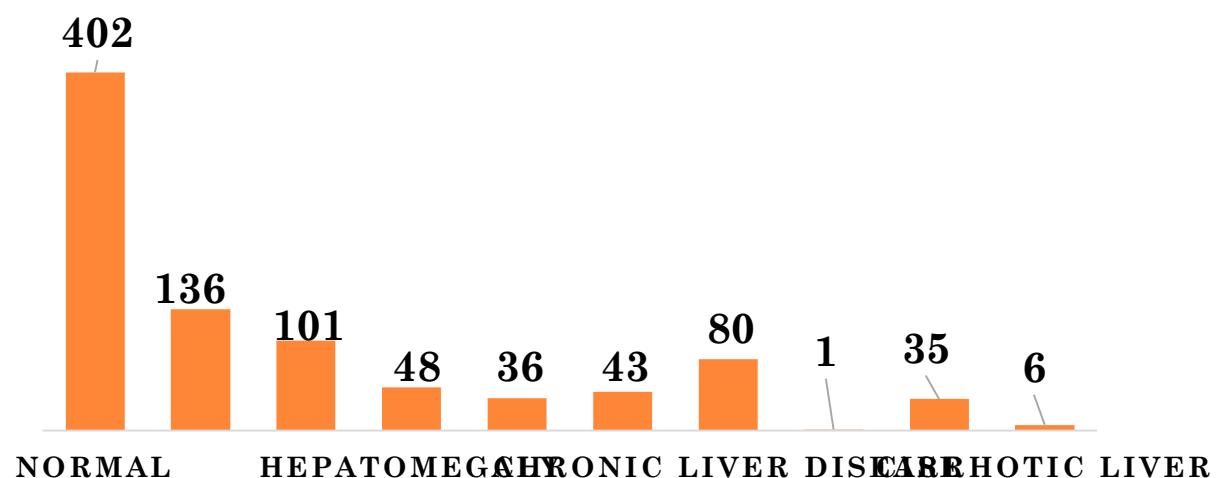
ETR ACHIEVED, NOT ACHIEVED



Responder, Non Responder



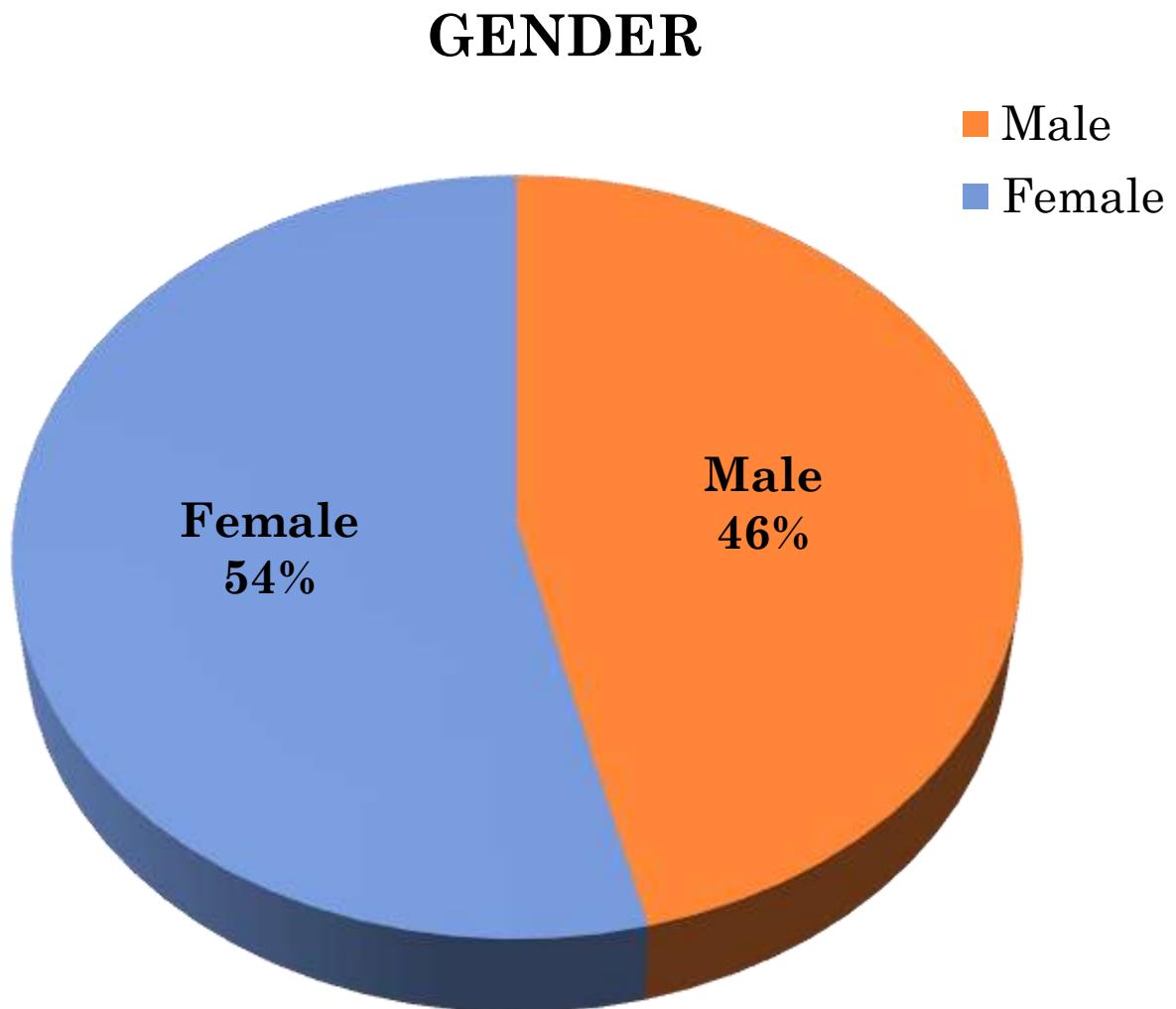
USG



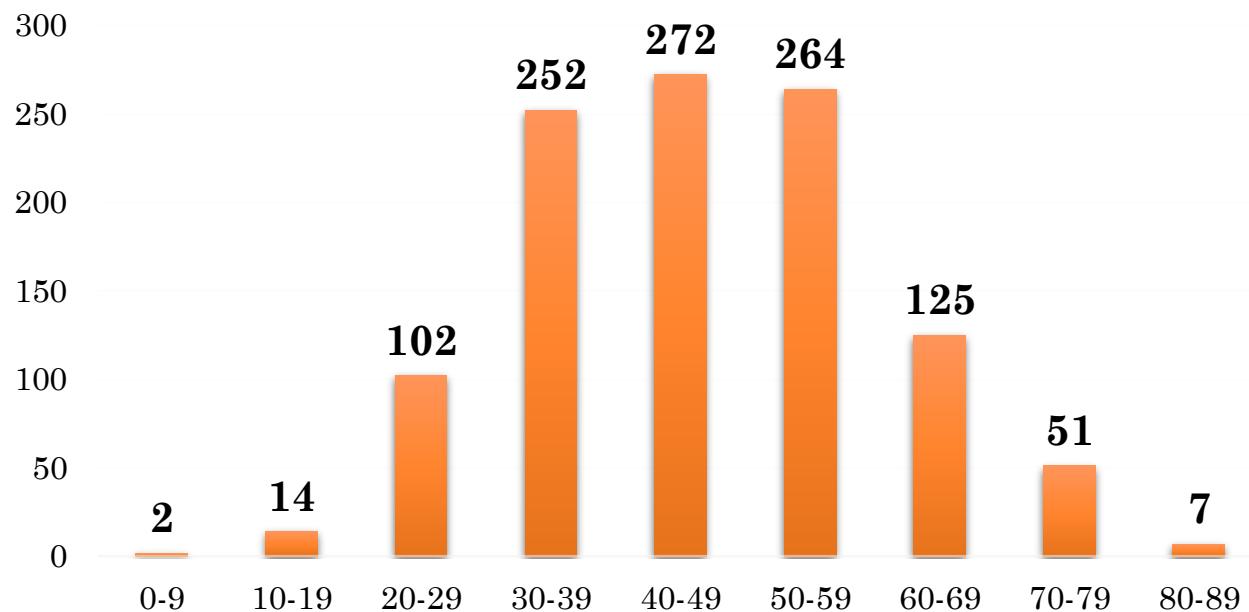
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

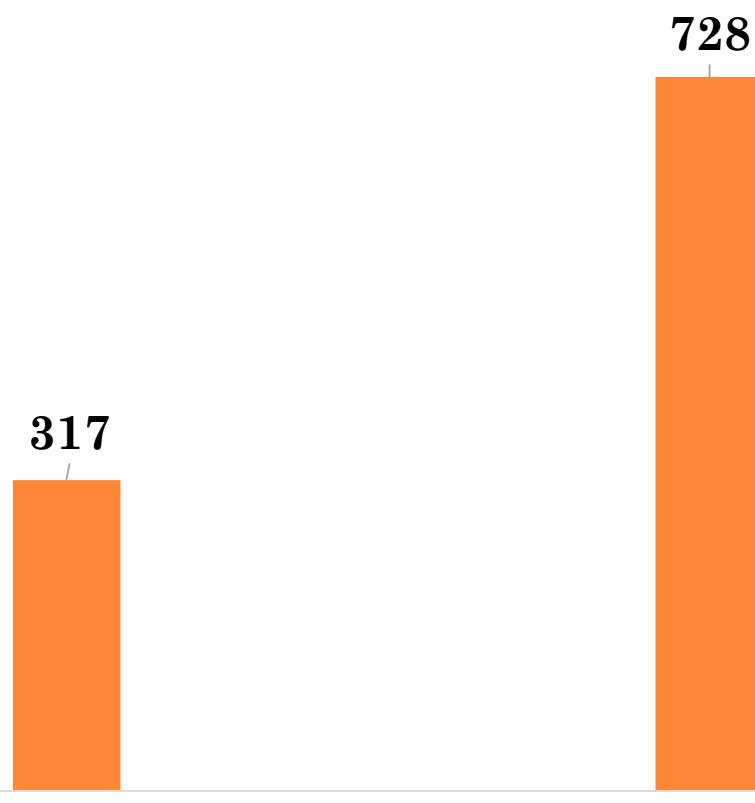
| | |
|----------------------|------|
| Total No of Patients | 1089 |
| Male | 505 |
| Female | 584 |



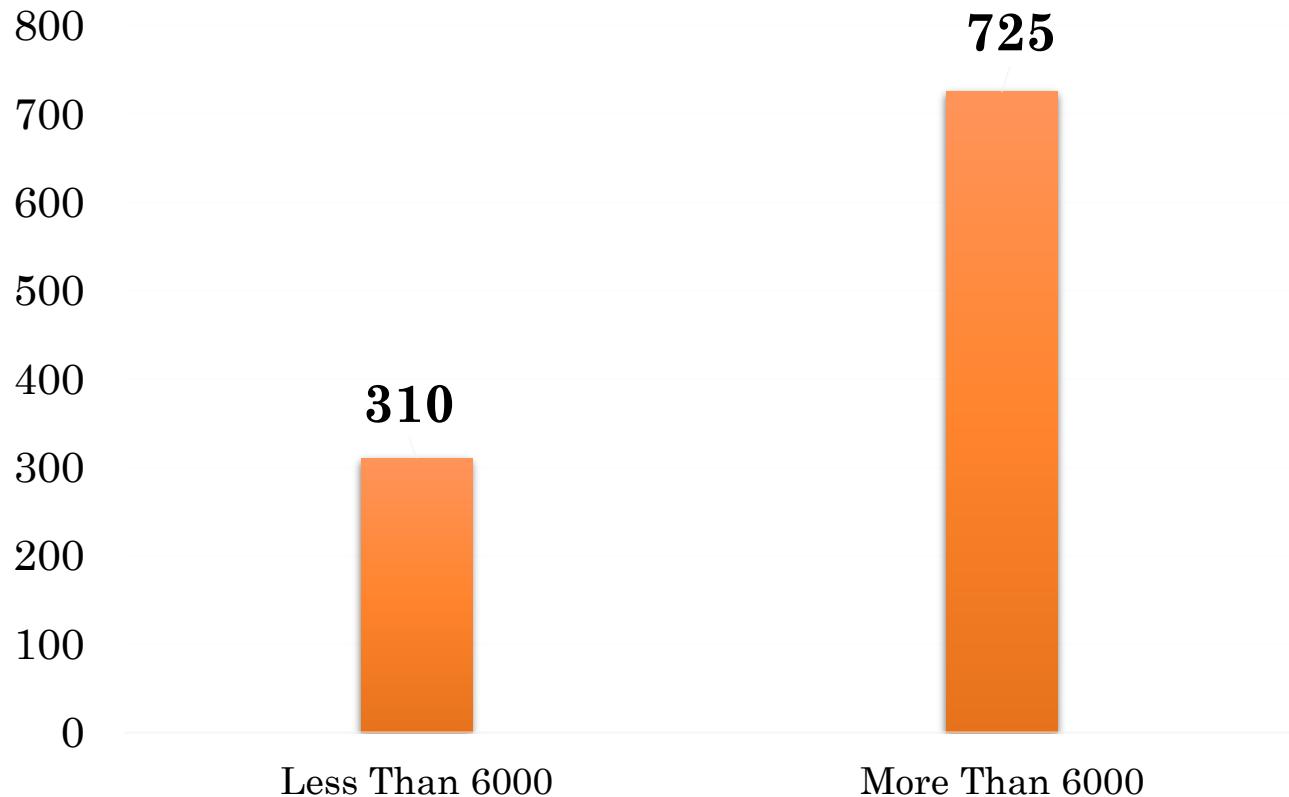
AGE WISE DISTRIBUTION



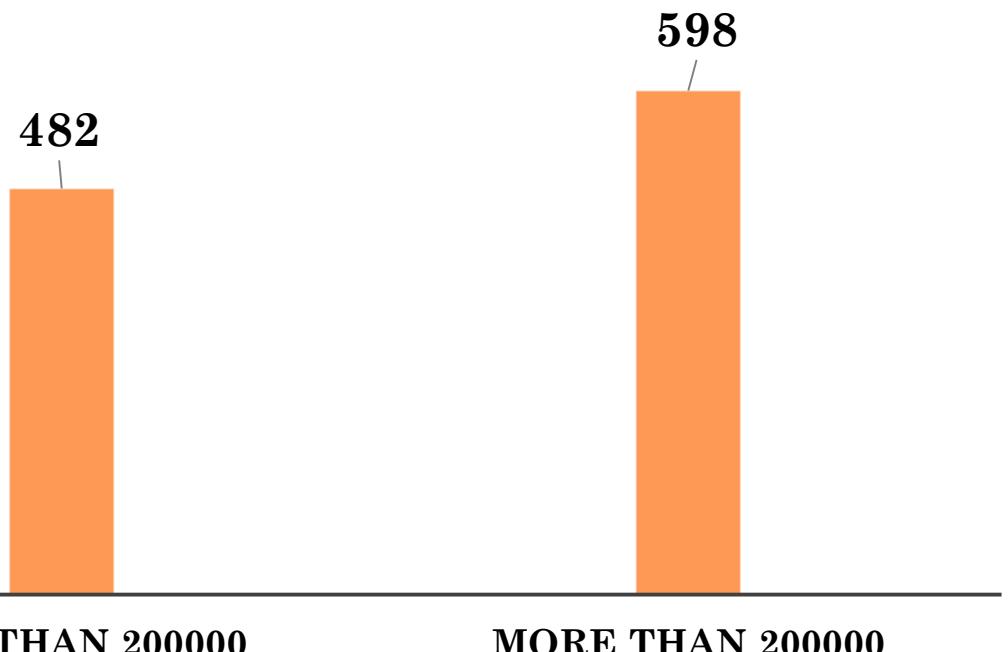
HEMOGLOBIN



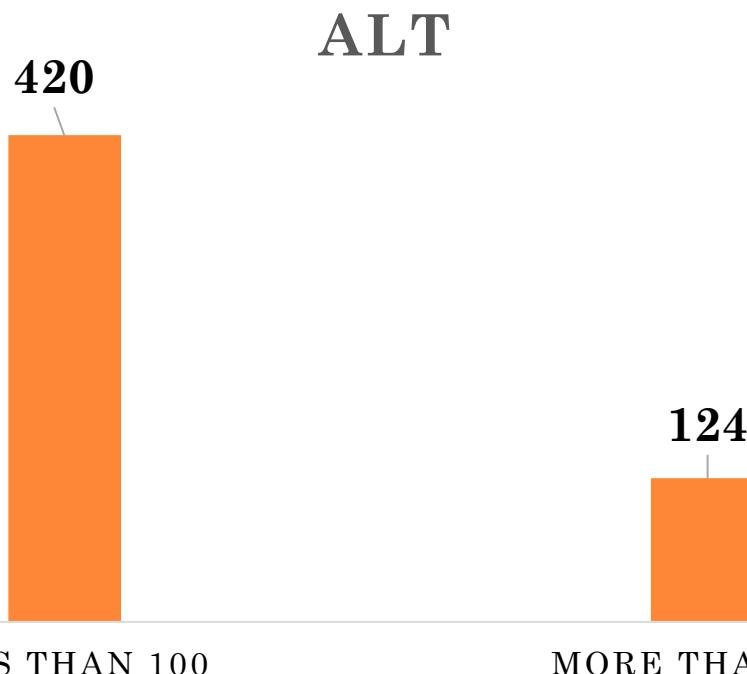
TLC



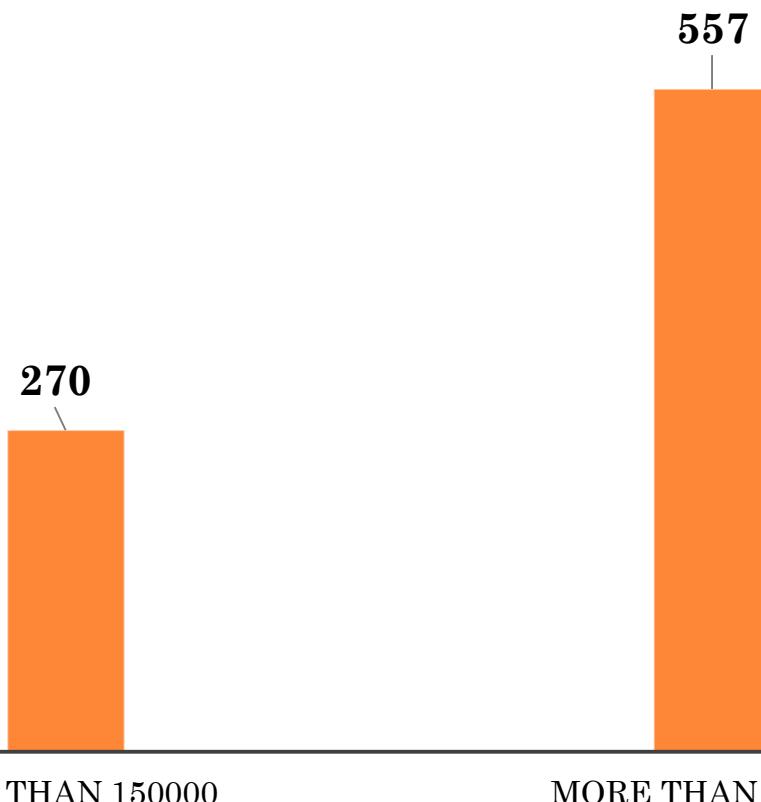
Platelets

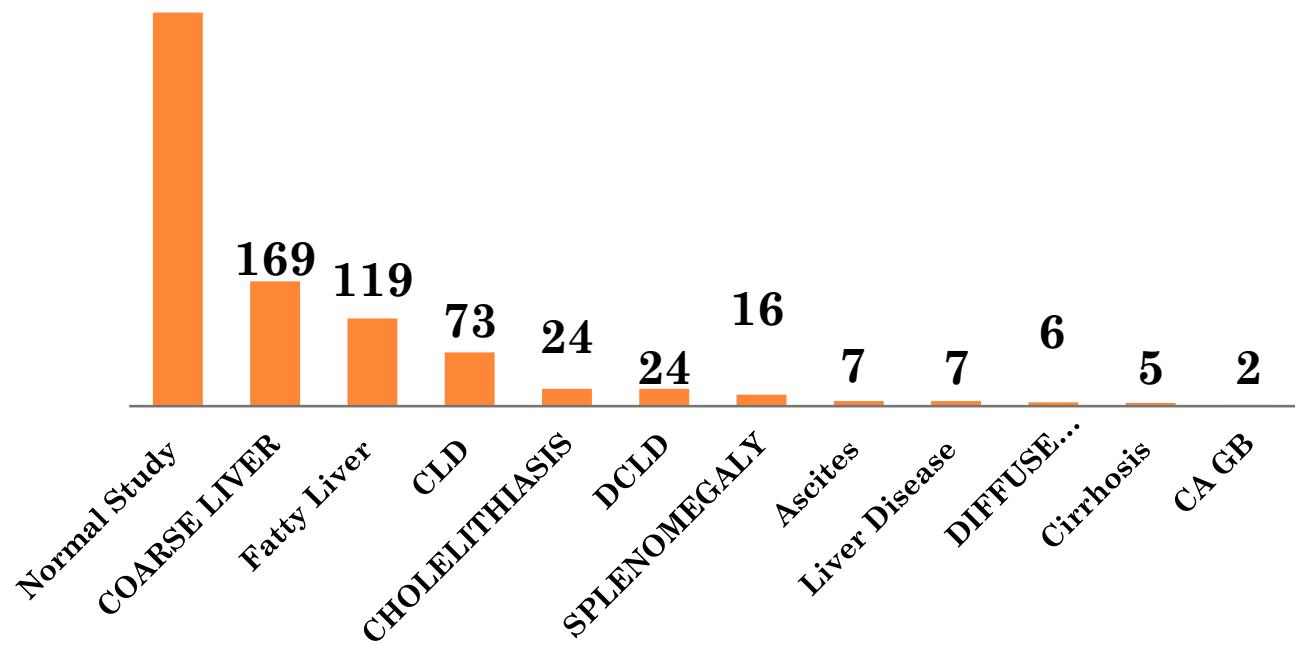


ALT

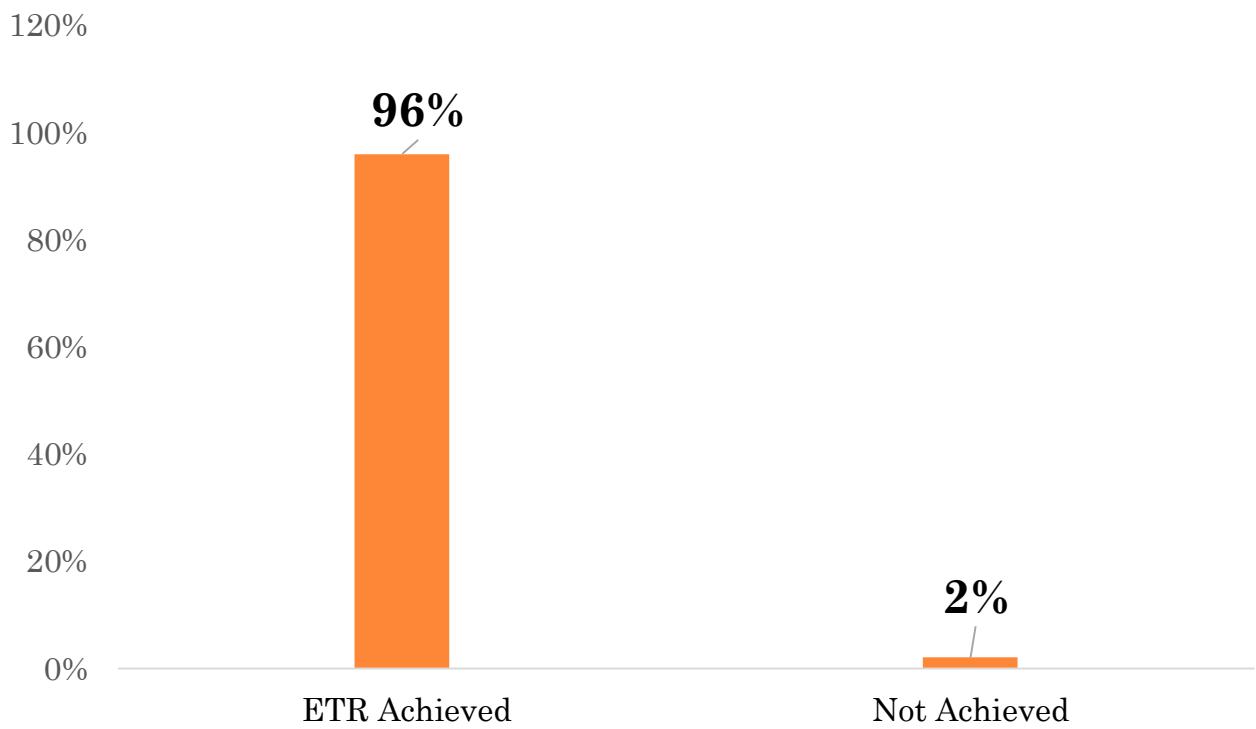


PCR





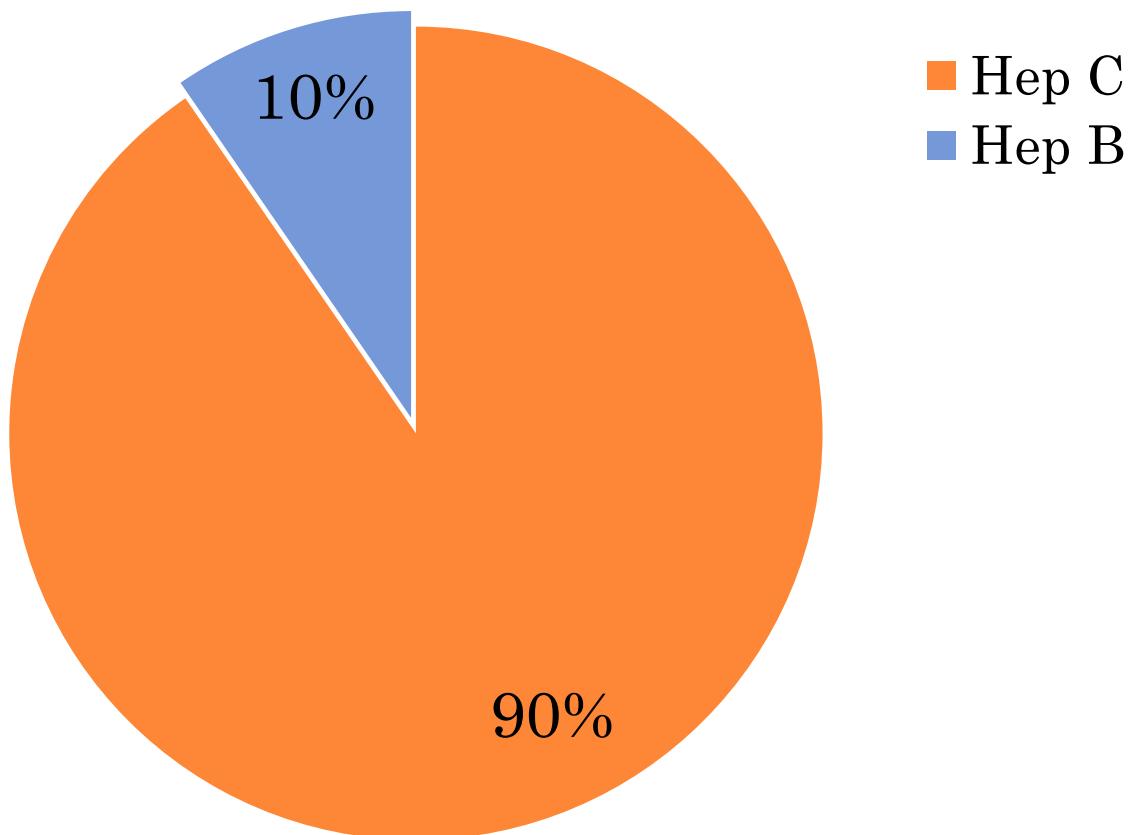
END OF TREATMENT RESPONSE (ETR)
NO OF PATIENTS WITH PCR AT END OF
TREATMENT = 45



2022

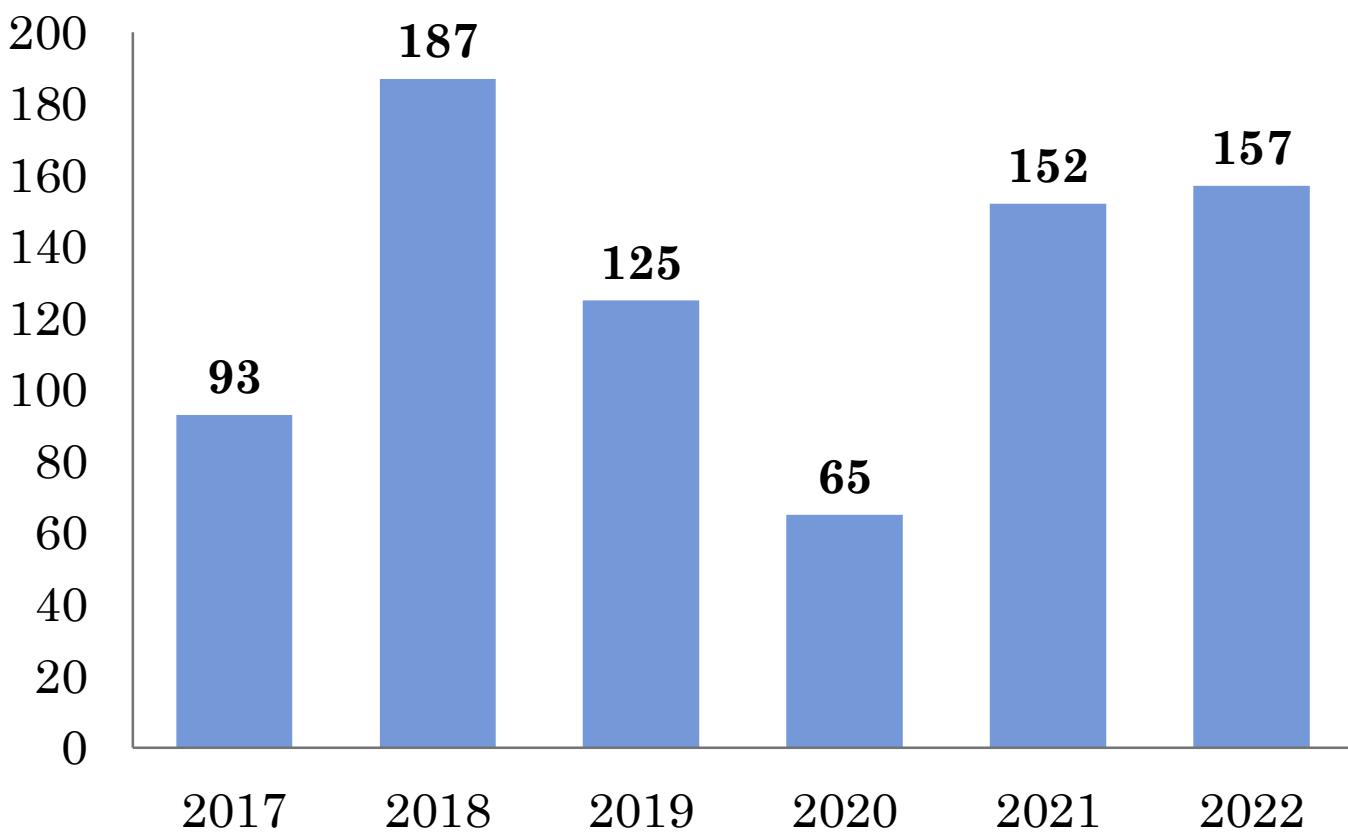
TOTAL NUMBER OF PATIENTS WITH DISTRIBUTION.

| | |
|----------------------|------|
| Total No of Patients | 1115 |
| Hepatitis C | 1008 |
| Hepatitis B | 107 |



HCC Clinic Audit

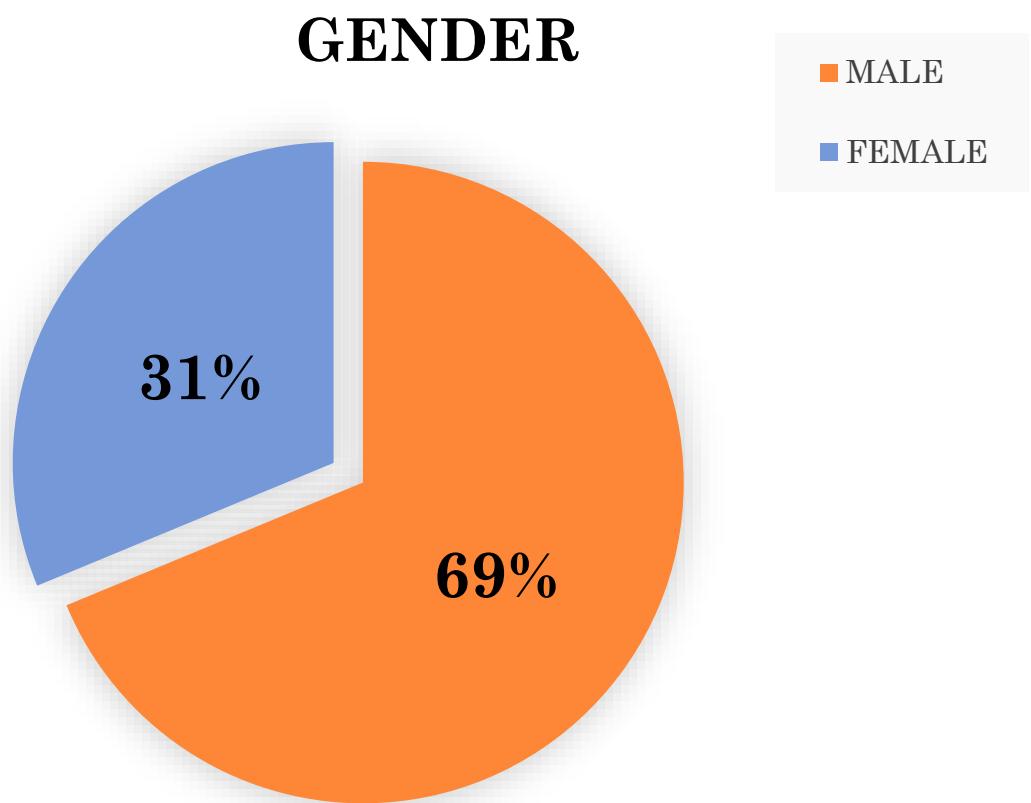
Pakistan being the most prevalent country for Hep C therefore the incidence of HCC is remarkably high and with better availability and easy access to radiological mortalities more and more HCC cause are being reported. HFH has its own CT Scan and MRI facilities. Center for liver and diagnostic disease also has the facility of RFA. A dedicated HCC clinic entertains the patients on every Friday. After formal enrollment and data entry each case is individually discussed in MDM meeting to decide for the best therapeutic modality. Most of the patients are diagnosed late with a BCLC stage C and are thus offered systemic chemotherapy. Our center is also offering RFA for stage appropriate cases.



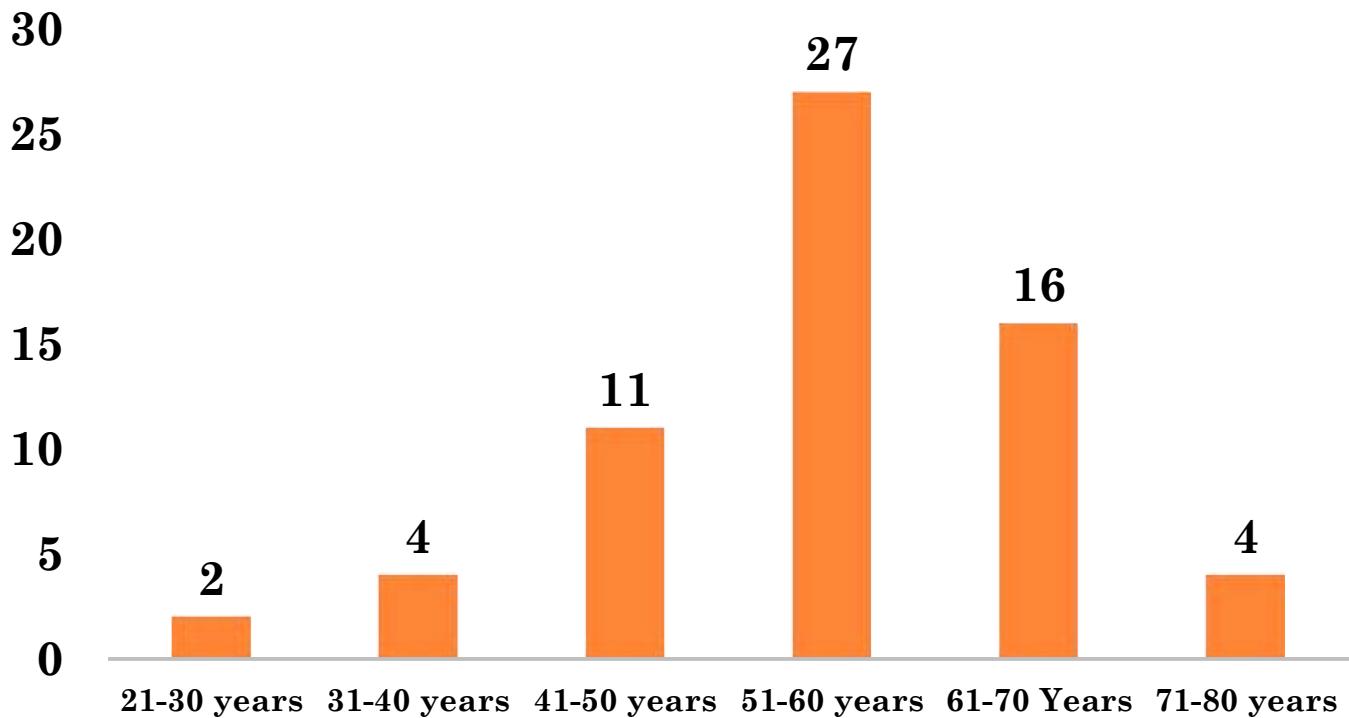
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

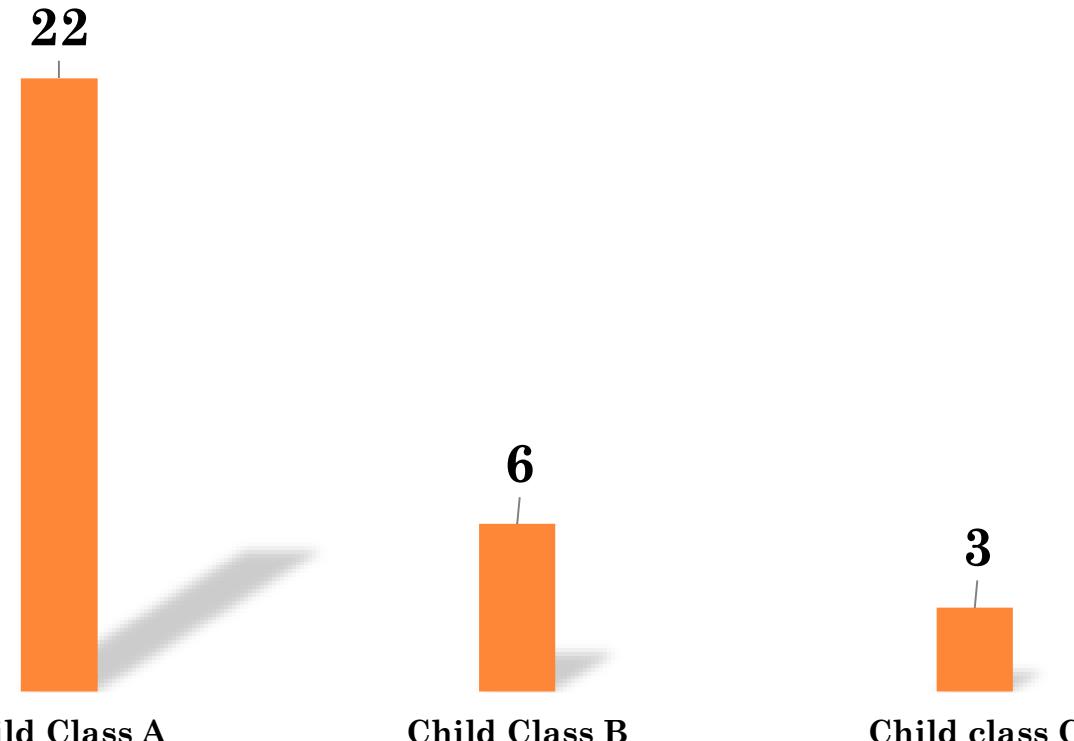
| | |
|----------------------|----|
| TOTAL NO OF PATIENTS | 64 |
| MALE | 44 |
| FEMALE | 20 |



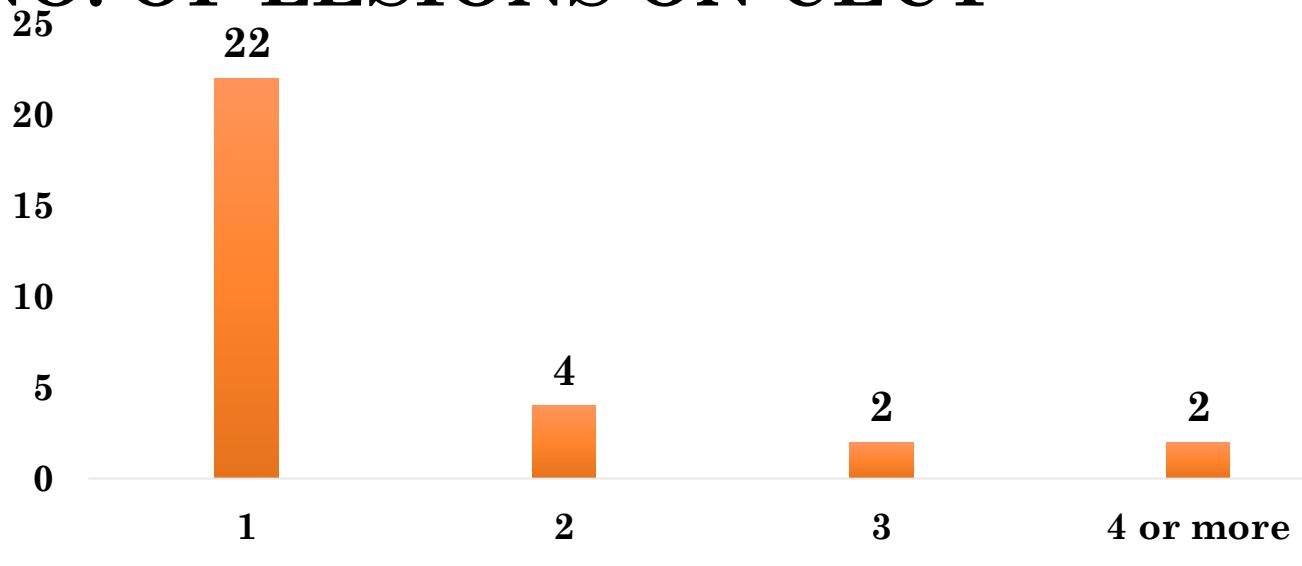
AGE WISE DISTRIBUTION



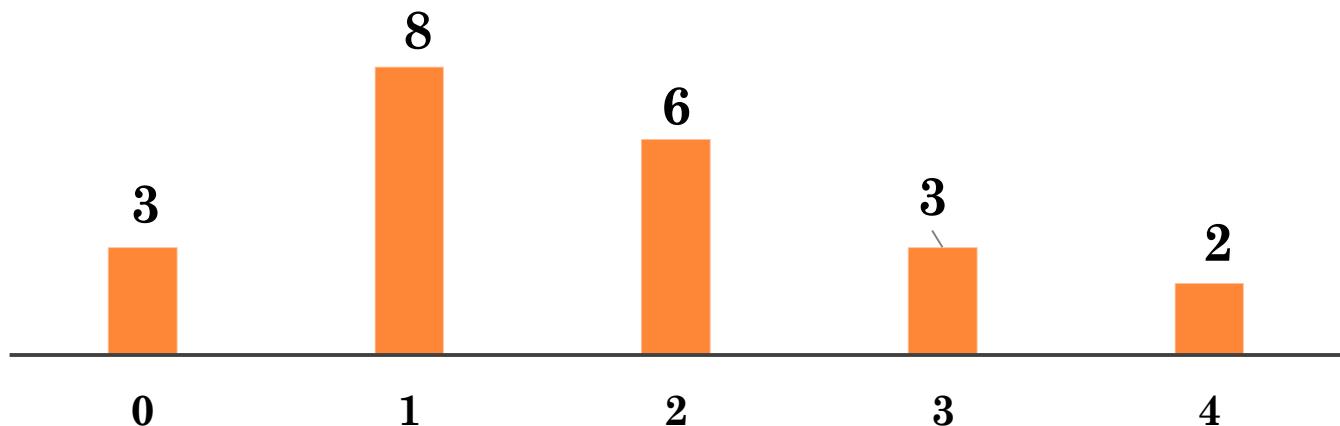
■ CHILD TURCUTTE CLASS



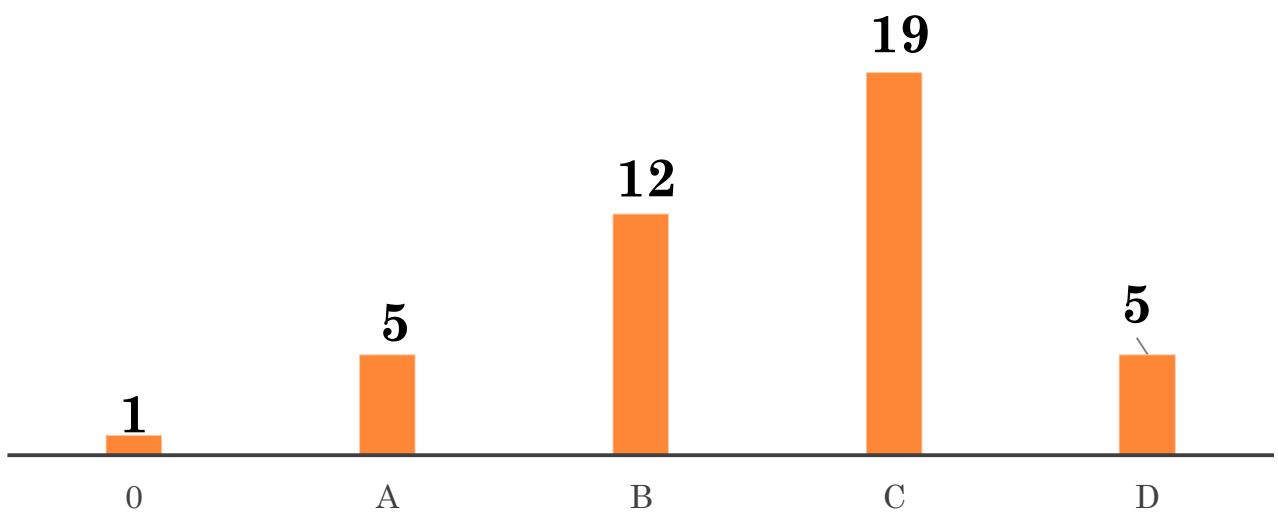
NO. OF LESIONS ON CECT



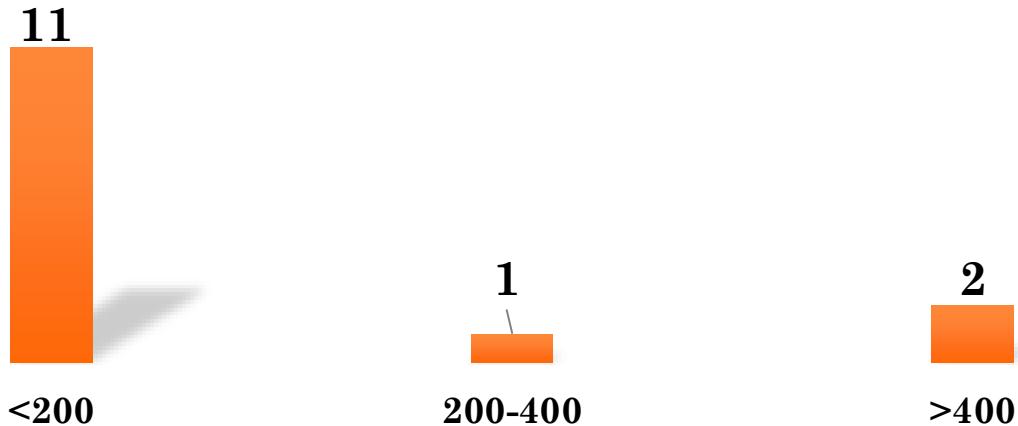
PST (ECOG)



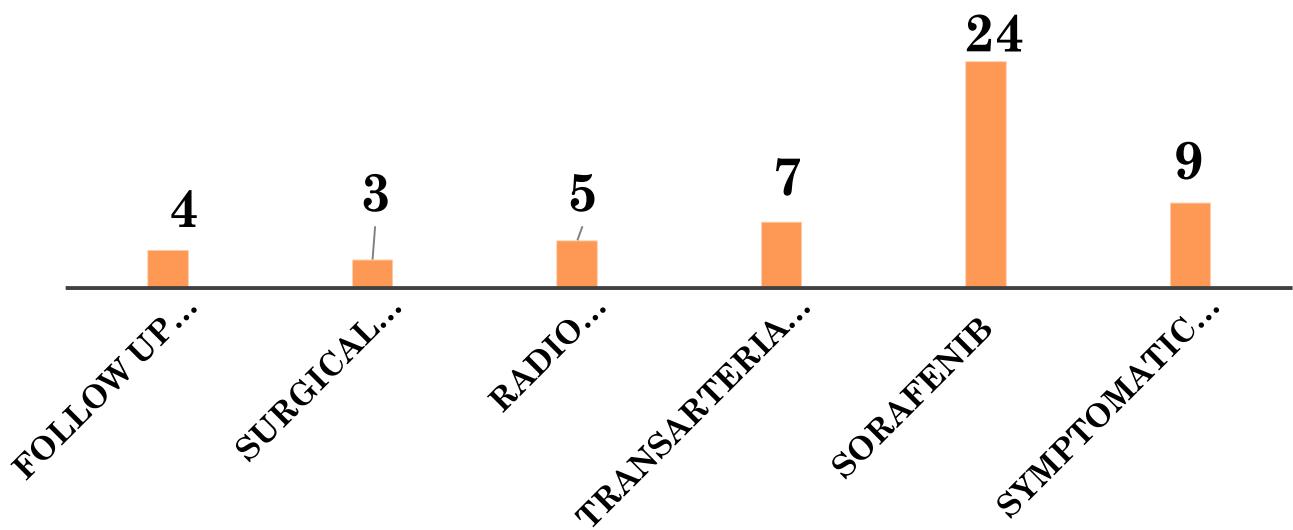
BARCELONA CLINIC FOR LIVER CANCER



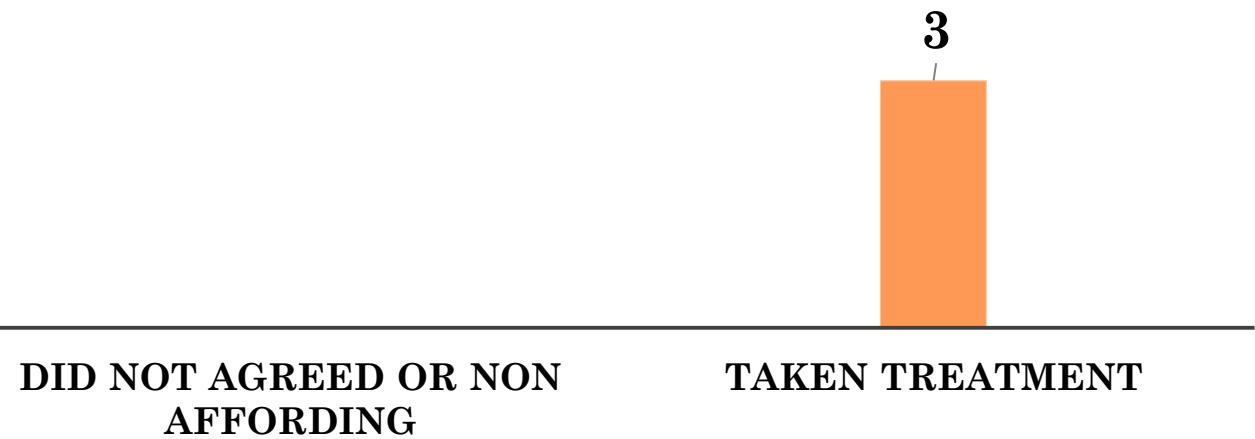
ALPHA FETO PROTEINS



TREATMENT OFFERED



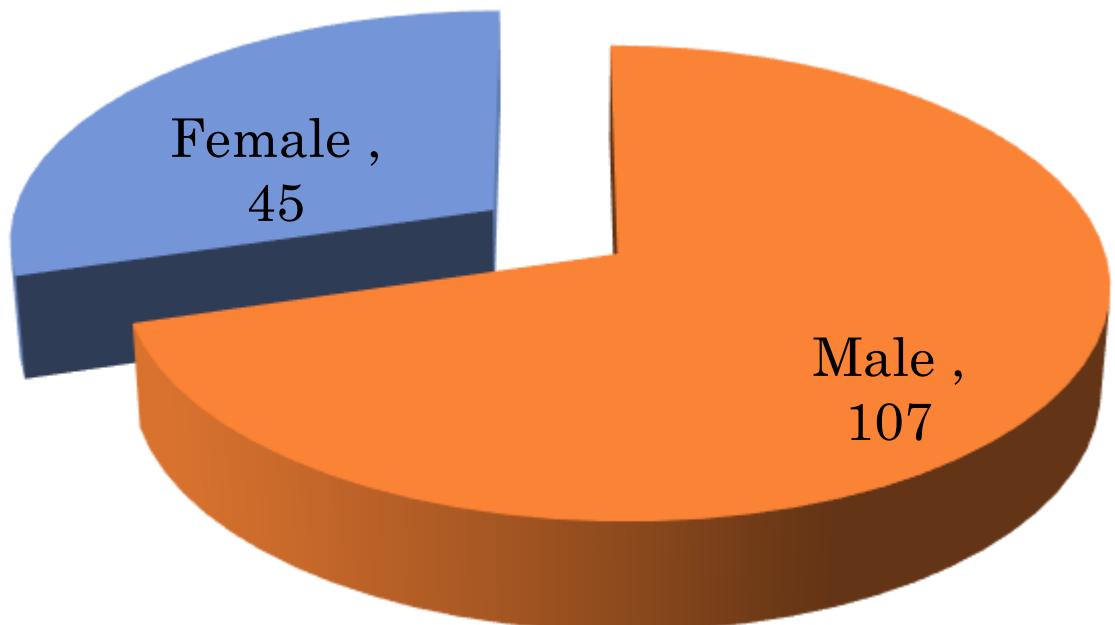
TREATMENT TAKEN OR NOT



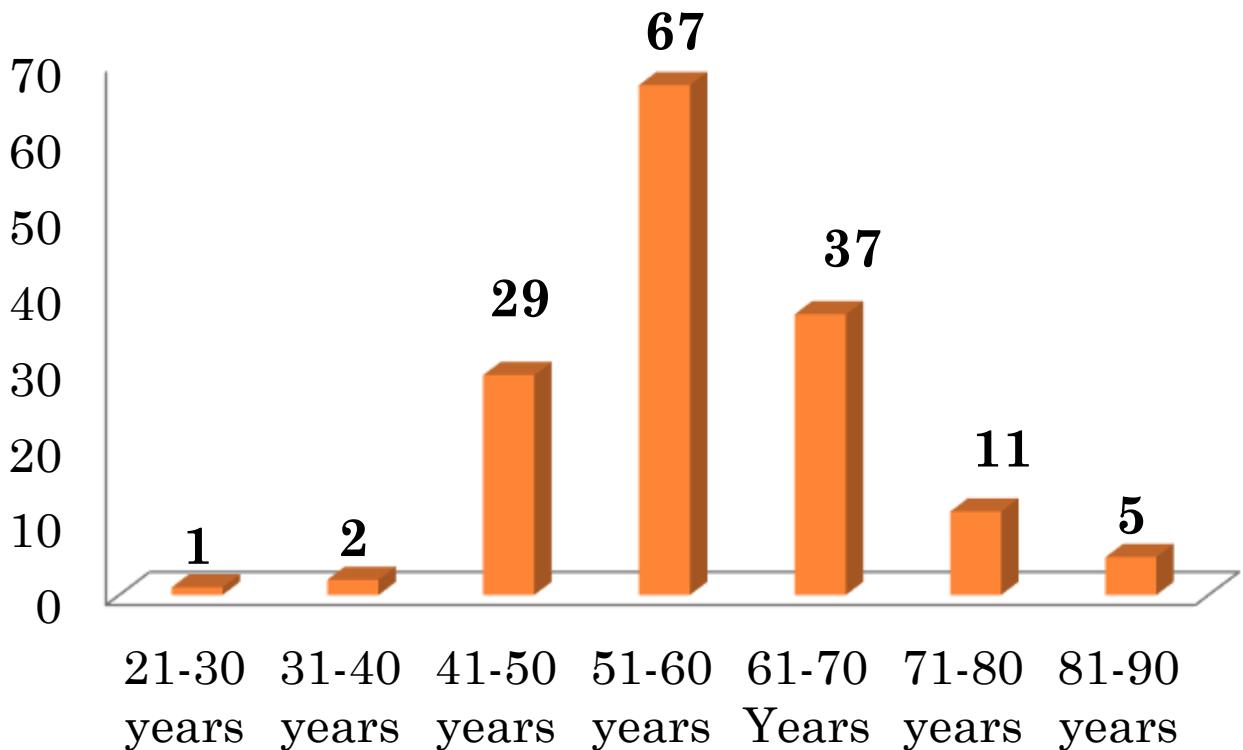
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

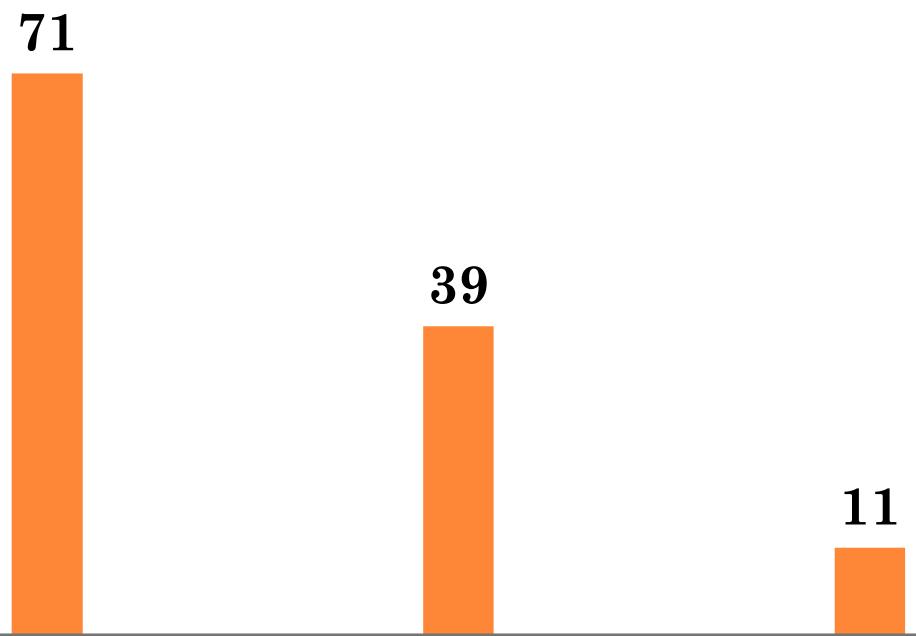
| | |
|-----------------------------|------------|
| TOTAL NO OF PATIENTS | 152 |
| MALE | 107 |
| FEMALE | 45 |



AGE WISE DISTRIBUTION

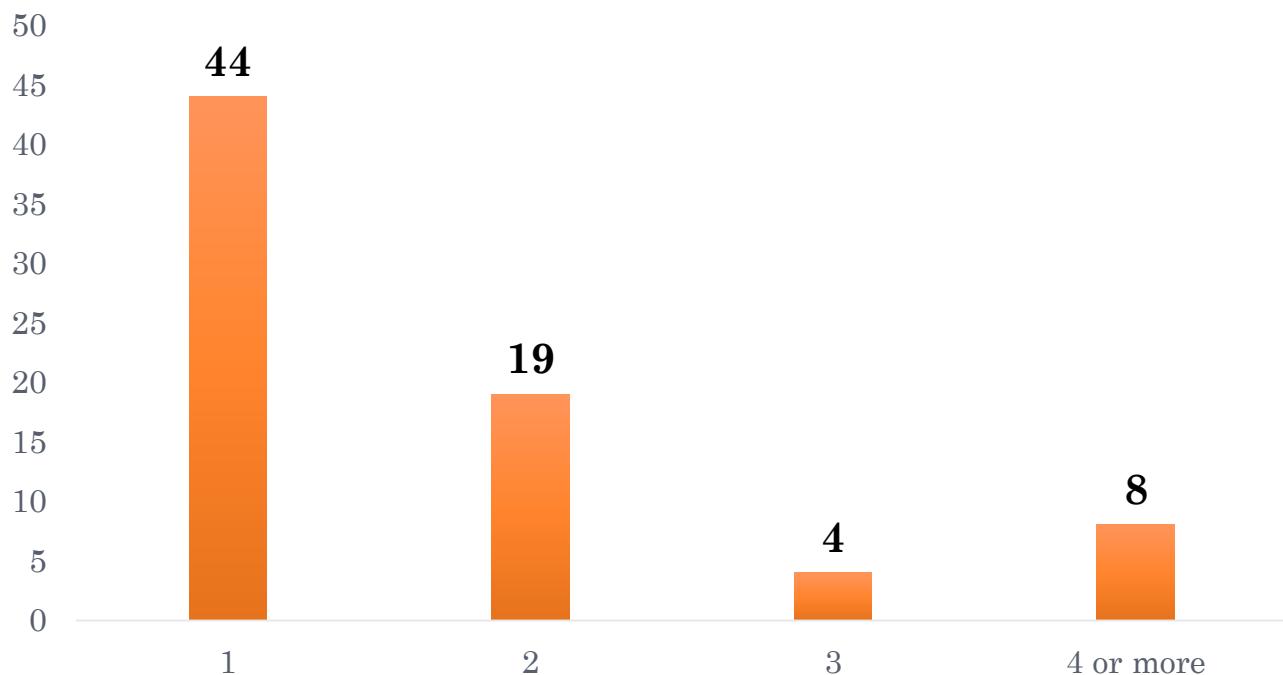


CHILD TURCUTTE CLASS

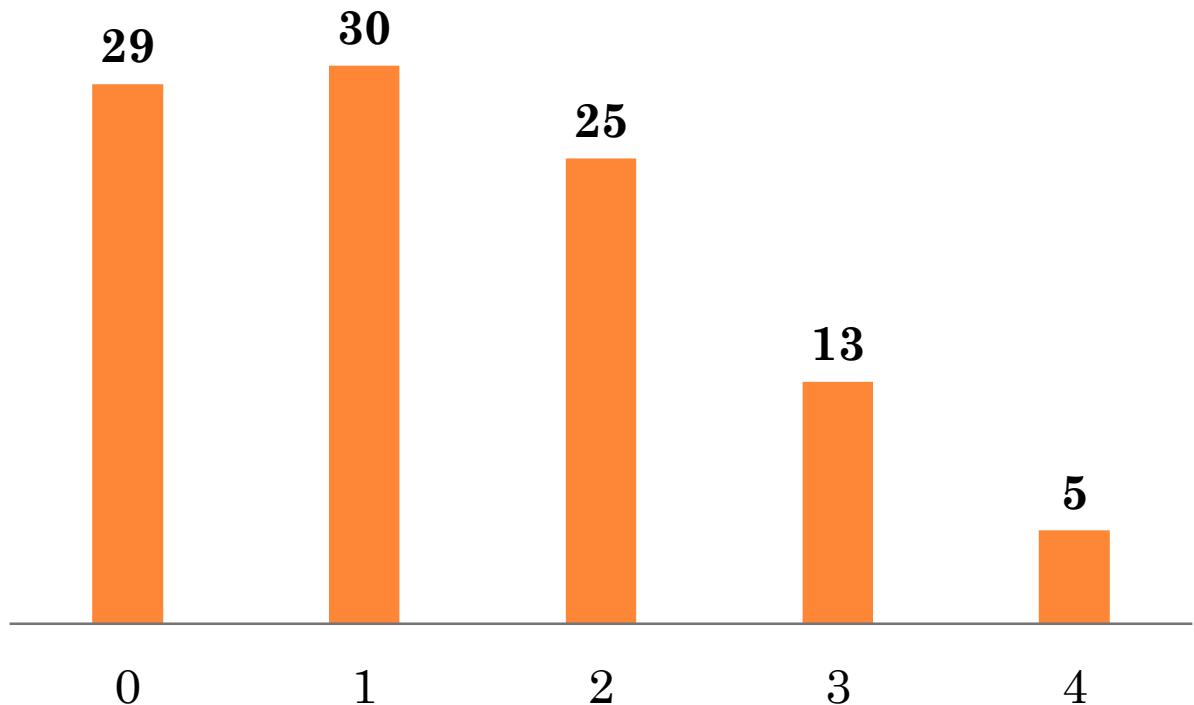


child Class A child class B Child class C

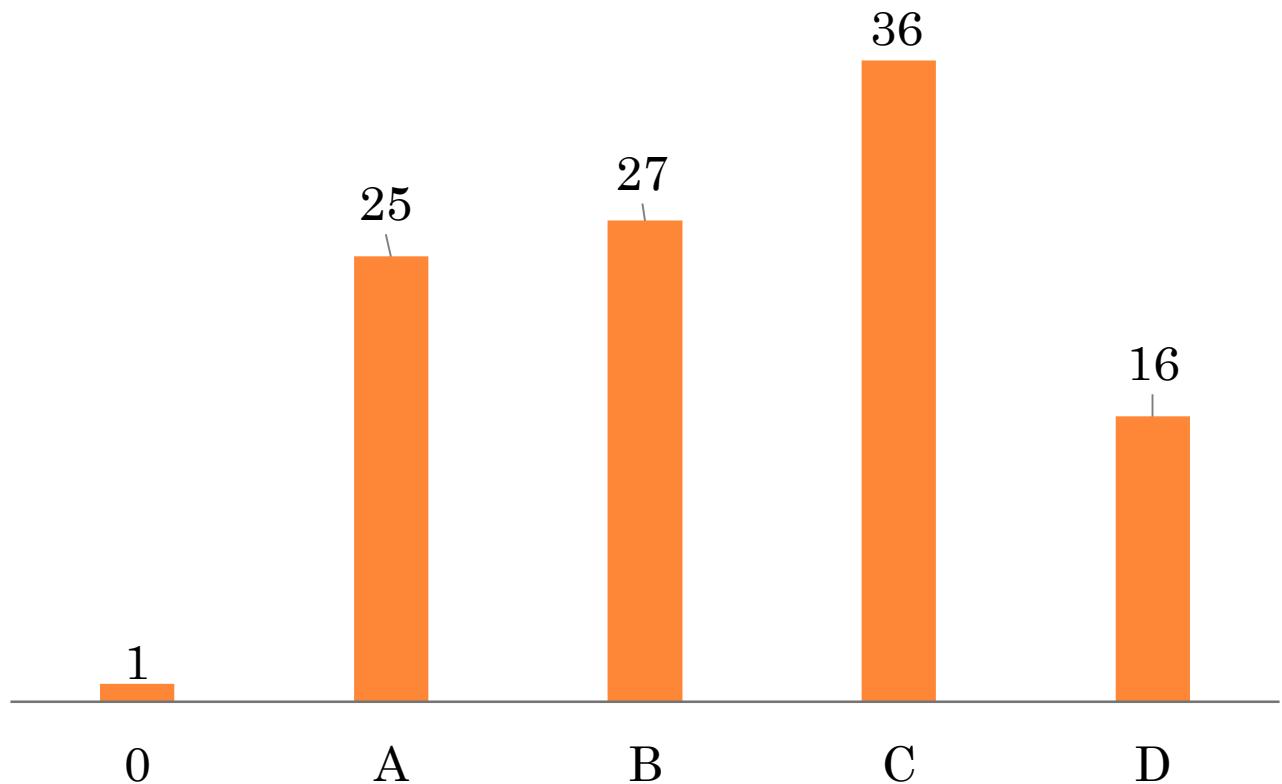
NO. OF LESIONS ON CECT



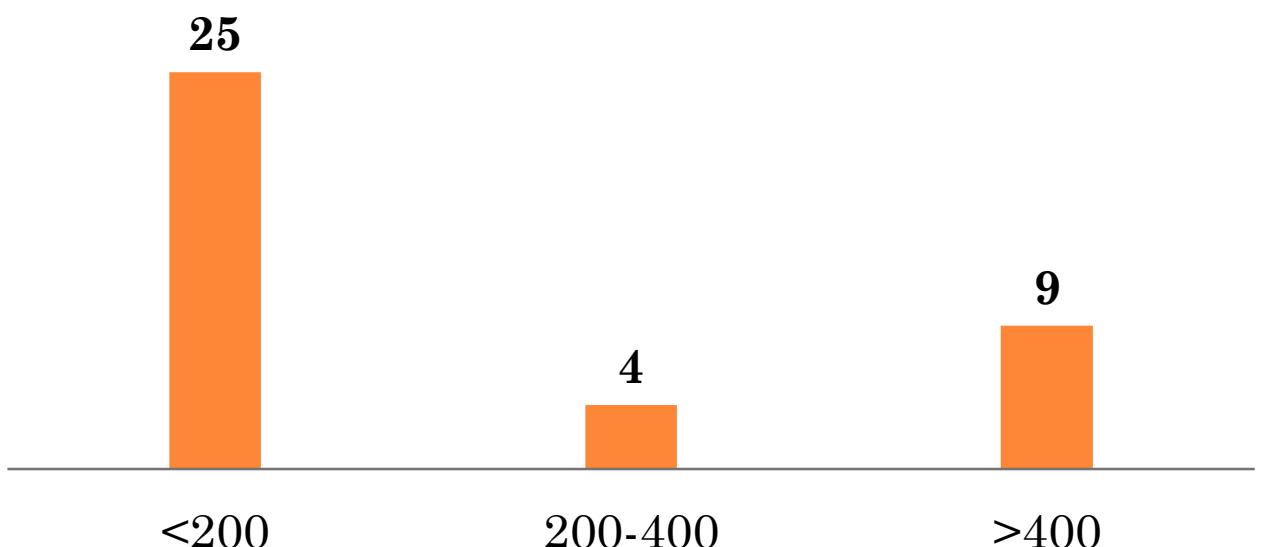
PST (ECOG)



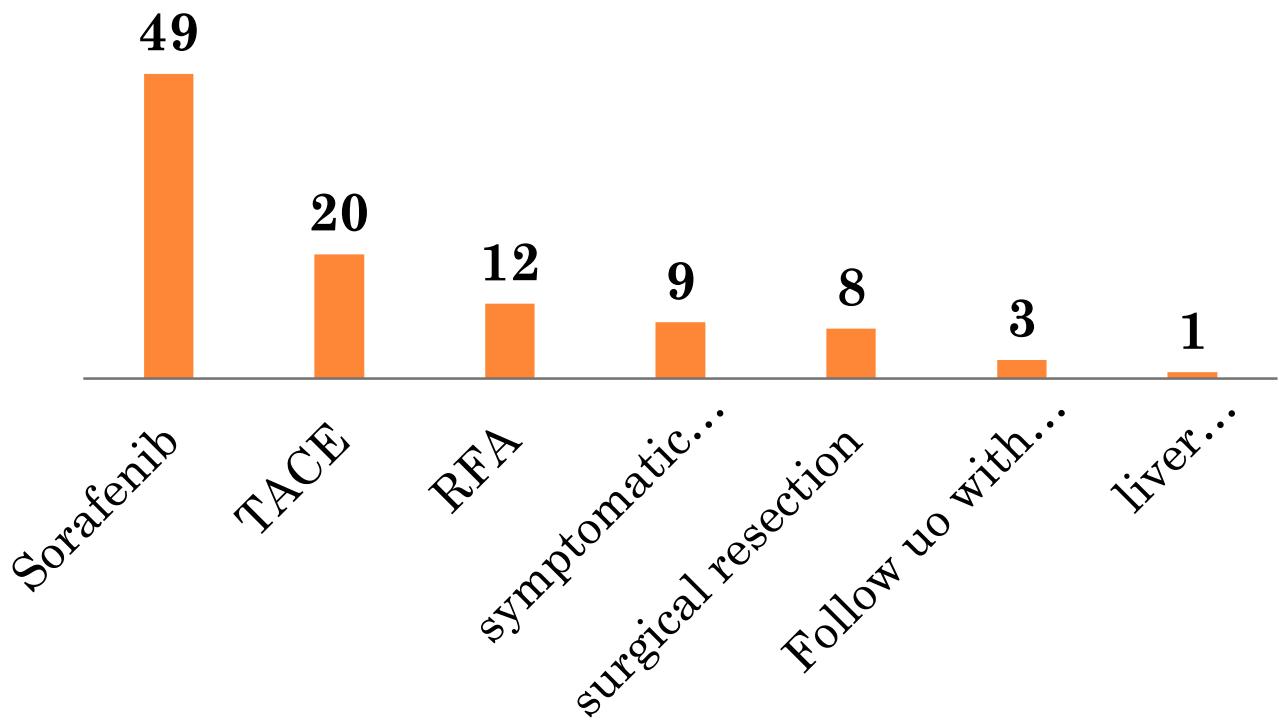
BARCELONA CLINIC FOR LIVER CANCER STAGE



ALPHA FETO PROTEINS



TREATMENT OFFERED



INTERVENTIONS OPTED BY PATIENTS OR NOT



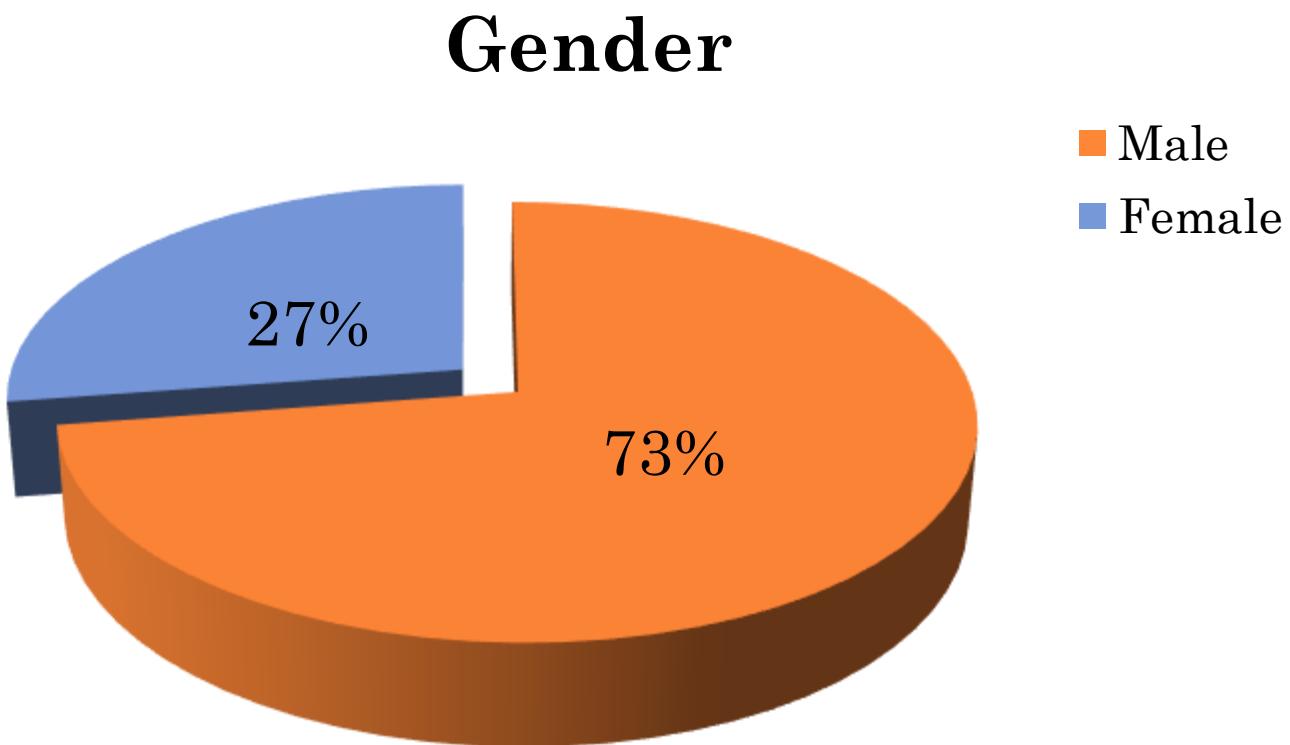
Did Not agree or non
affording

Interventiops Opted

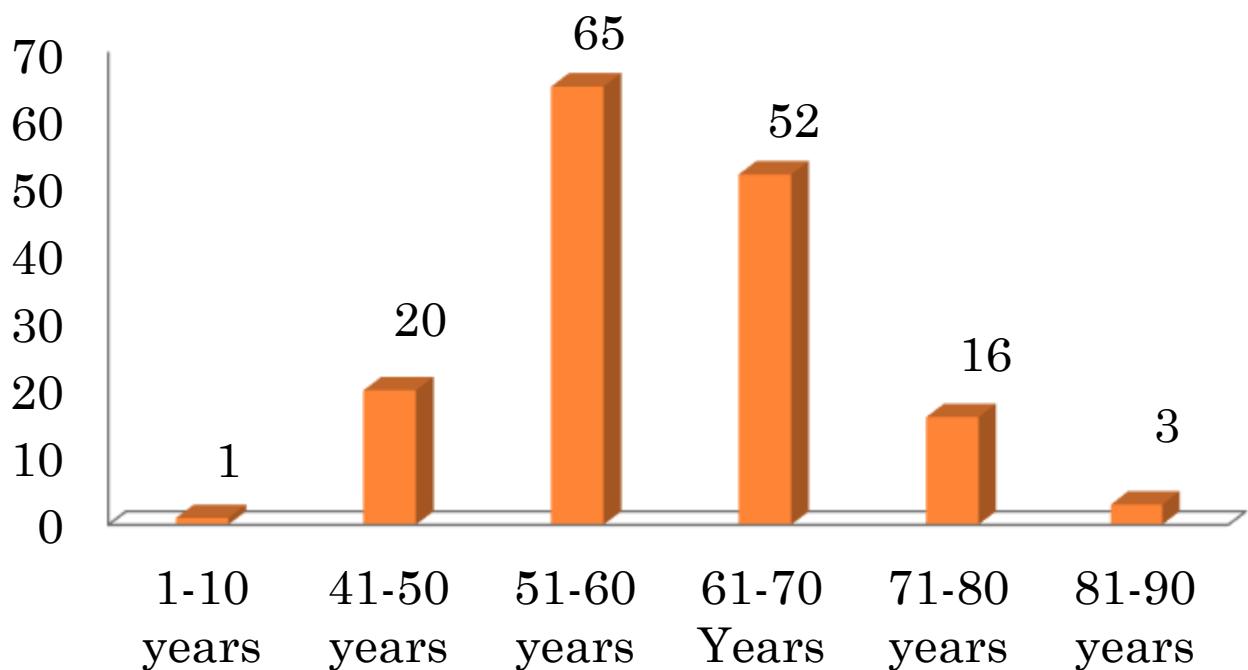
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

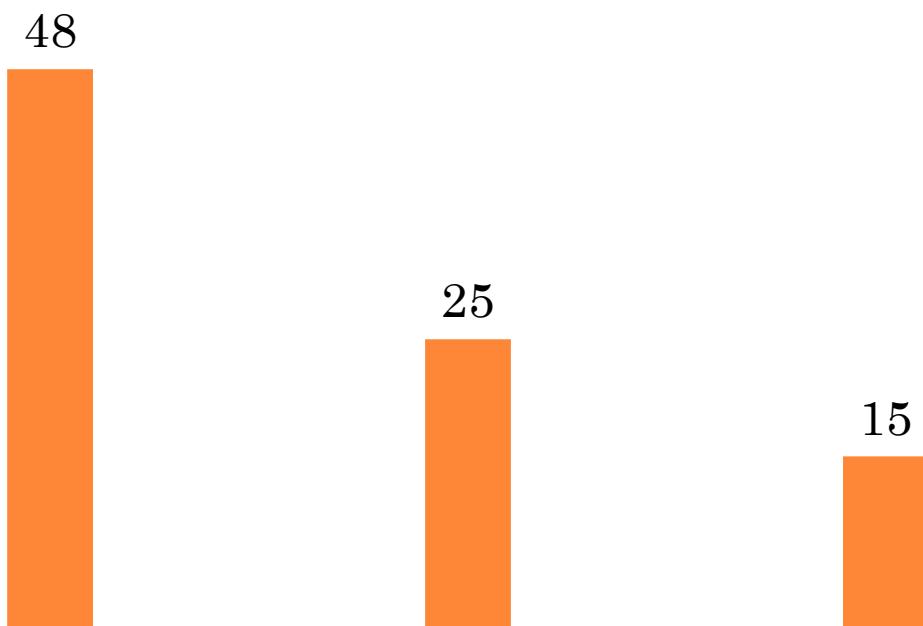
| | |
|-----------------------------|------------|
| Total No of Patients | 157 |
| Male | 114 |
| Female | 43 |



AGE WISE DISTRIBUTION



■ CHILD TURCUTTE CLASS

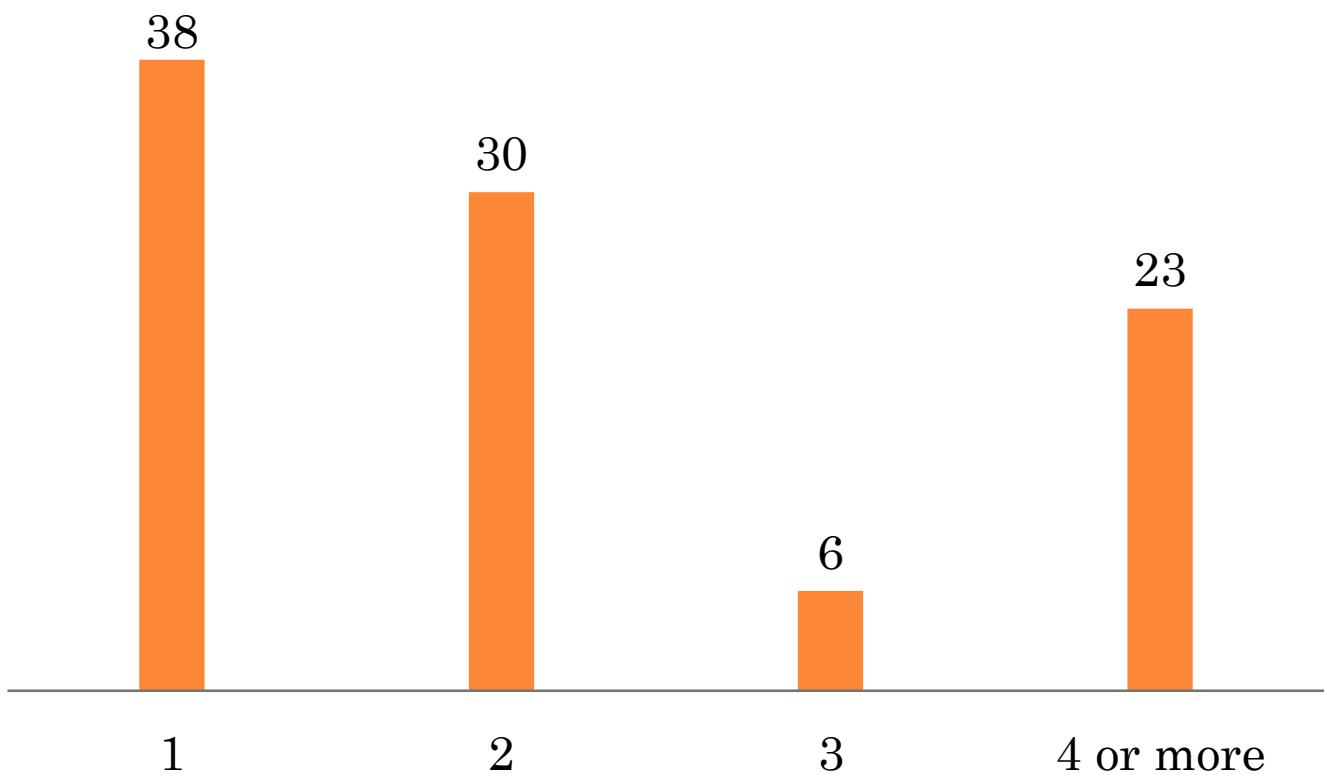


child Class A

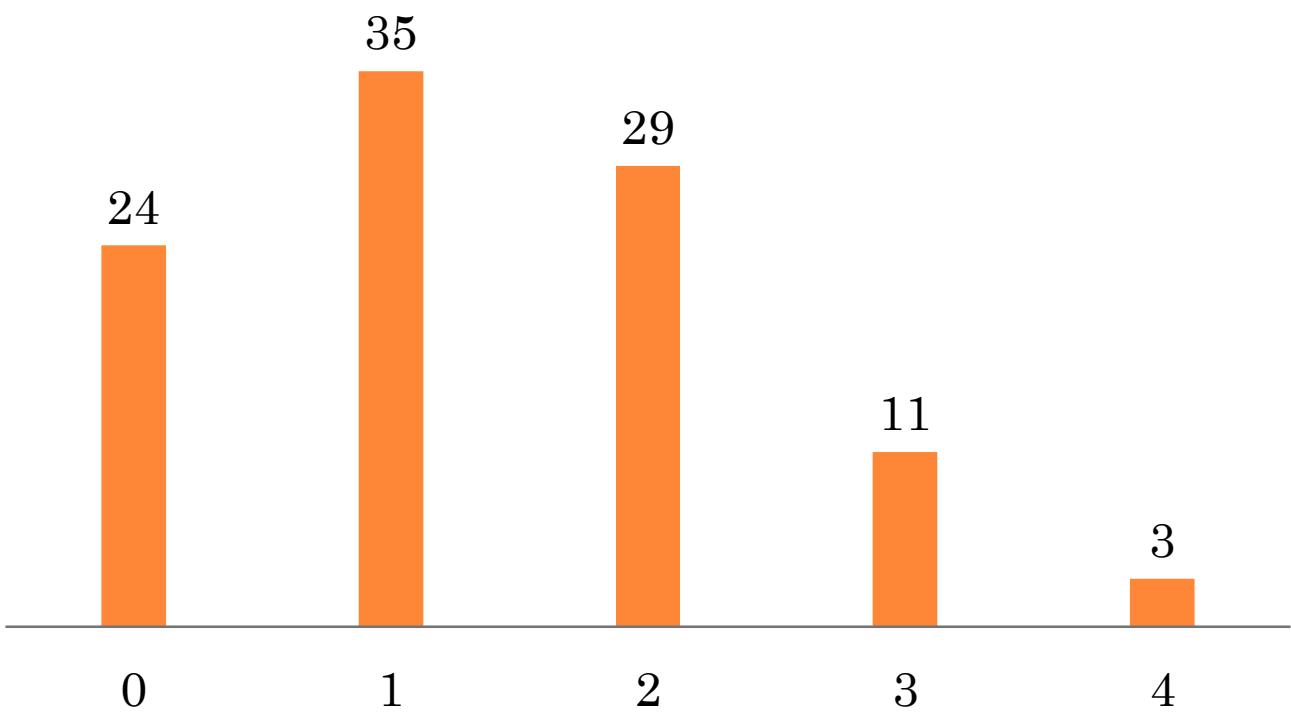
child class B

Child class C

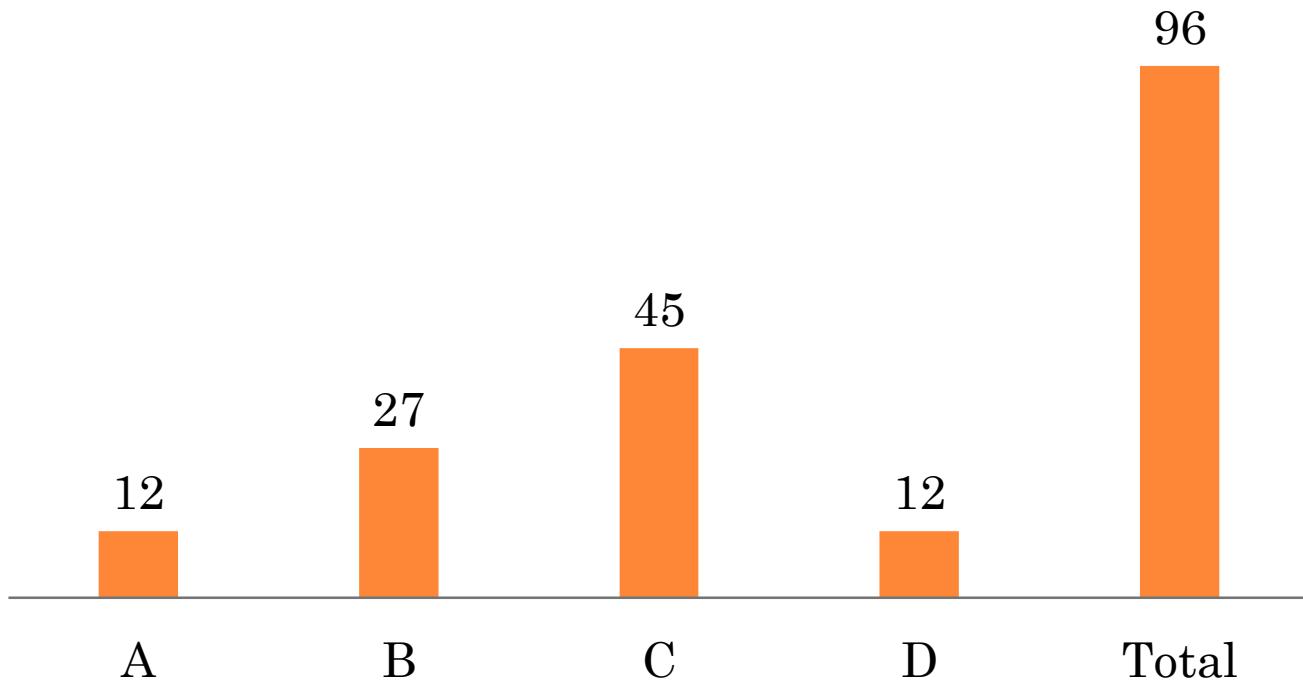
NO. OF LESIONS ON CECT



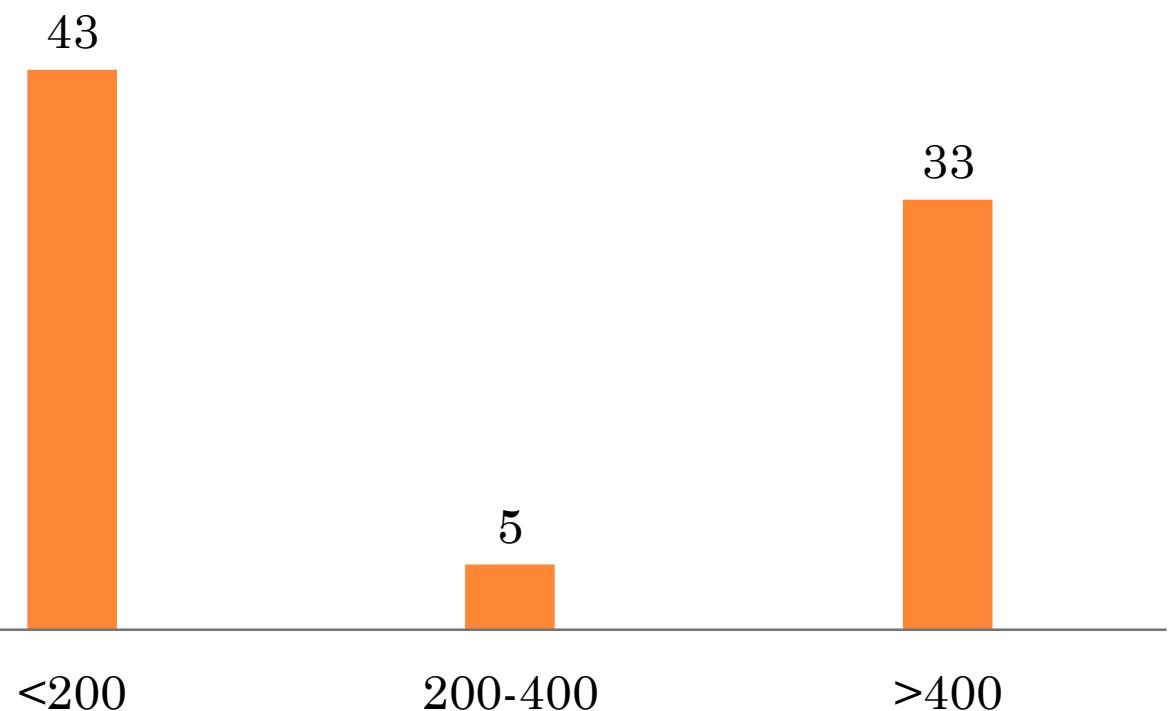
PST (ECOG)



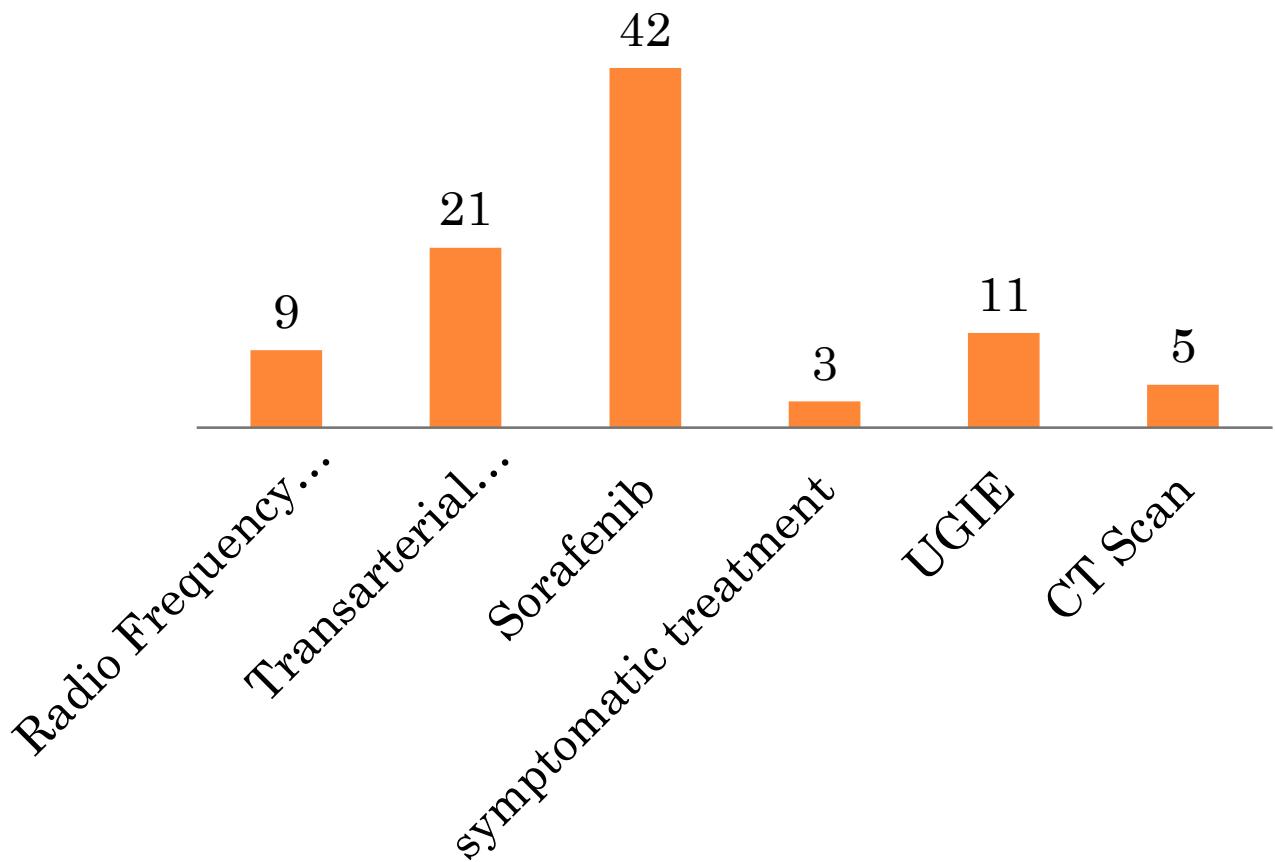
BARCELONA CLINIC FOR LIVER CANCER STAGE



ALPHA FETO PROTEINS



TREATMENT OFFERED



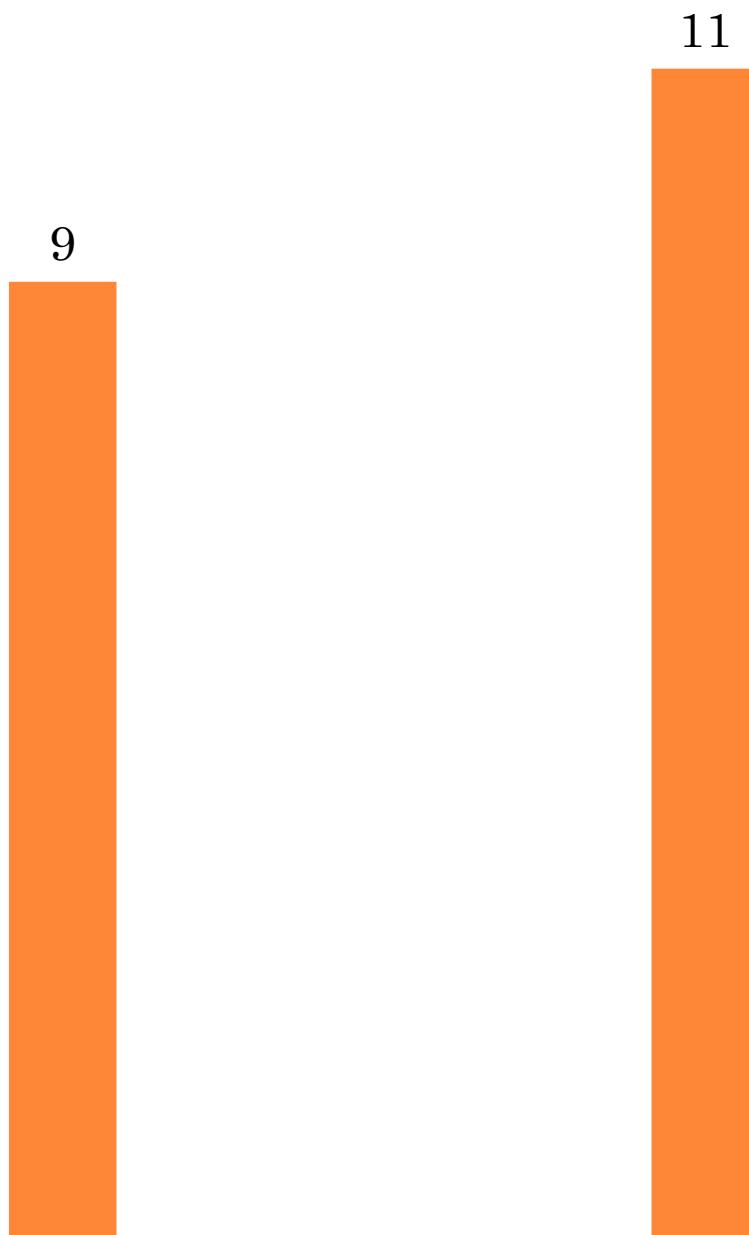
INTERVENTIONS OPTED BY PATIENTS OR NOT



Did Not agree or non affording

Interventiopns Opted

INTERVENTIONS OPTED BY PATIENTS OR NOT



Did Not agree or non
affording

Interventiops Opted

2022

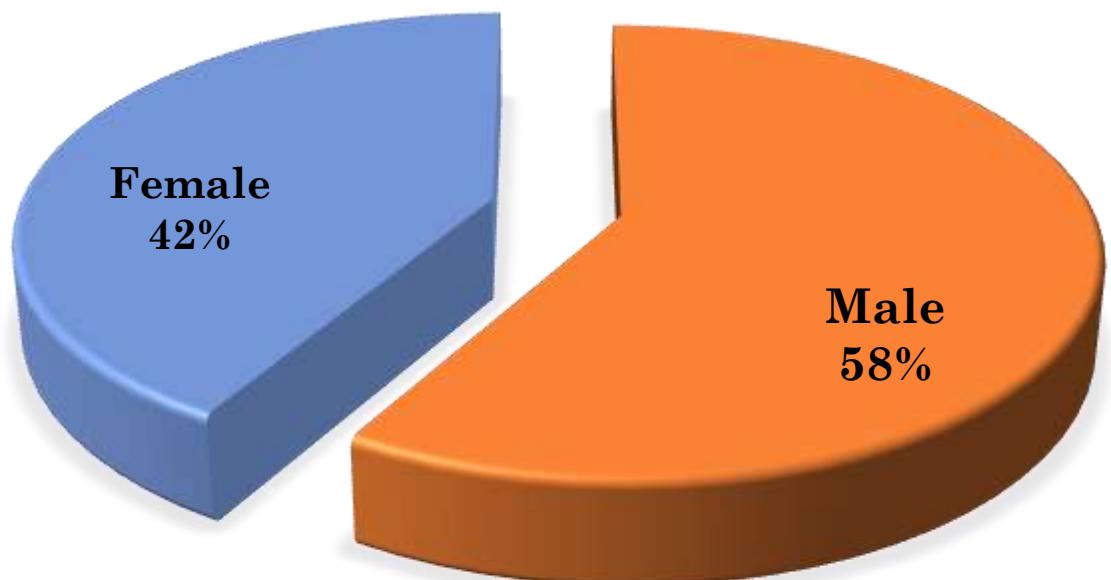
Pancreatitis Clinic Audit

In the year 2022 Center for Liver & digestive diseases have successfully launched a dedicated Pancreatitis clinic, offering its services once weekly on every Tuesday. 118 patients have already been registered with maximum number presenting as acute pancreatitis.

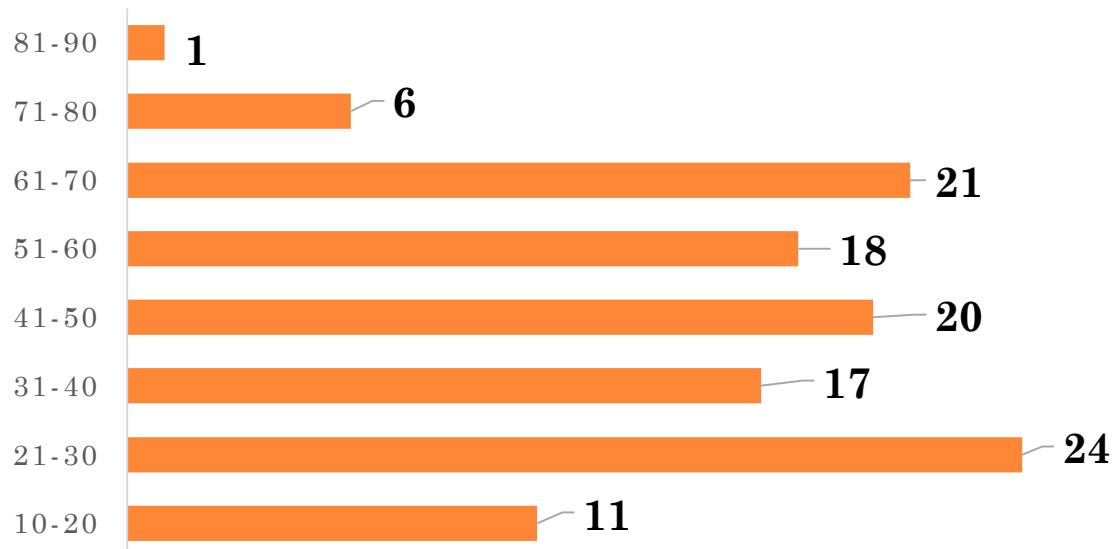


TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

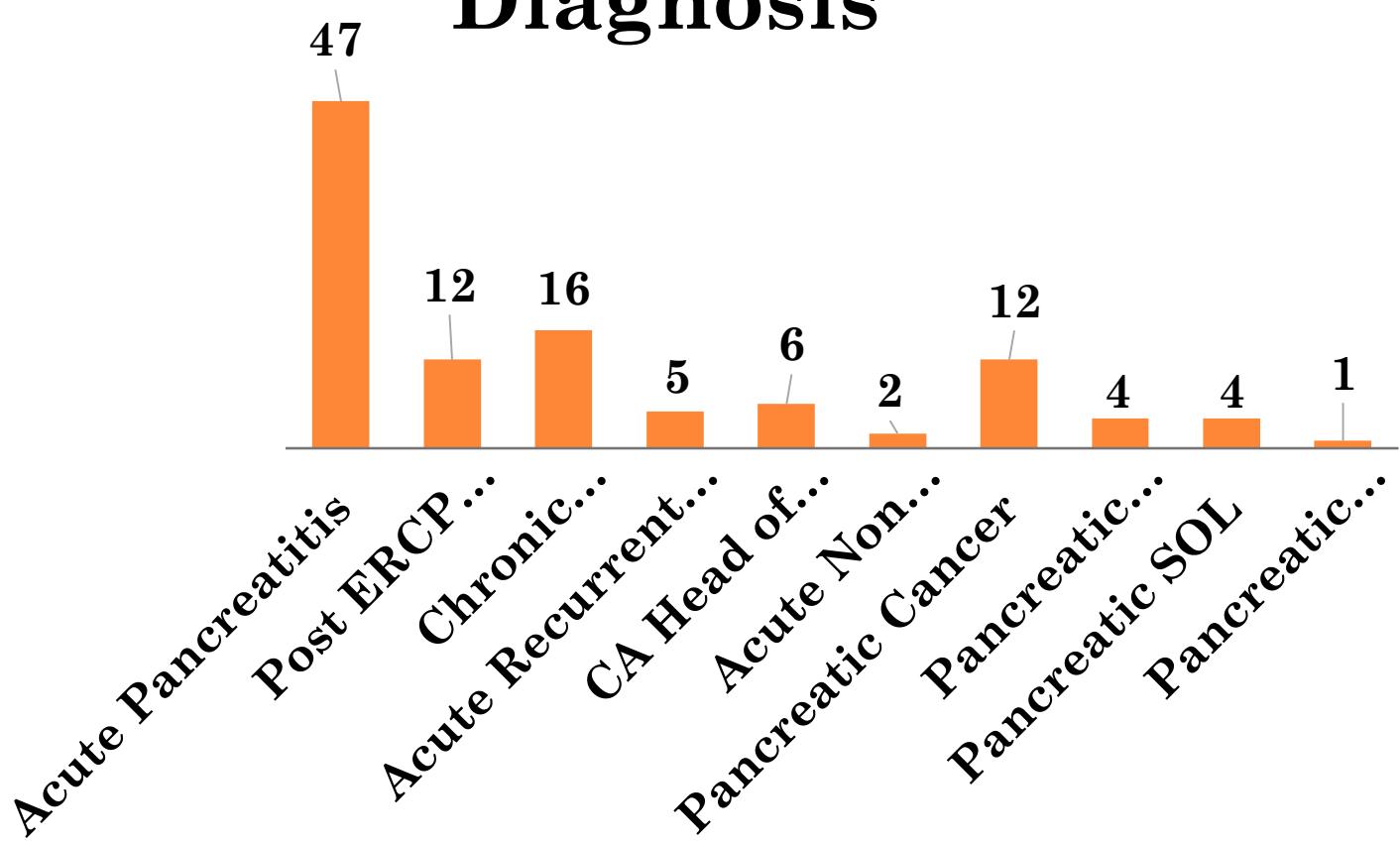
| | |
|-----------------------------|------------|
| Total No of Patients | 118 |
| Male | 69 |
| Female | 49 |



AGE WISE DISTRIBUTION

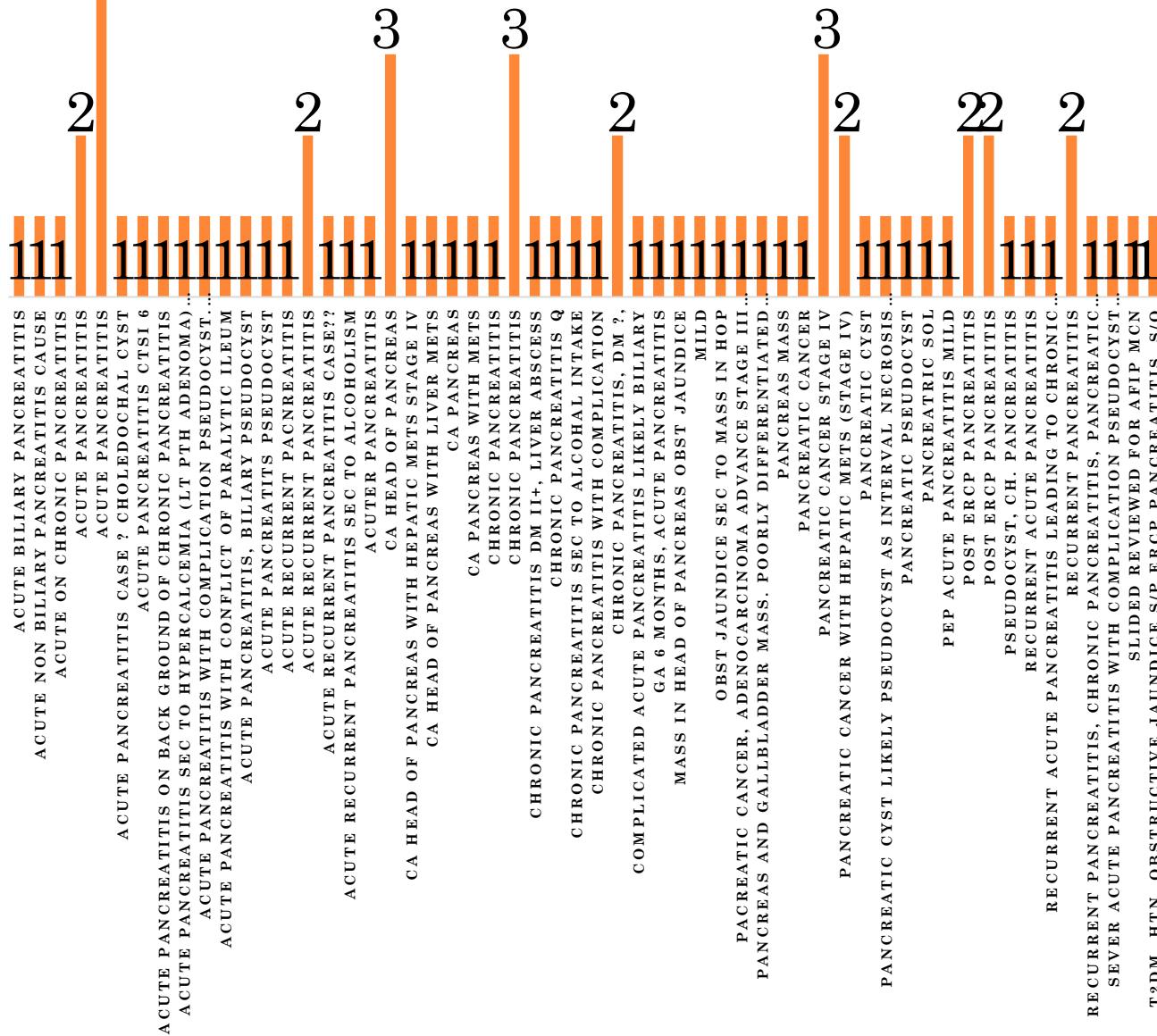


Diagnosis



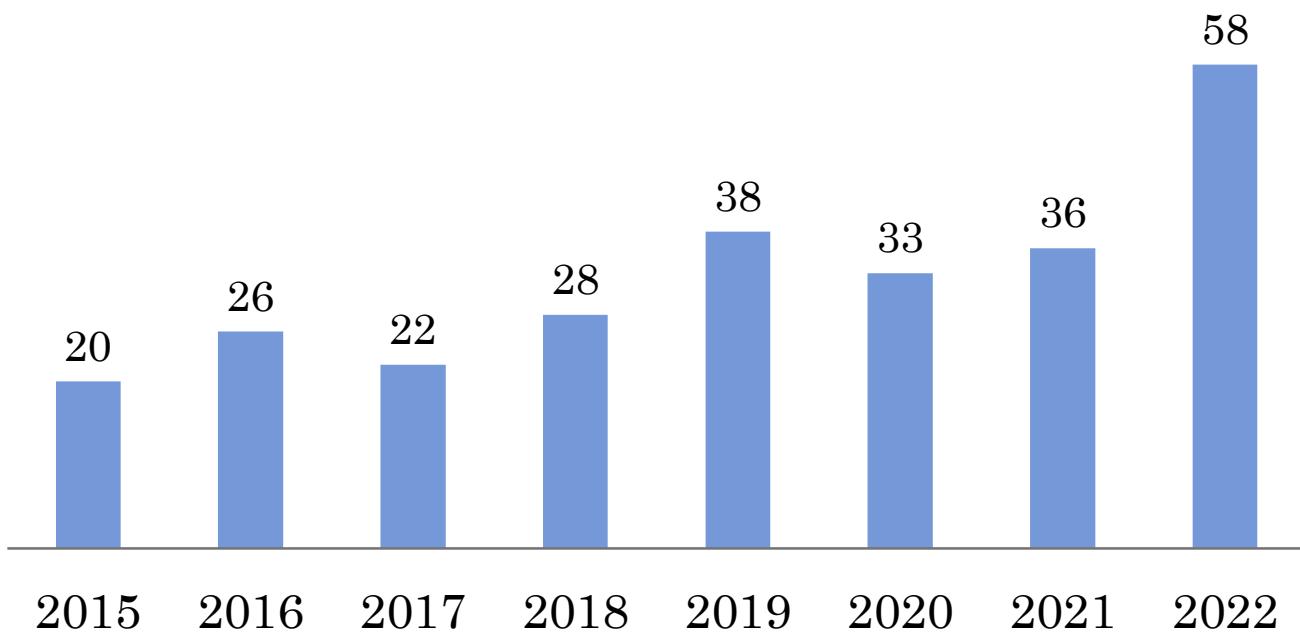
FINAL DIAGNOSIS

8



IBD Audit

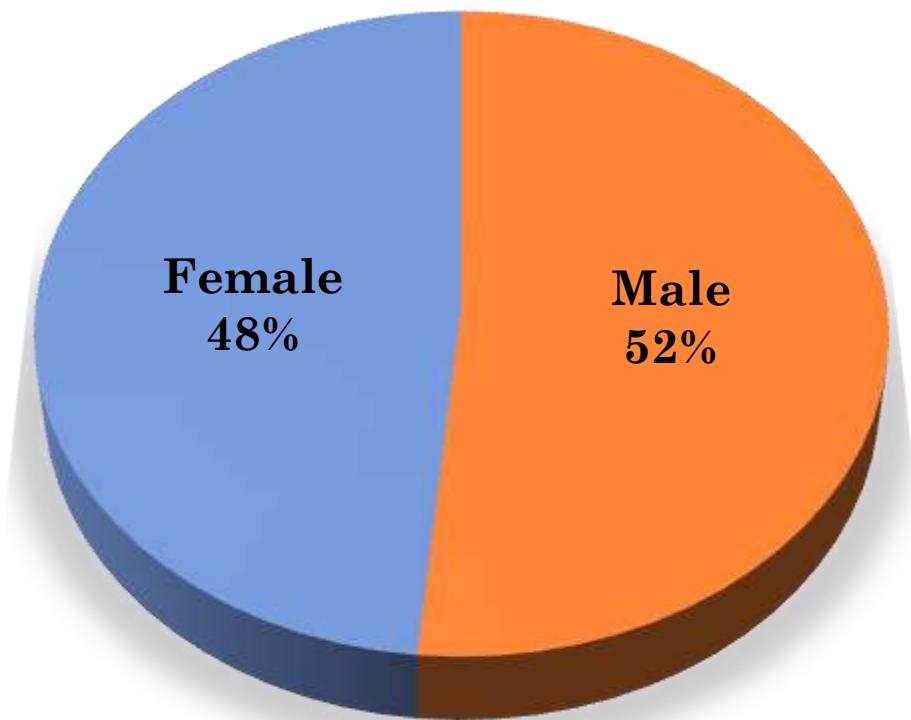
Inflammatory bowel disease has become a global disease with accelerating incidence in newly industrialized countries where societies are being westernized with a prevalence of 0.3%. However, the incidence varies from region to region. Furthermore, there is variability in the incidence of crohn's disease and ulcerative colitis. Center of Liver and digestive diseases has taken a step forward and established a dedicated IBD clinic. So far 261 patients have been enrolled and are in follow up. In 2022, 58 new patients enrolled out of which 2 patients had crohn's disease. Most of the patients are of Punjabi descend. Maximum patients responded with Sulfasalazine and Azathioprine (+steroids).



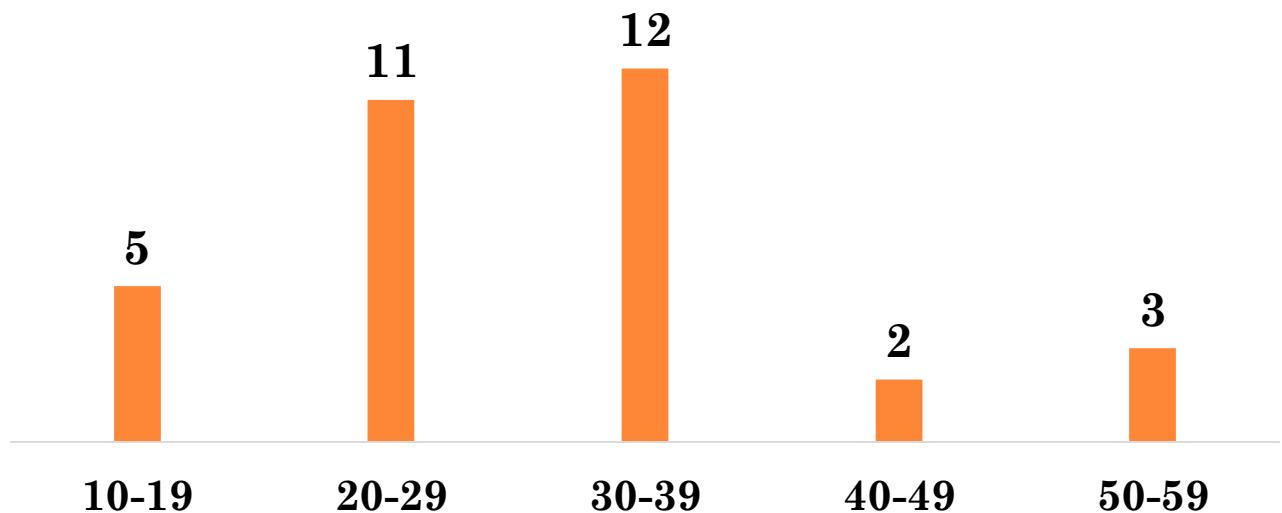
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

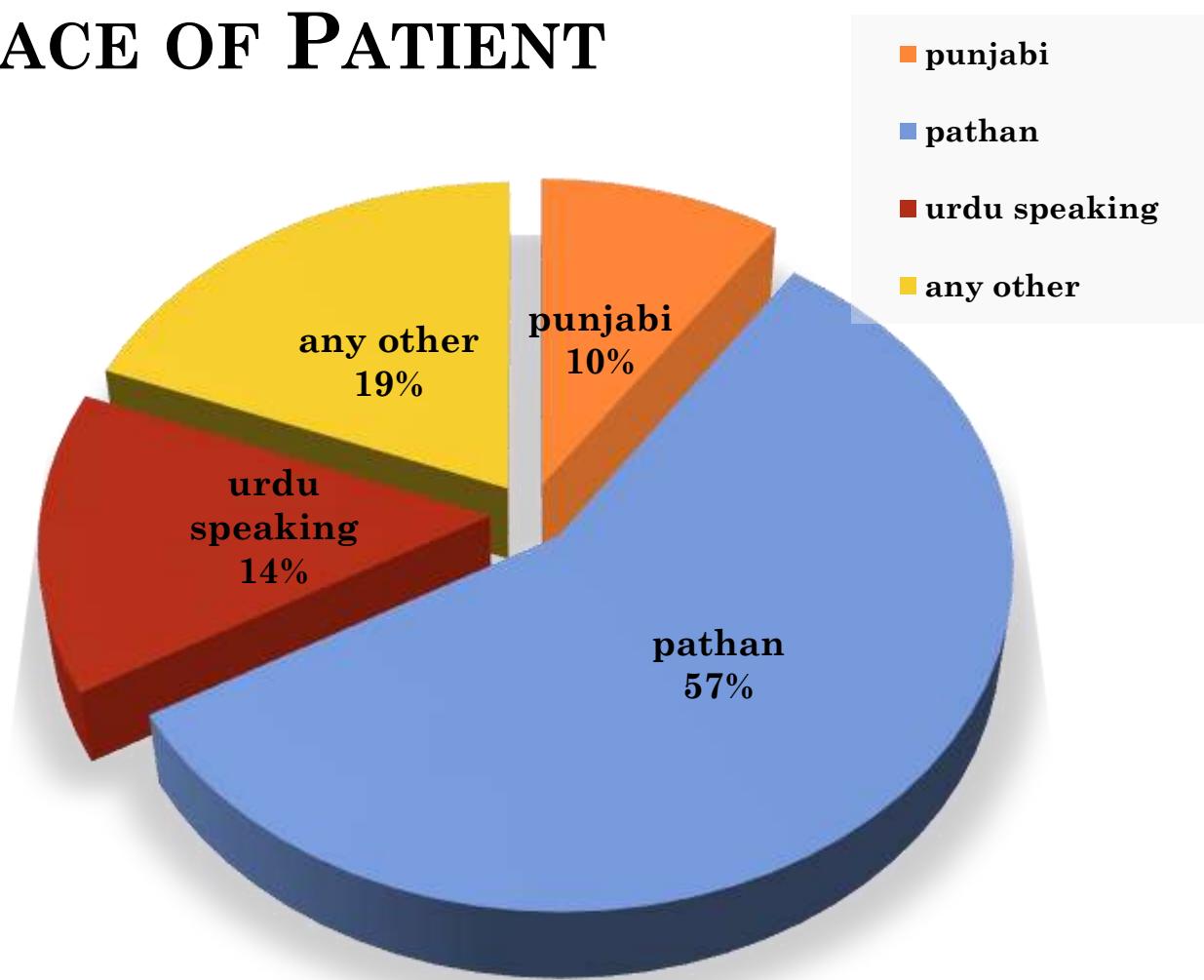
| | |
|----------------------|----|
| TOTAL NO OF PATIENTS | 33 |
| MALE | 17 |
| FEMALE | 16 |



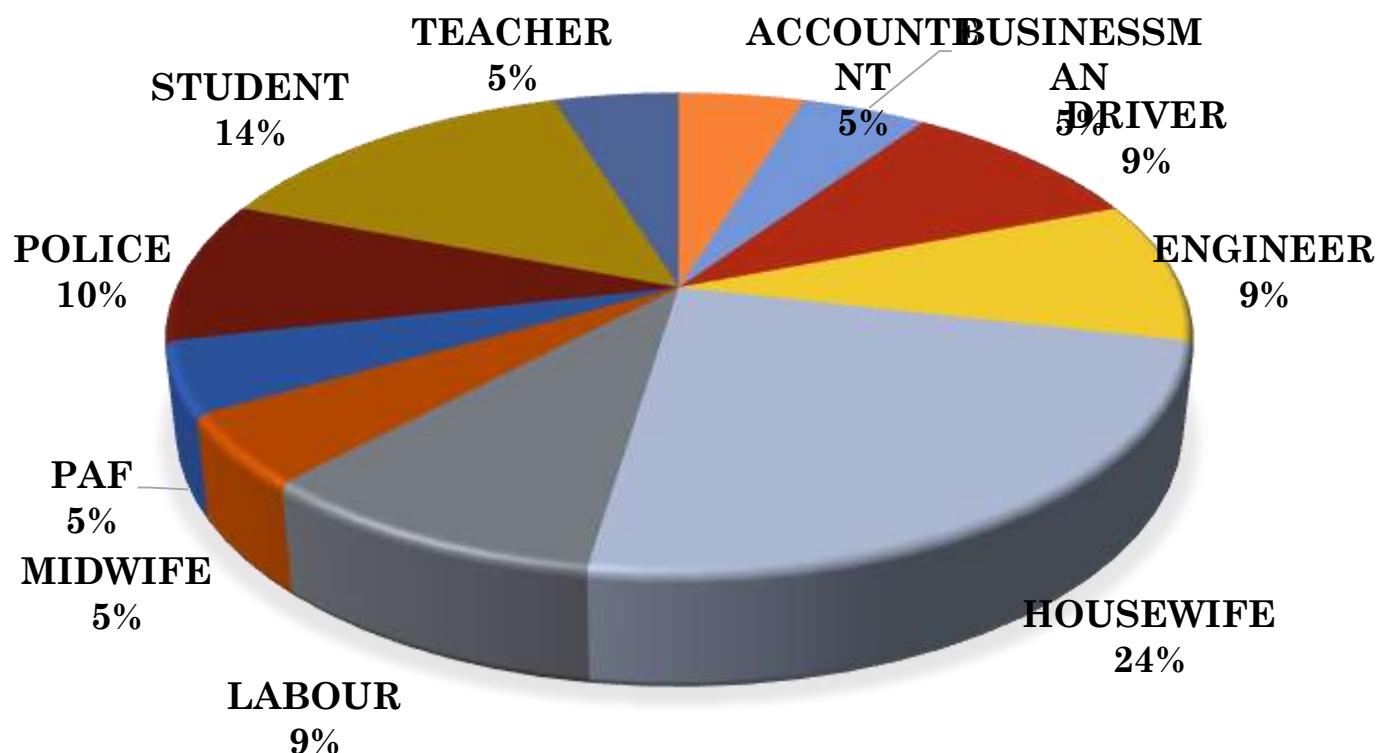
AGE WISE DISTRIBUTION



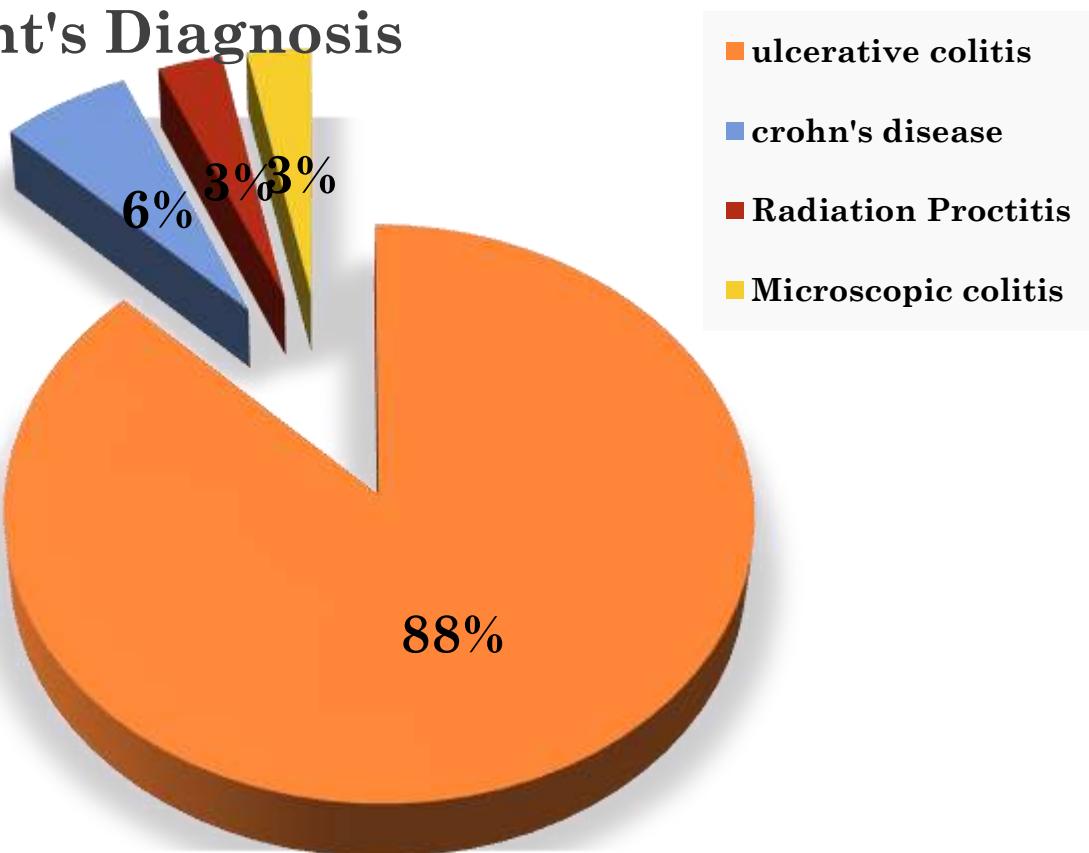
RACE OF PATIENT



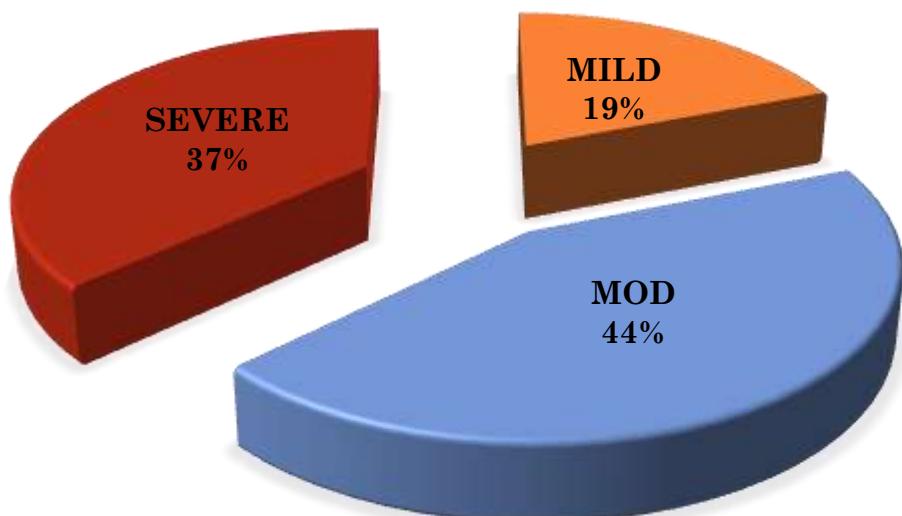
PATIENT'S PROFESSION



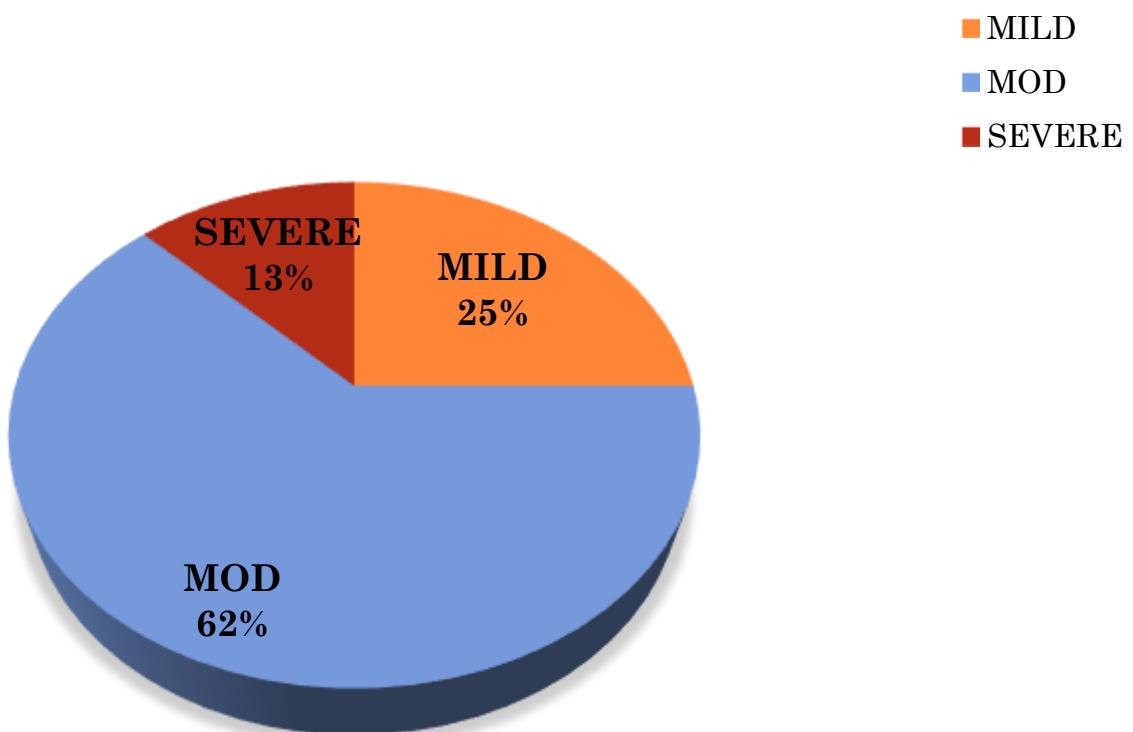
Patient's Diagnosis



COLONOSCOPIC SEVERITY AT PRESENTATION

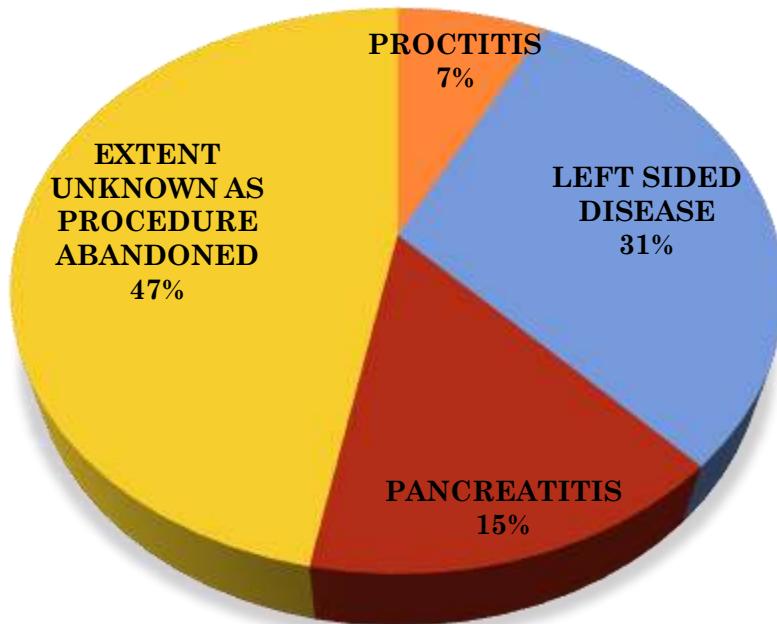


HISTOLOGICAL SEVERITY AT PRESENTATION



EXTENT OF DISEASE AT PRESENTATION

- PROCTITIS
- LEFT SIDED DISEASE
- PANCREATITIS
- EXTENT UNKNOWN AS PROCEDURE ABANDONED

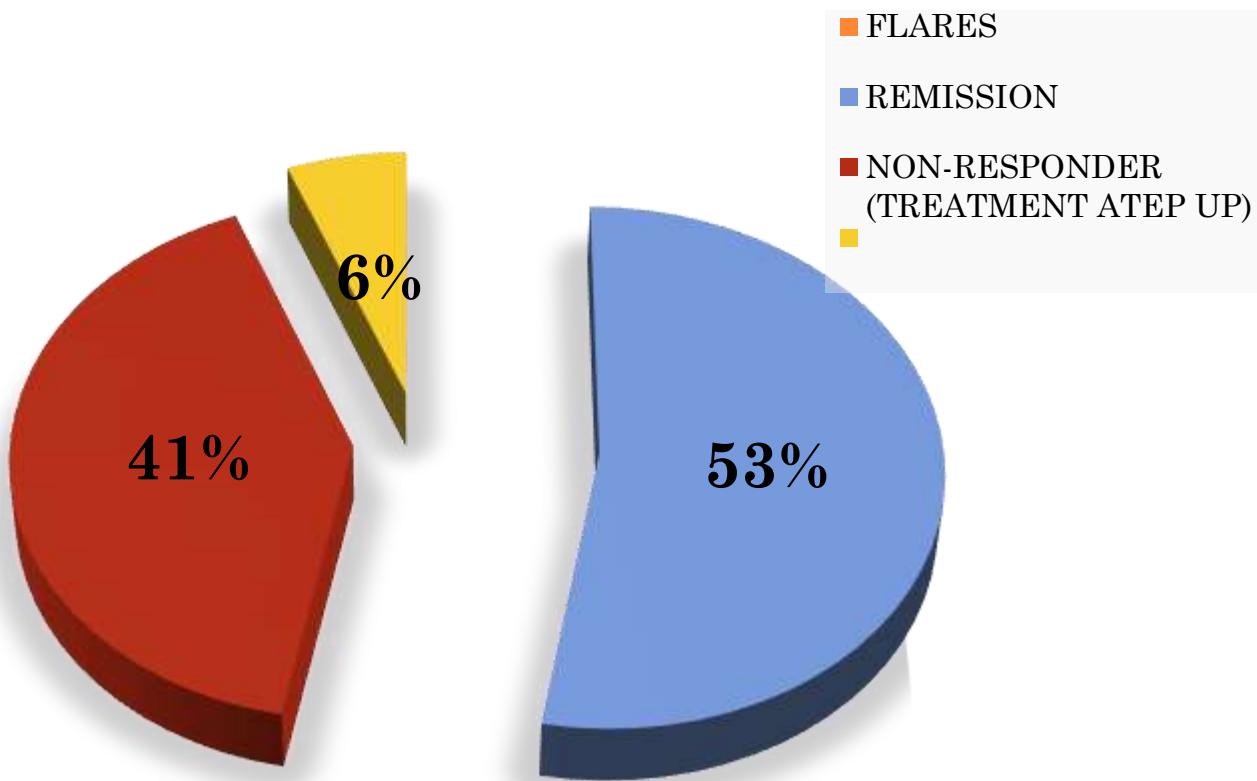


TREATMENT OFFERED



FOLLOW UP IN IBD CLINIC:-

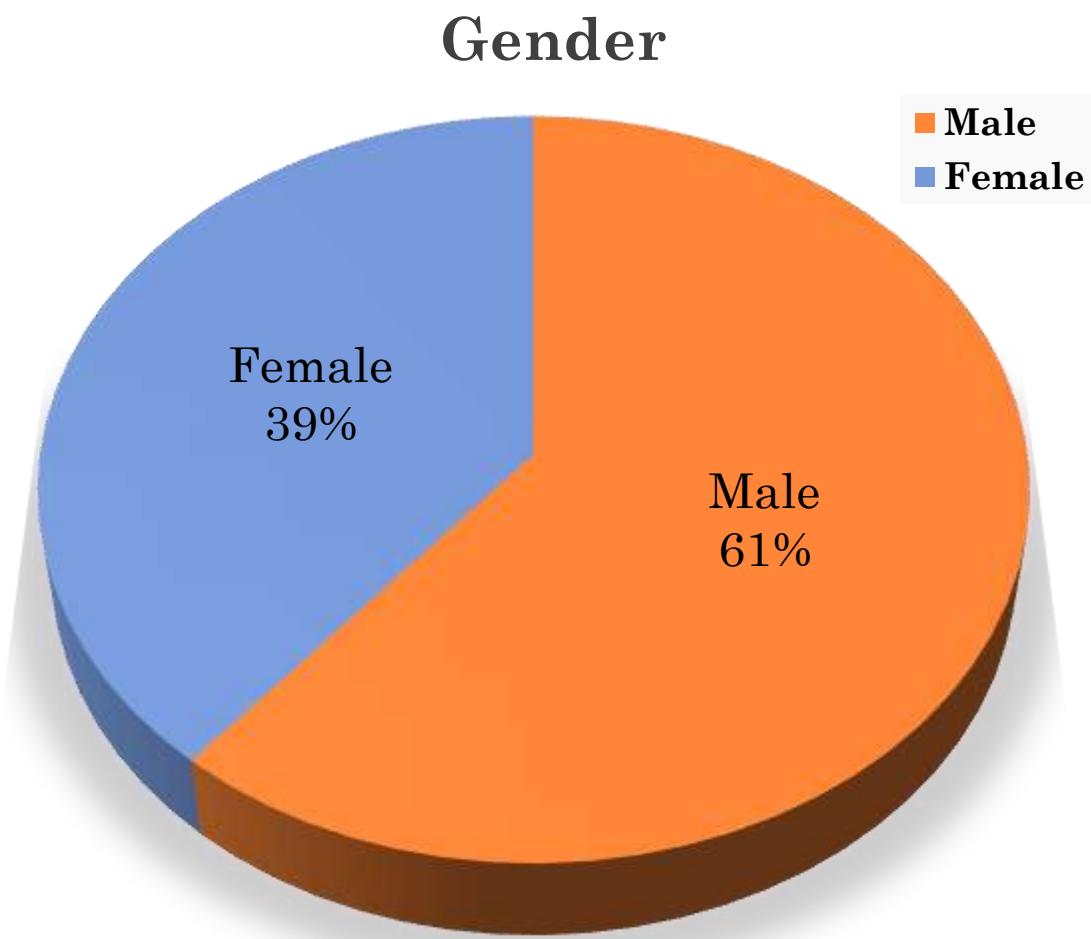
TOTAL PATIENTS REGISTER IN IBD CLINIC SINCE 2015 = 170
FOLLOW UP PATIENTS IN IBD CLINIC YEAR 2020 = 61



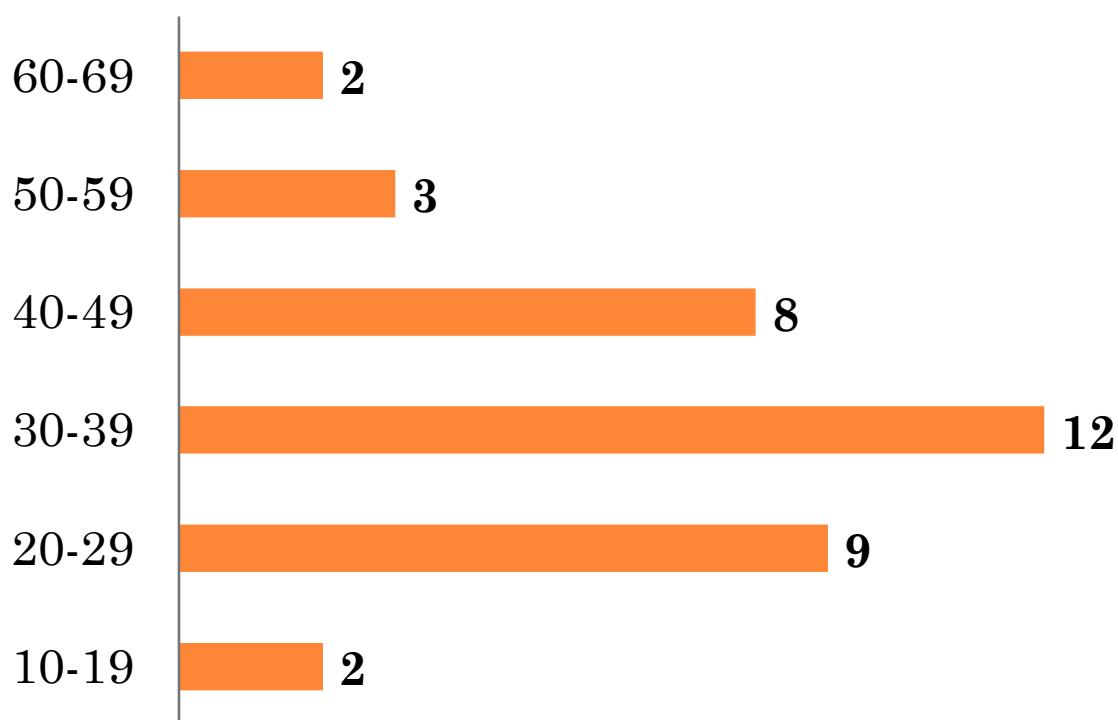
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

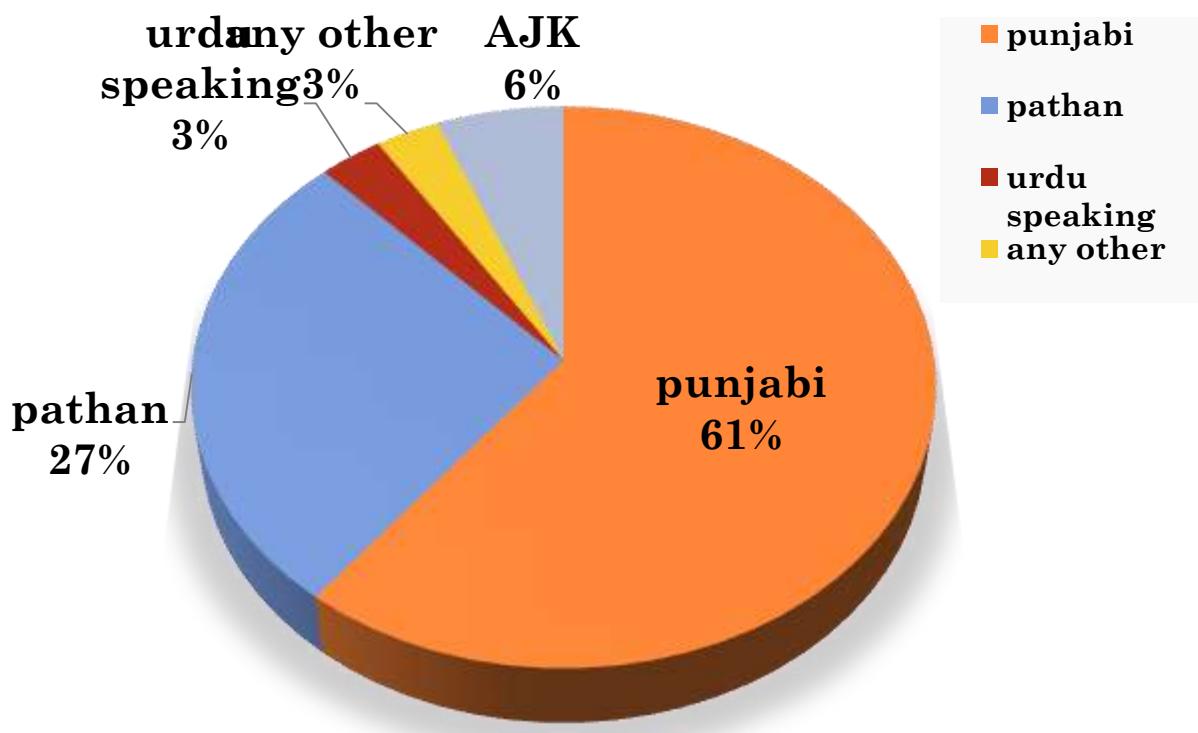
| TOTAL NO OF PATIENTS | 36 |
|----------------------|----|
| MALE | 22 |
| FEMALE | 14 |



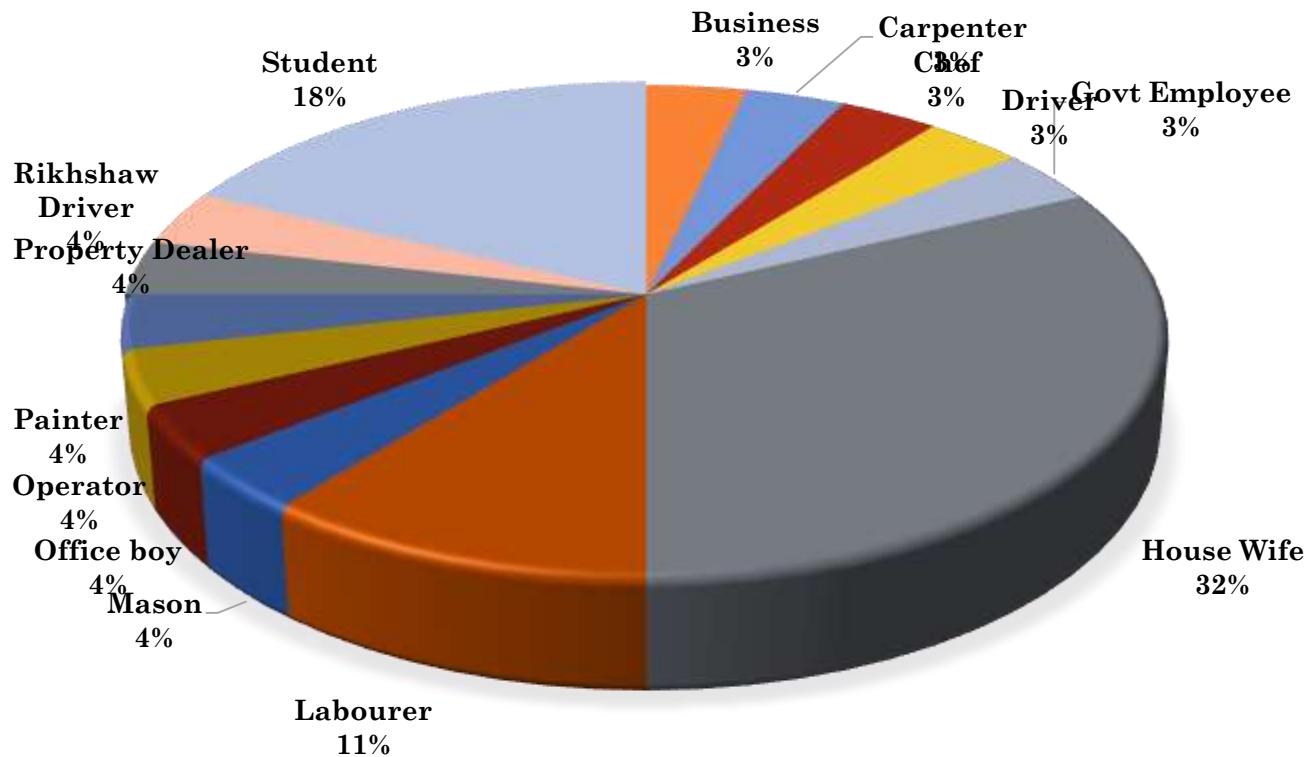
AGE WISE DISTRIBUTION



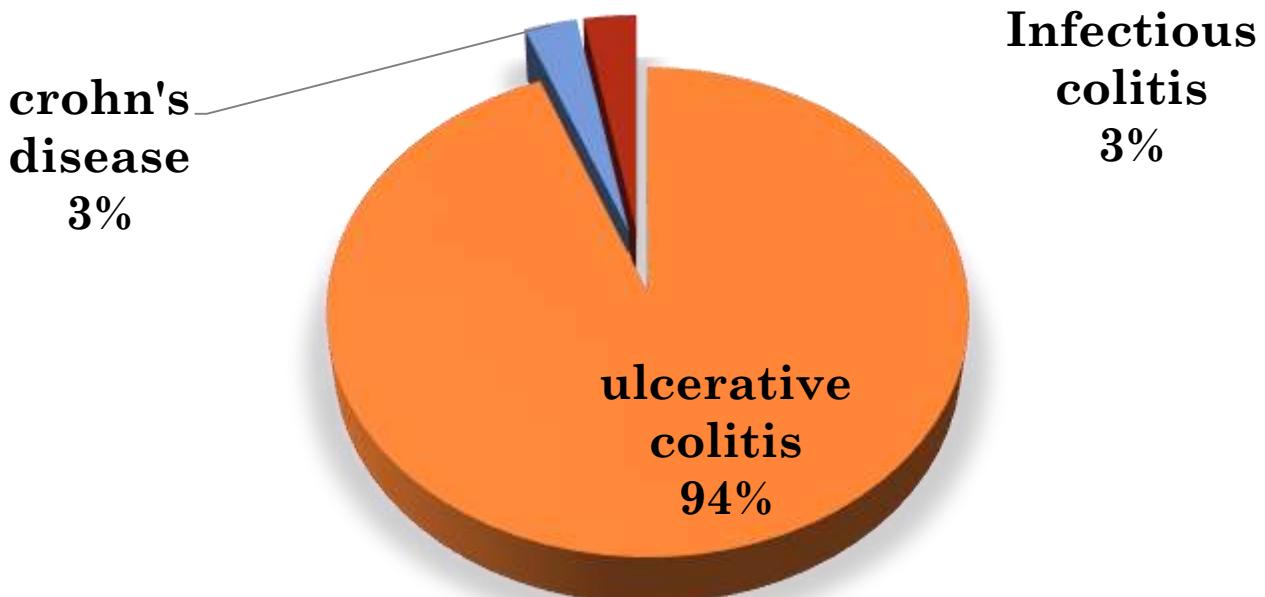
RACE OF PATIENT



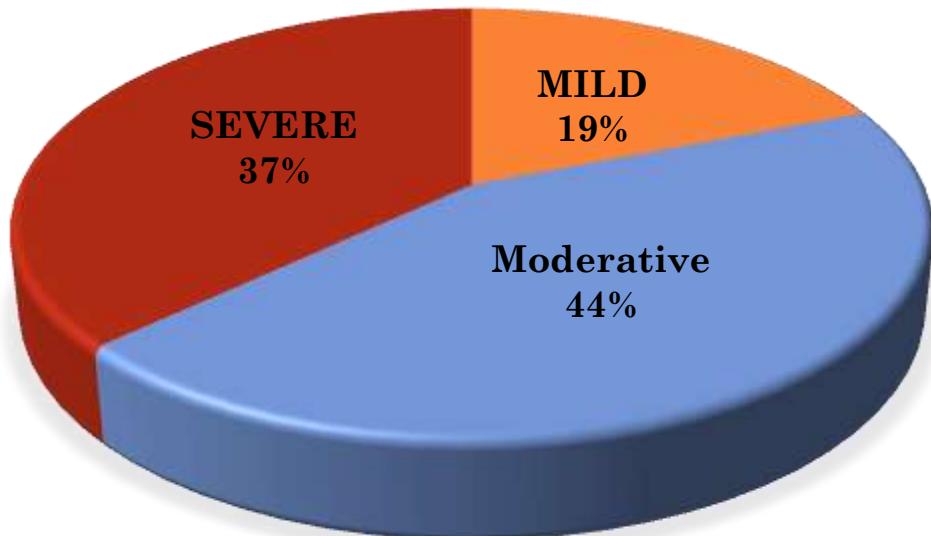
PATIENT'S PROFESSION



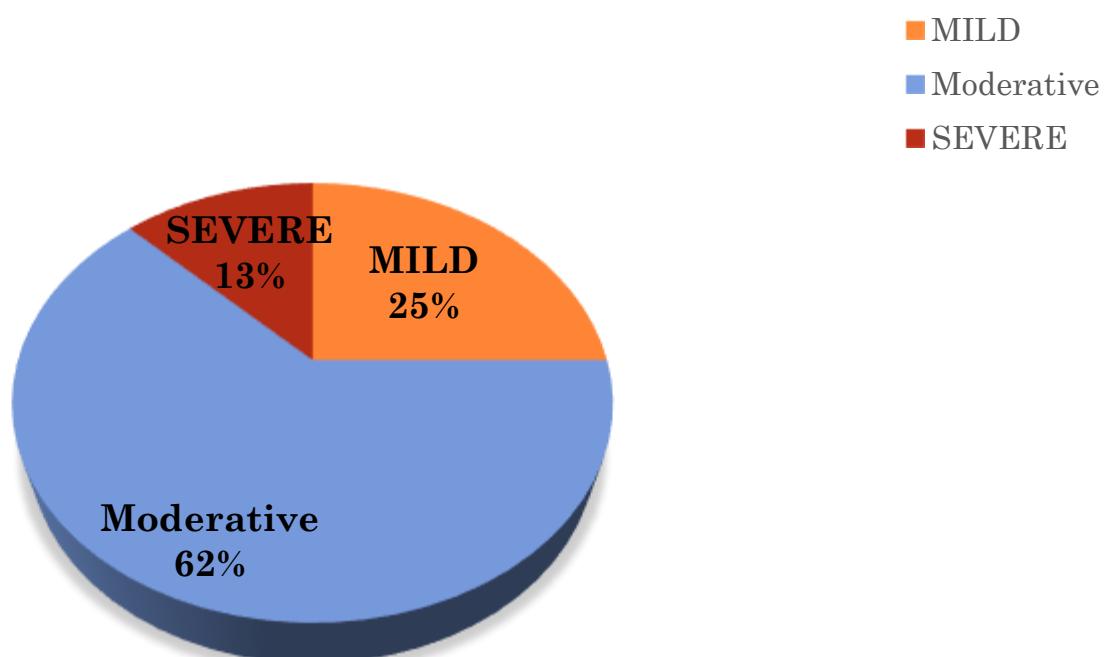
Patient's Diagnosis



COLONOSCOPIC SEVERITY AT PRESENTATION

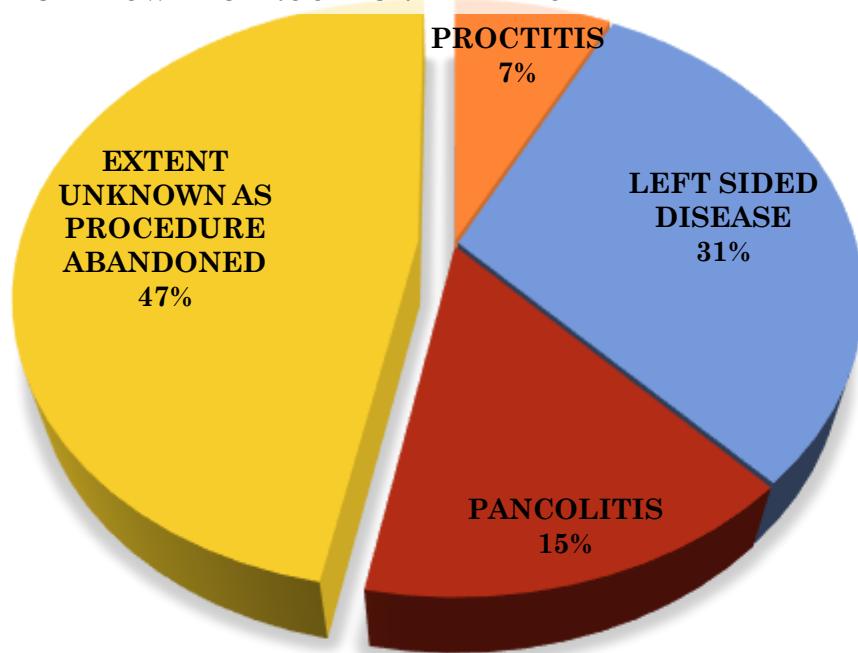


HISTOLOGICAL SEVERITY AT PRESENTATION

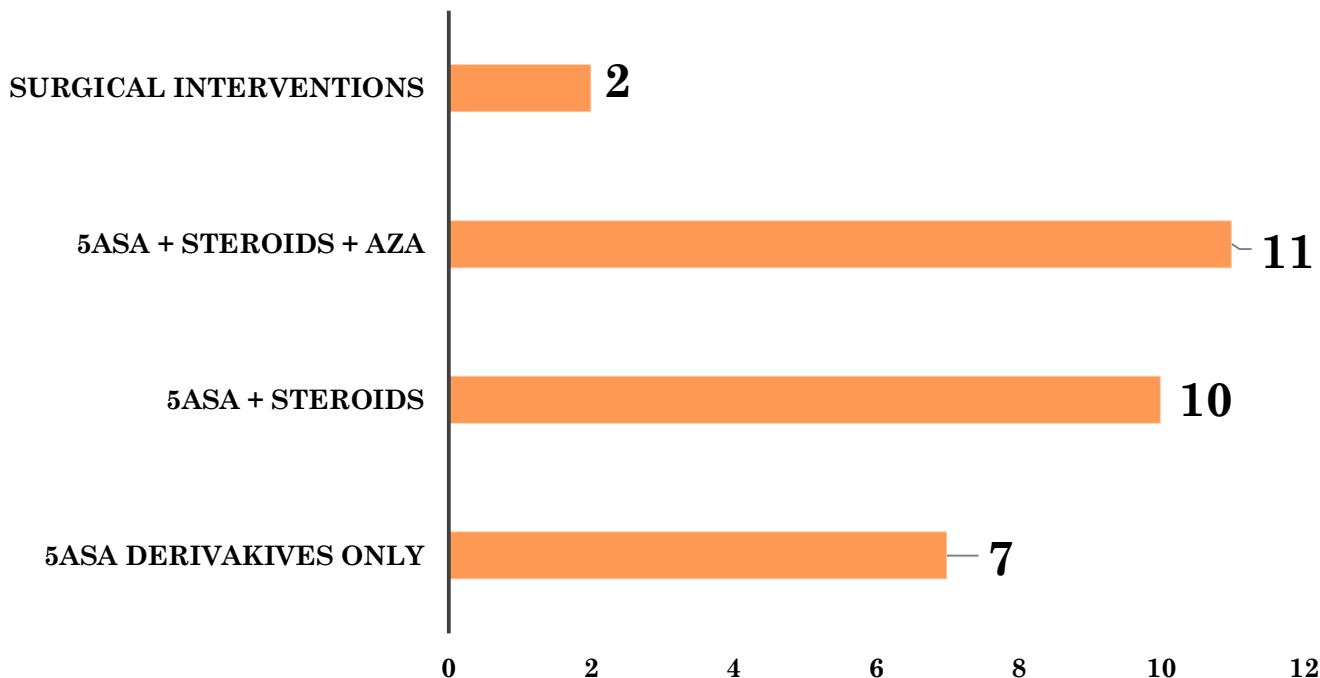


EXTENT OF DISEASE AT PRESENTATION

- *PROCTITIS*
- *LEFT SIDED DISEASE*
- *PANCOLITIS*
- *EXTENT UNKNOWN AS PROCEDURE ABANDONED*

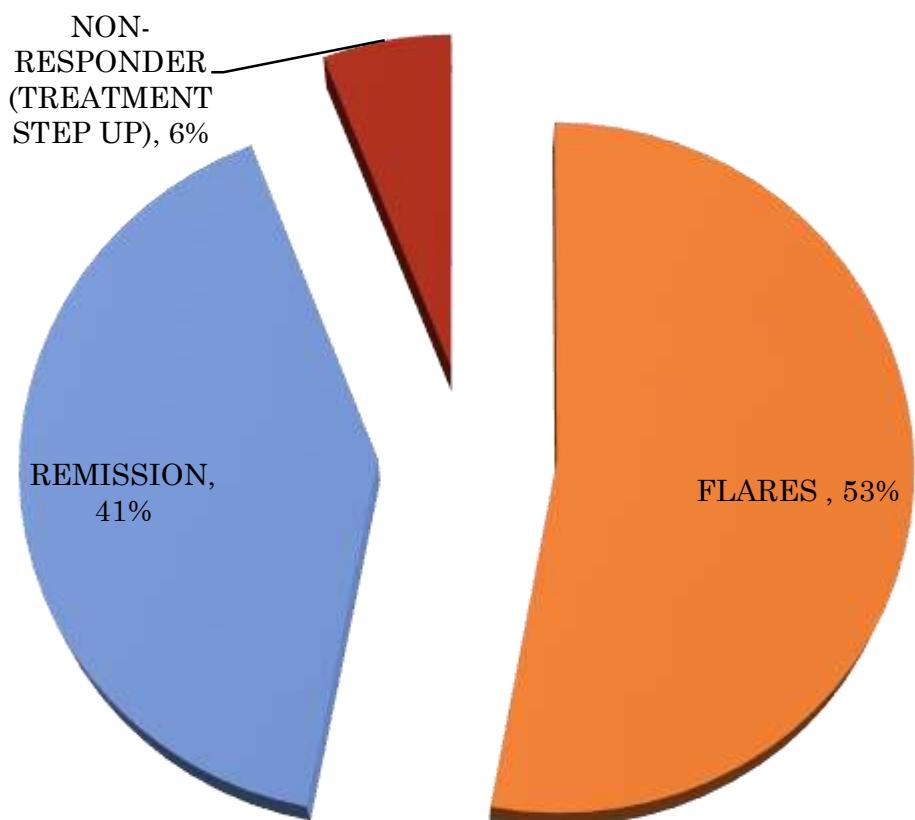


TREATMENT OFFERED



FOLLOW UP IN IBD CLINIC:

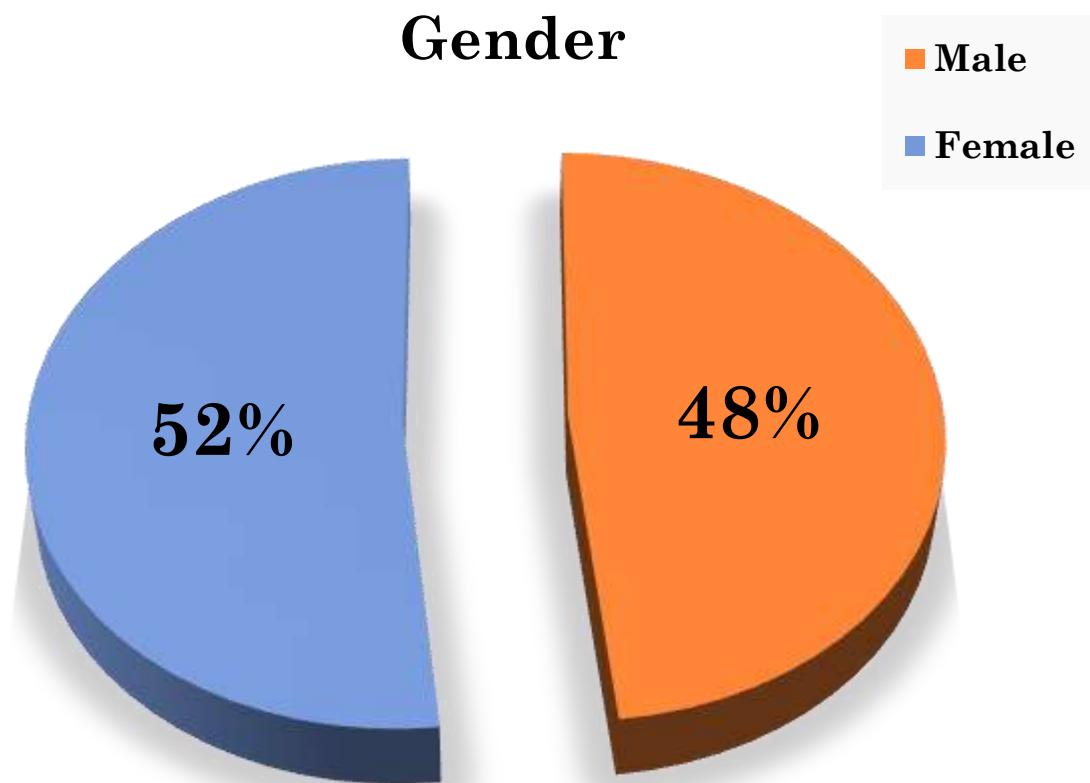
| | |
|--|-----|
| Total Patients register in IBD Clinic since 2015 | 170 |
| Follow up Patients in IBD clinic year 2020 | 61 |



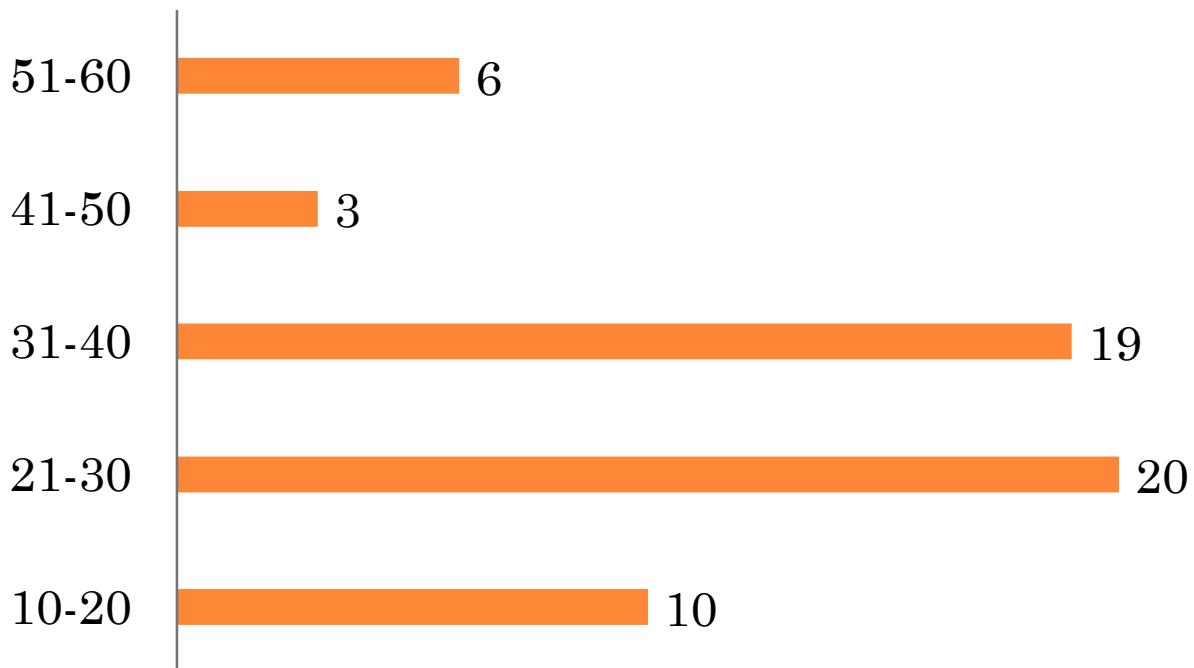
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

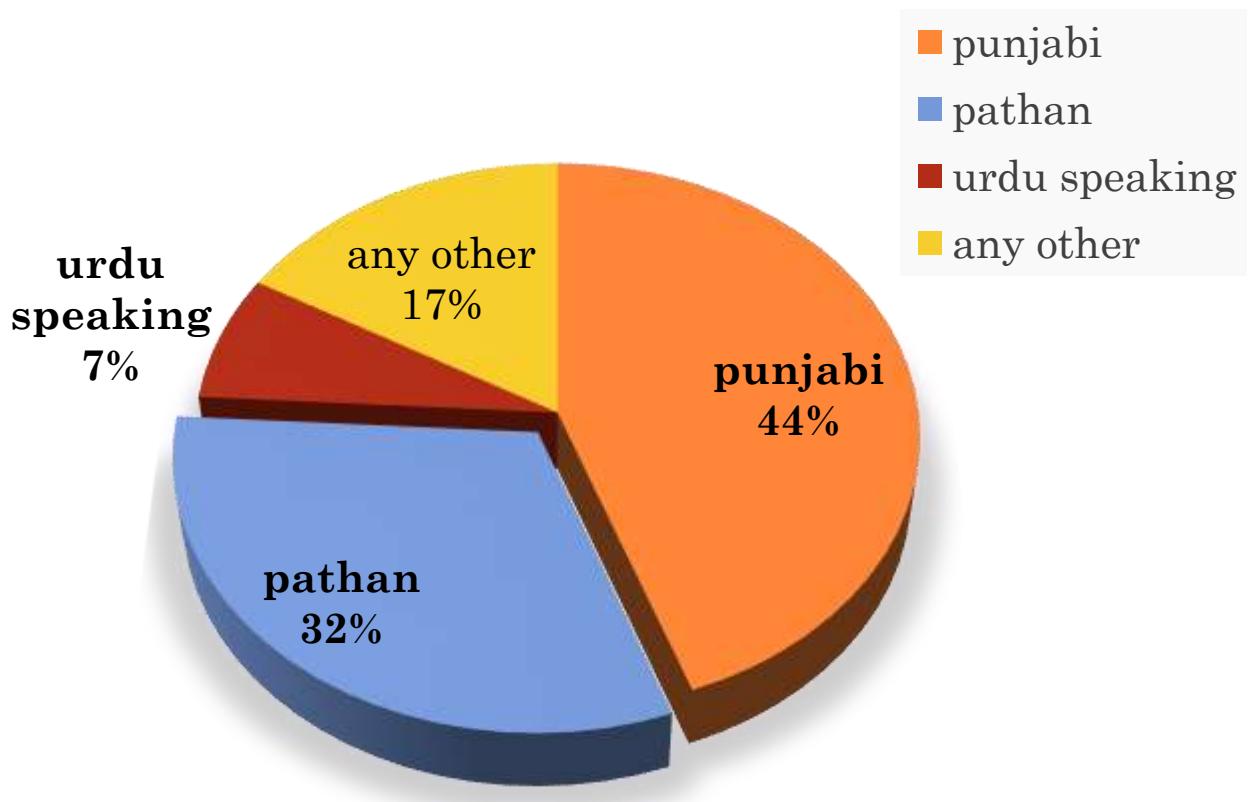
| | |
|----------------------|----|
| Total No of Patients | 58 |
| Male | 28 |
| Female | 30 |



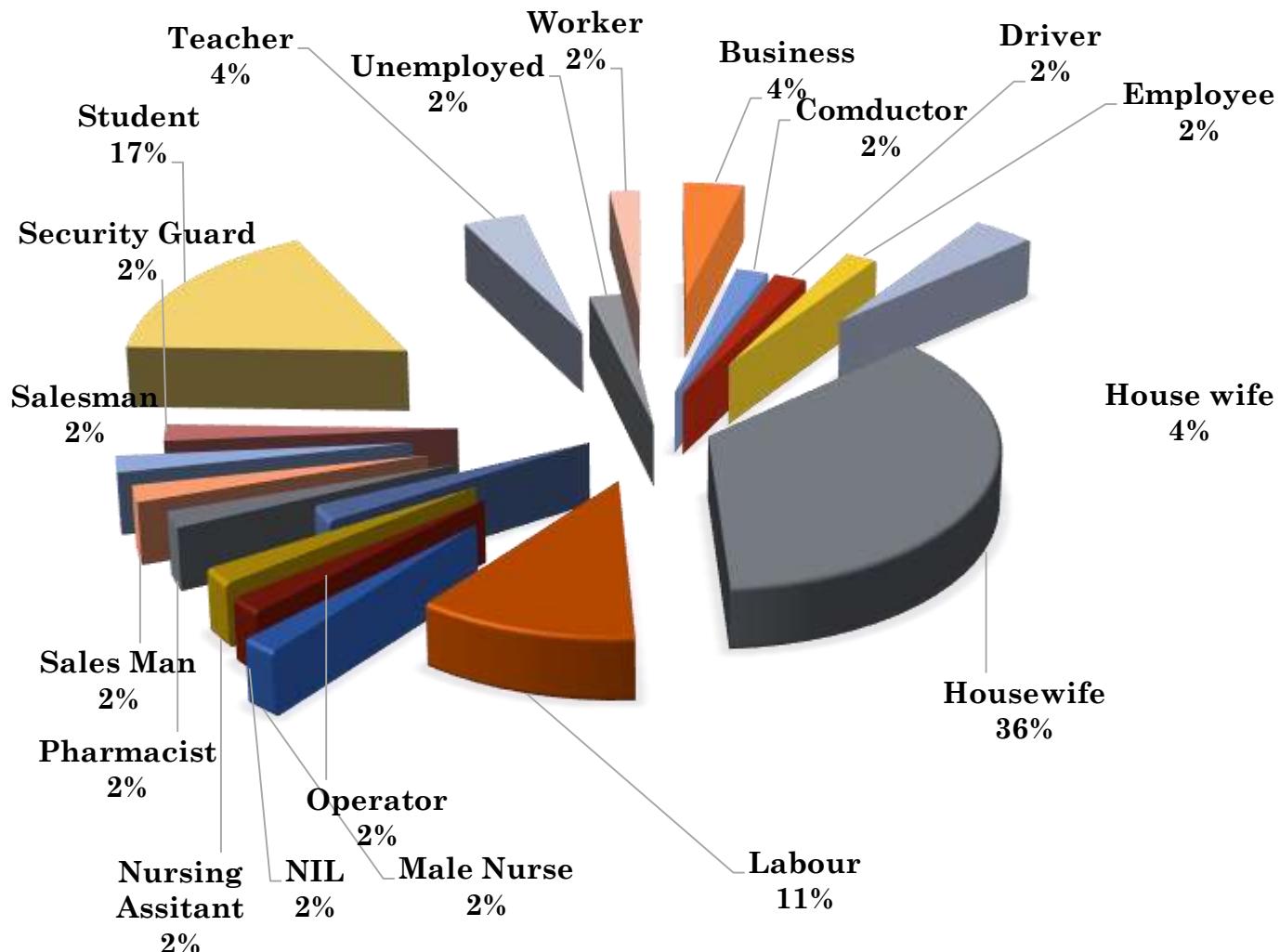
Age Wise Distribution



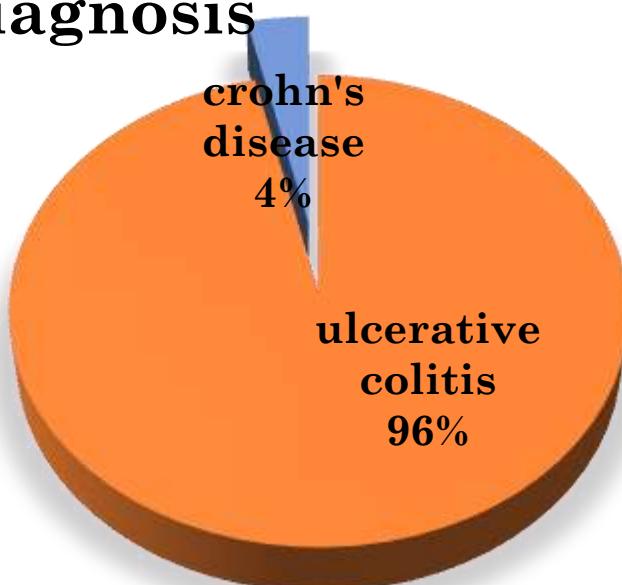
RACE OF PATIENT



PATIENT'S PROFESSION



Patient's Diagnosis



TREATMENT OFFERED

Sulfasalazine derivatives
+ Steroids+ AZA

37

Sulfasalazine derivatives
+ Steroids

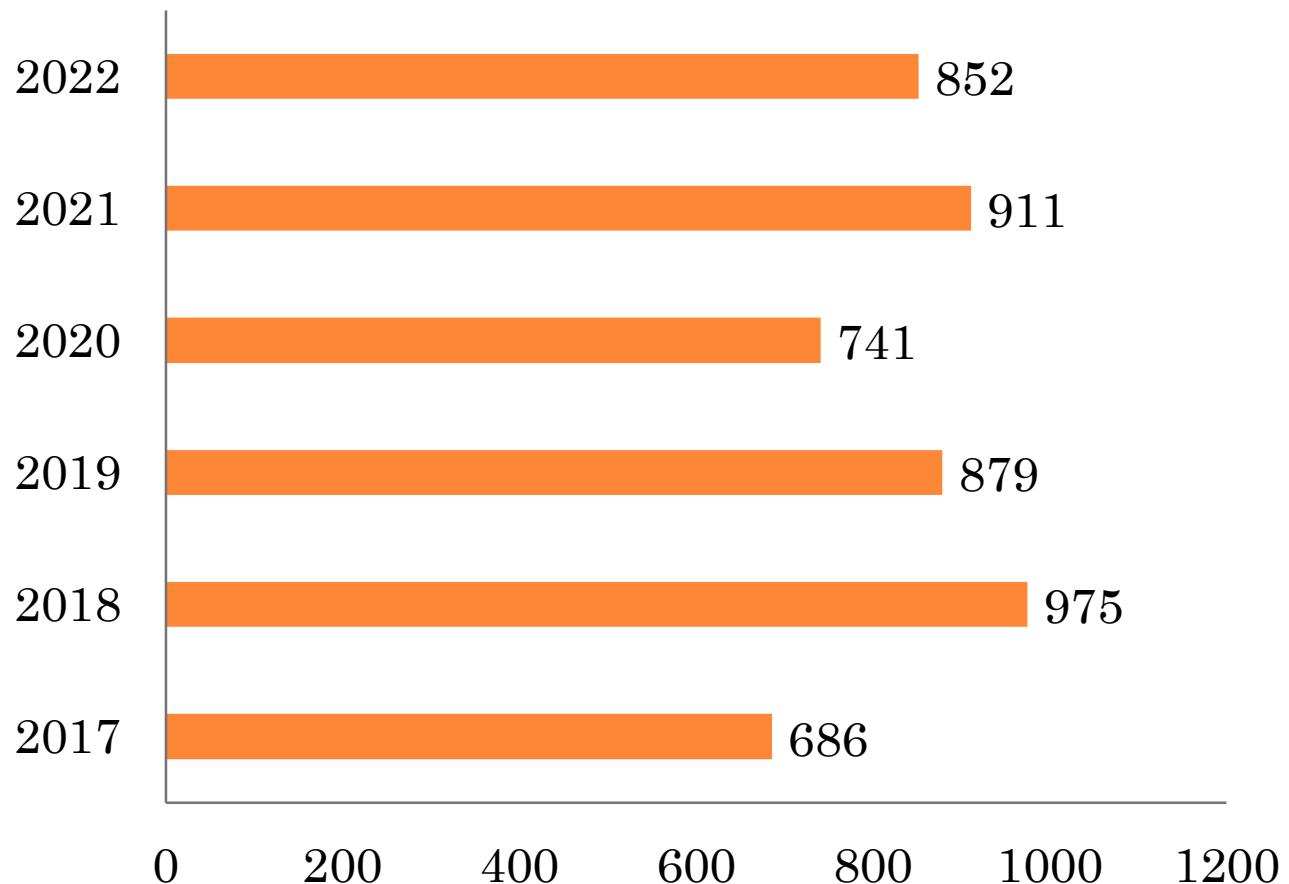
13

Sulfasalazine derivatives
only

8

Indoor/Ward Audit

Centre for liver and Digestive Diseases has established its own 14 bedded Indoor ward since March 2017. With a total of 852 patients in 2022, our unit has admitted approx. 80 plus patients per month. The total number of inpatient days were 3588 whereas the bed occupancy rate was 70.21%. Maximum burden of Indoor patients, depicting more serious illness, ranges from 40 to 60 years of age group and males are predominantly involved. This is the age group providing main economic support to their families. Being most prevalent country in Hepatitis C, the picture is aptly depicted through our data with DCLD being the commonest diagnosis followed by obstructive jaundice and acute pancreatitis.

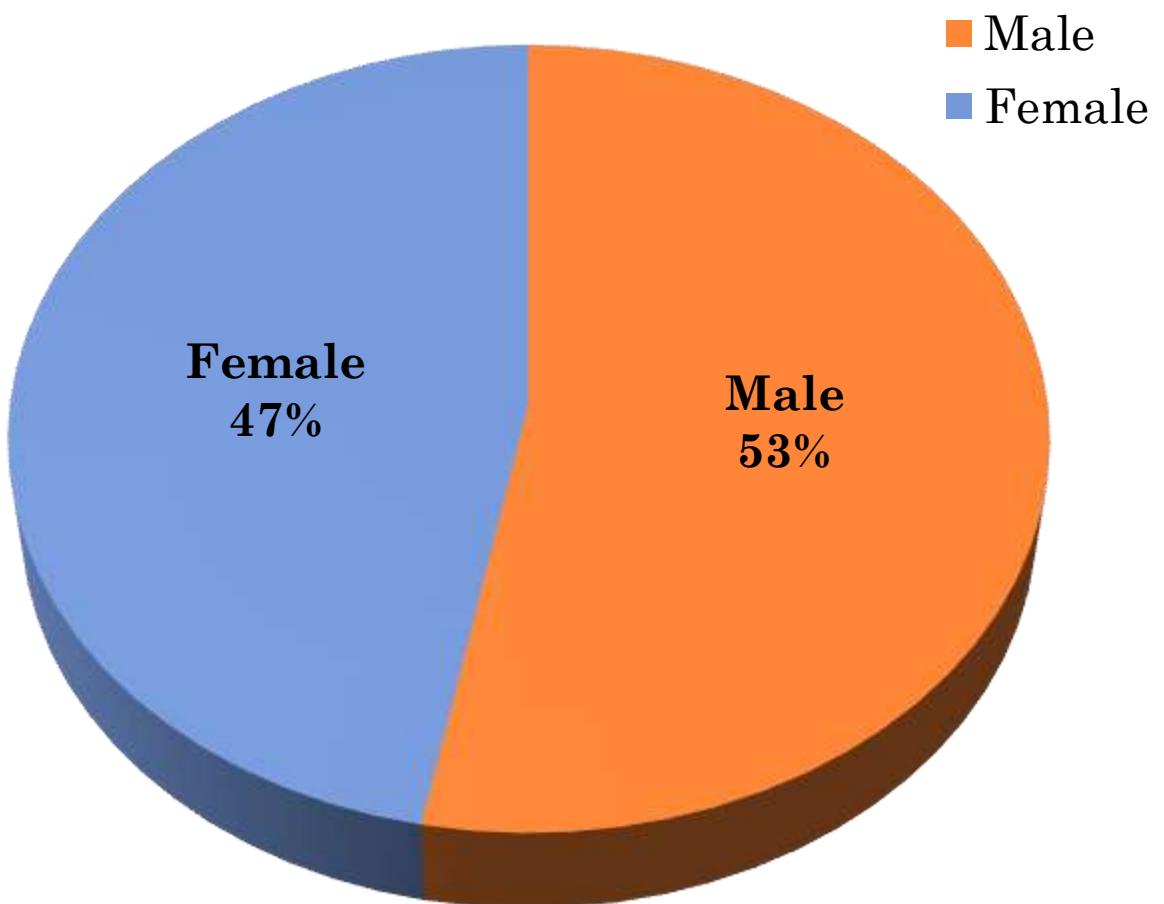


2020

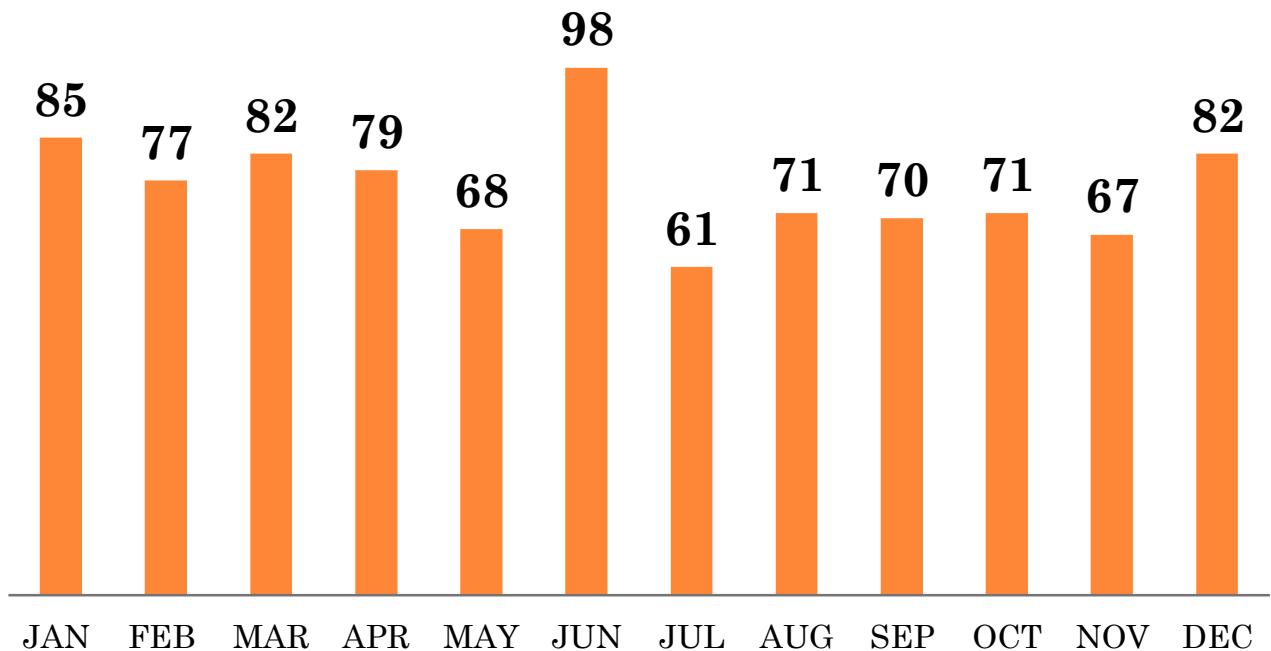
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

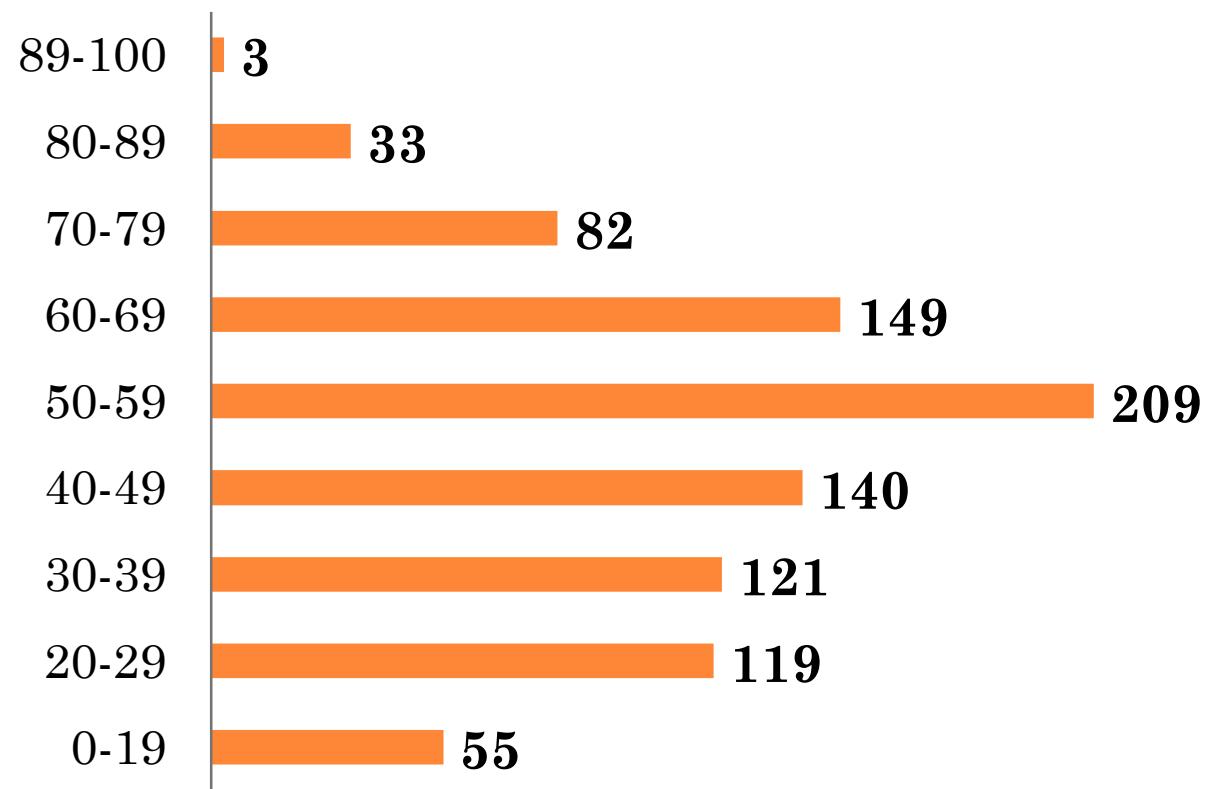
| | |
|----------------------|-----|
| Total No of Patients | 911 |
| Male | 483 |
| Female | 428 |



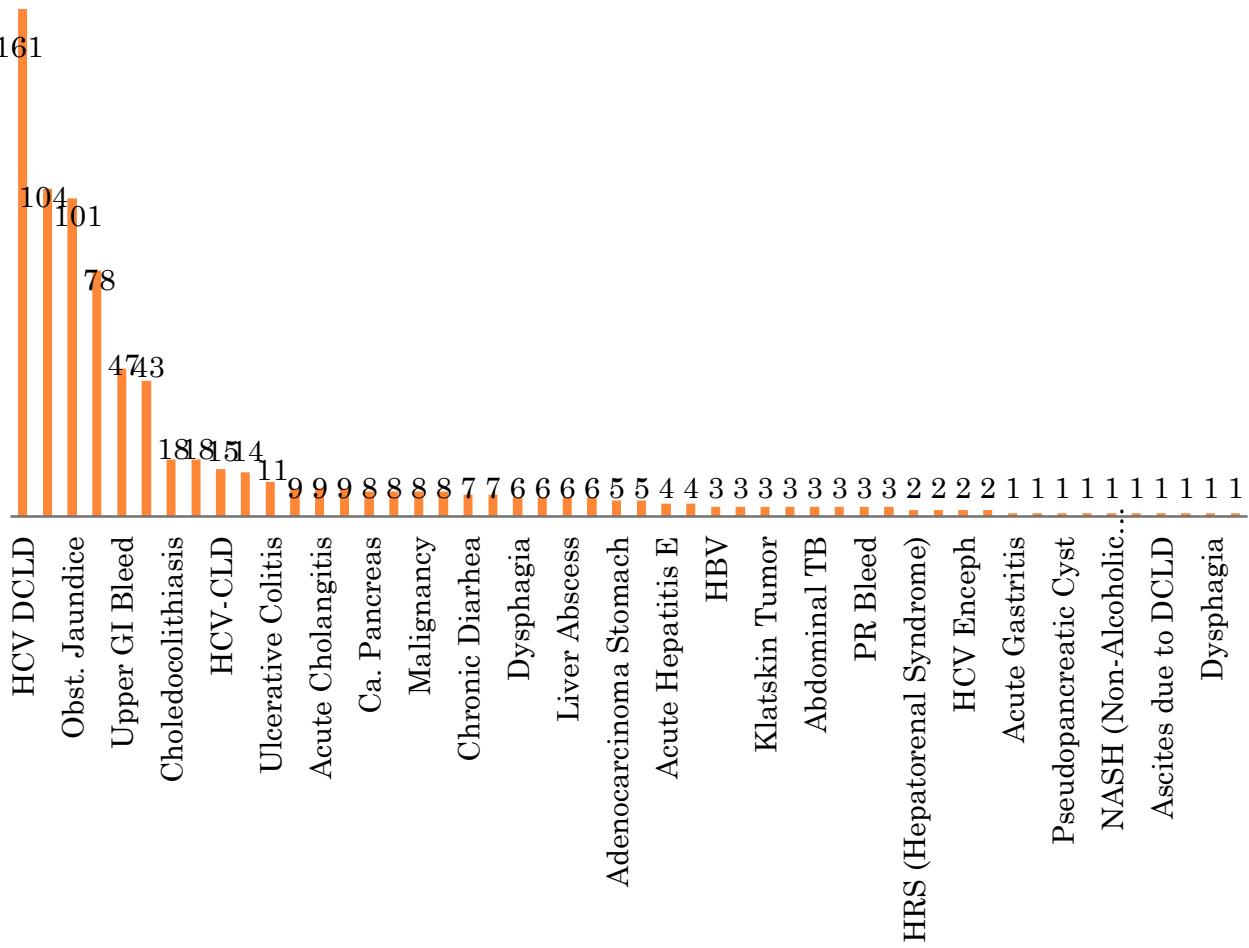
MONTHLY DISTRIBUTION



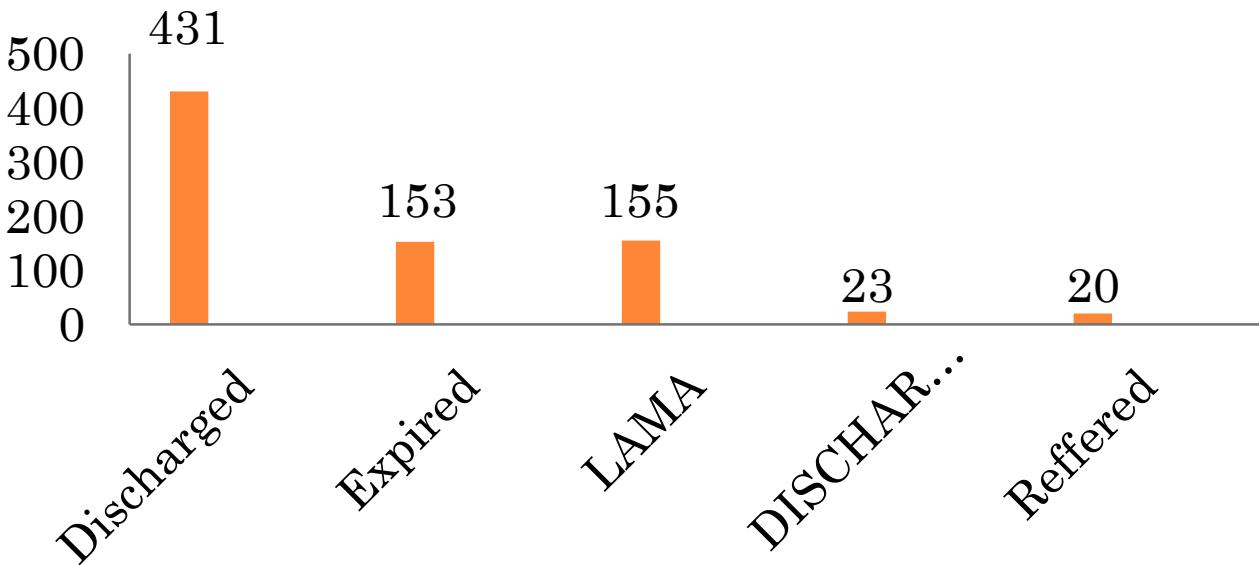
Agewise Distribution



DIAGNOSIS



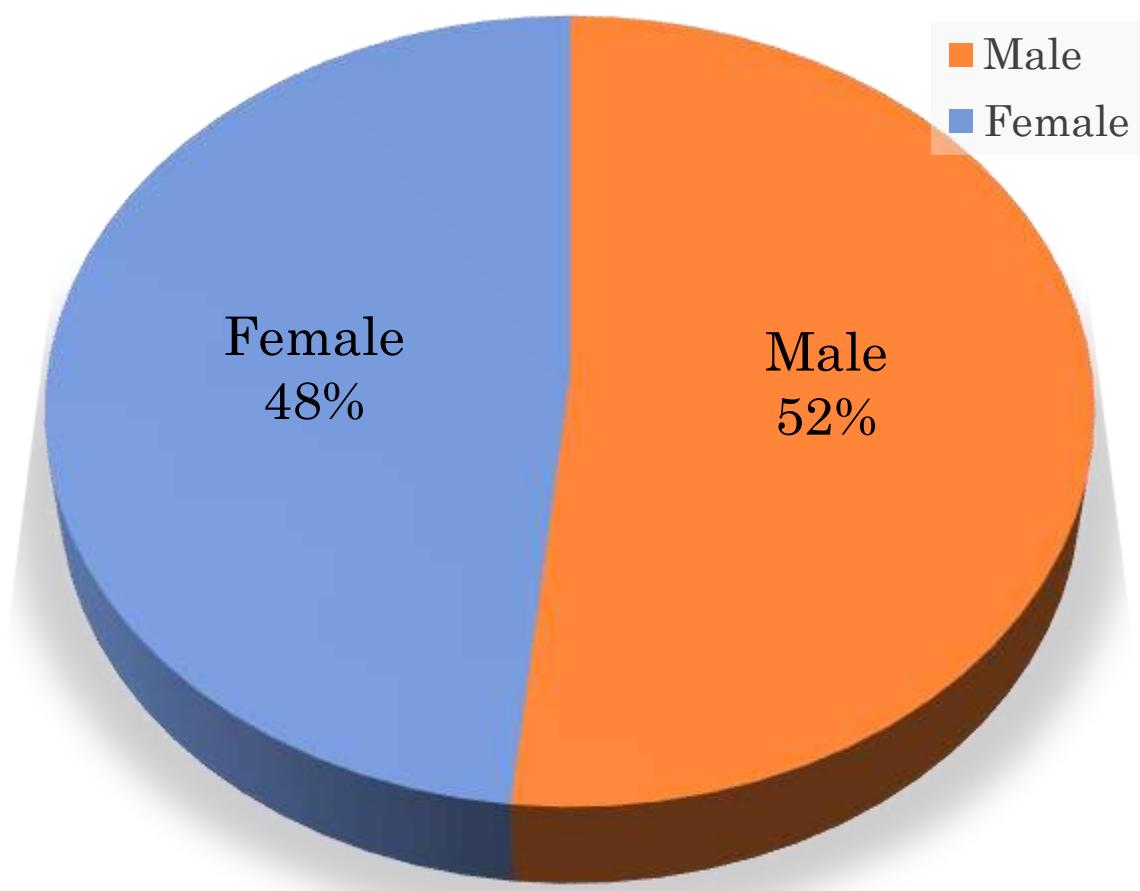
OUTCOME



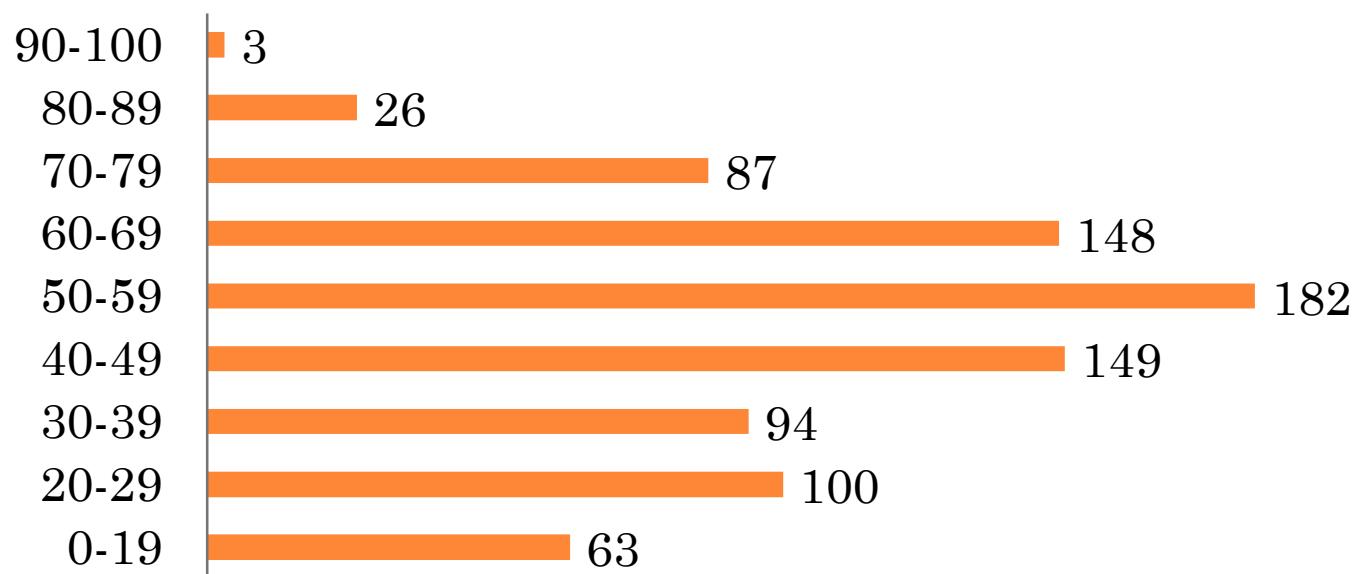
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

| | |
|-----------------------------|------------|
| Total No of Patients | 852 |
| Male | 440 |
| Female | 412 |

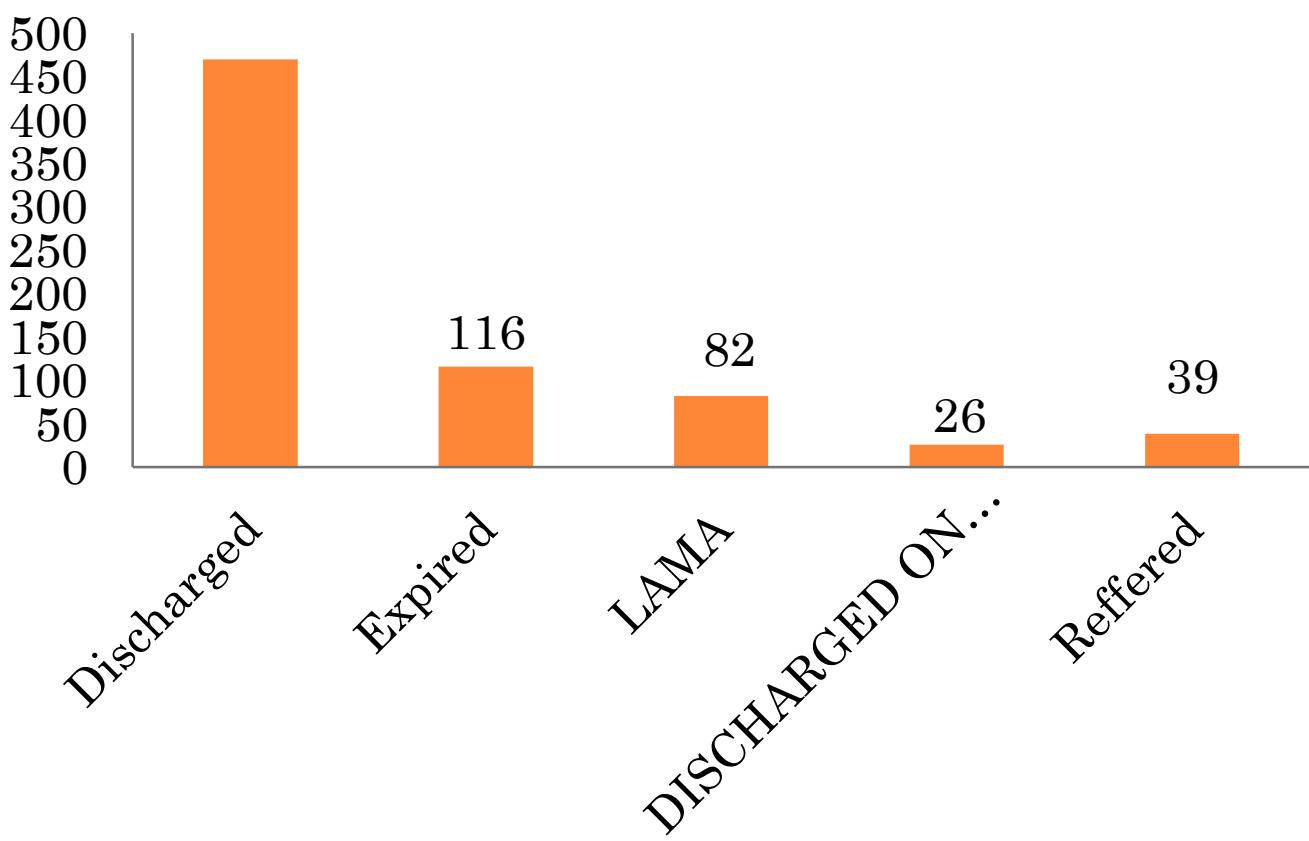


AGE WISE DISTRIBUTION

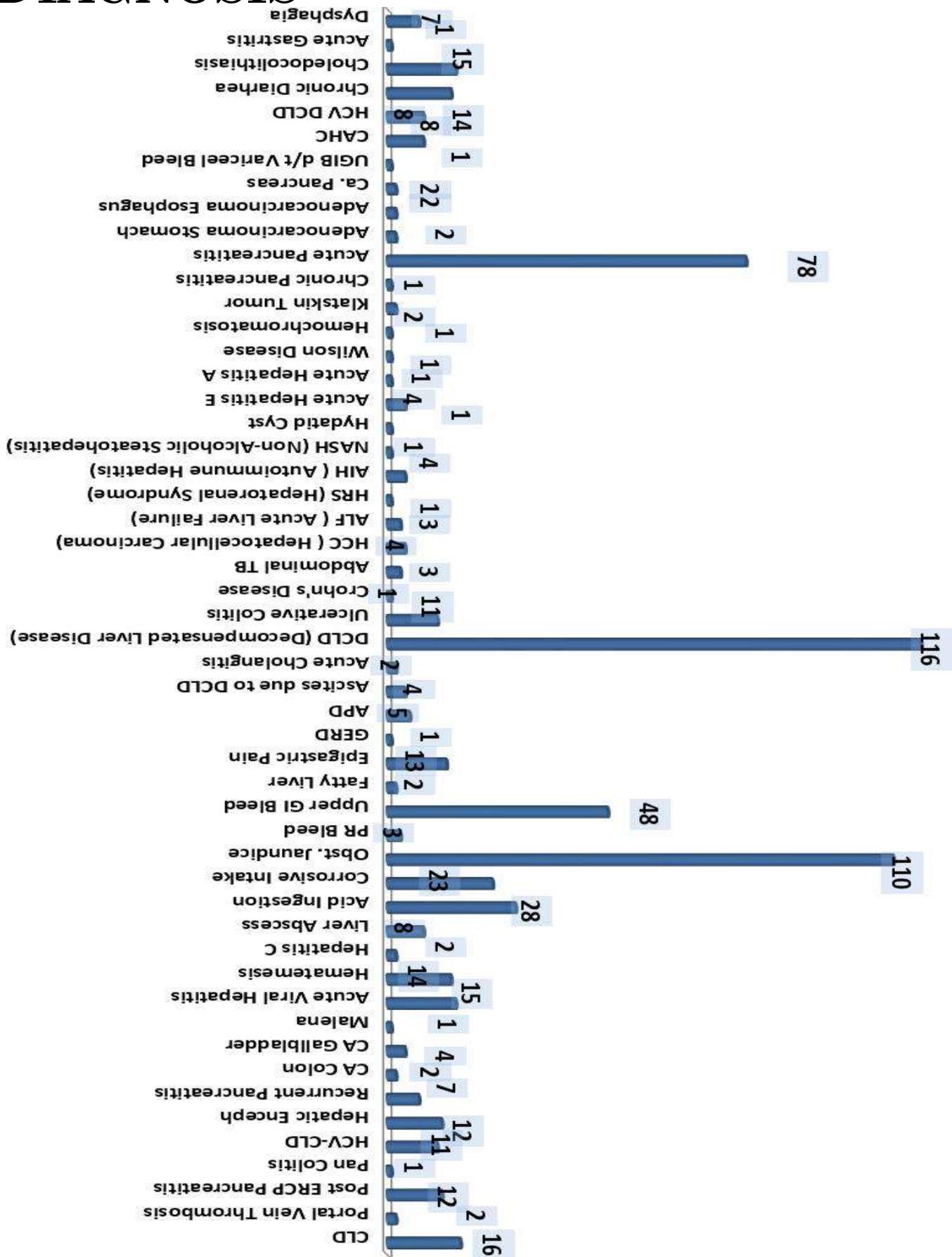


OUTCOME

470



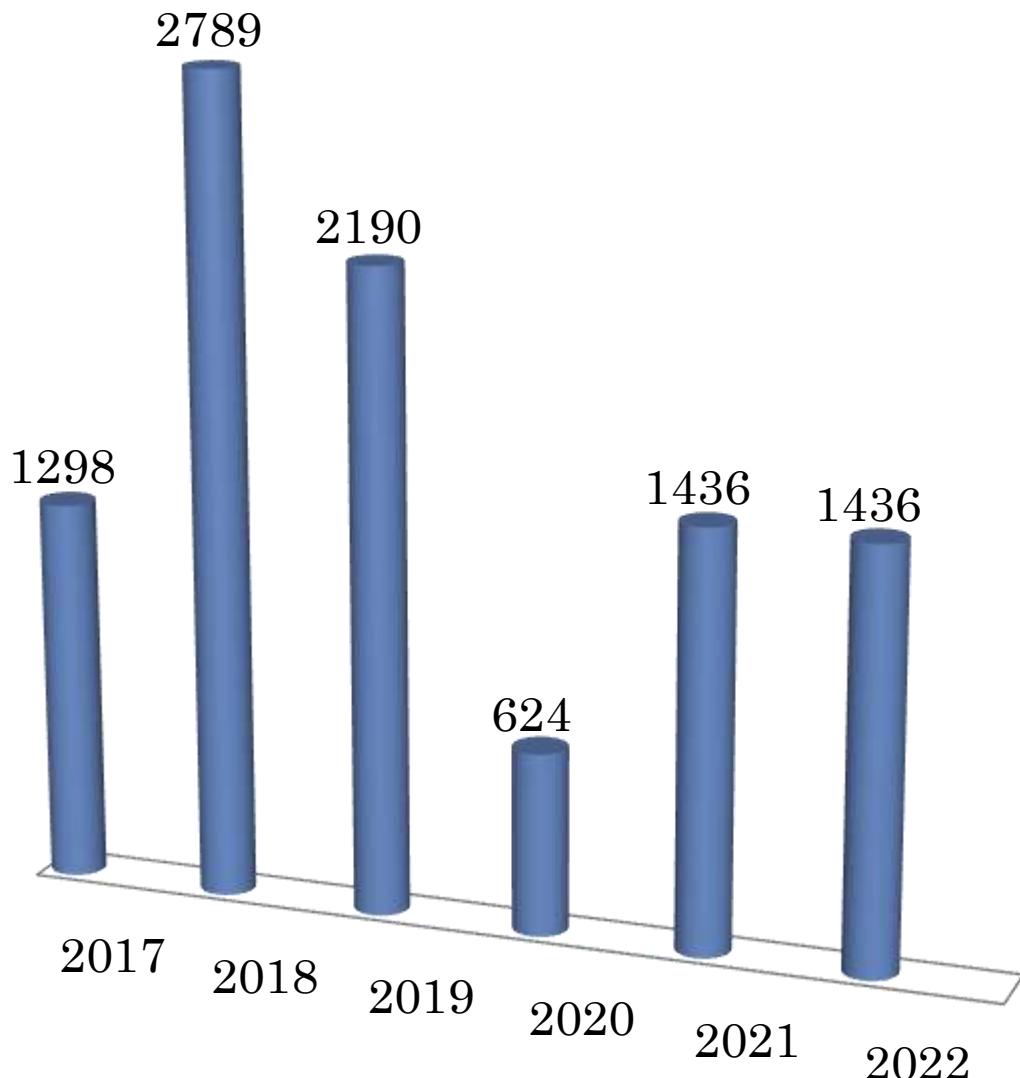
DIAGNOSIS



Emergency Audit

Gastroenterology department provides round the clock emergency services to the GI patients , seven days a week. In the COVID year there was some decline in the ER cases, which reverted back in year 2021-22.

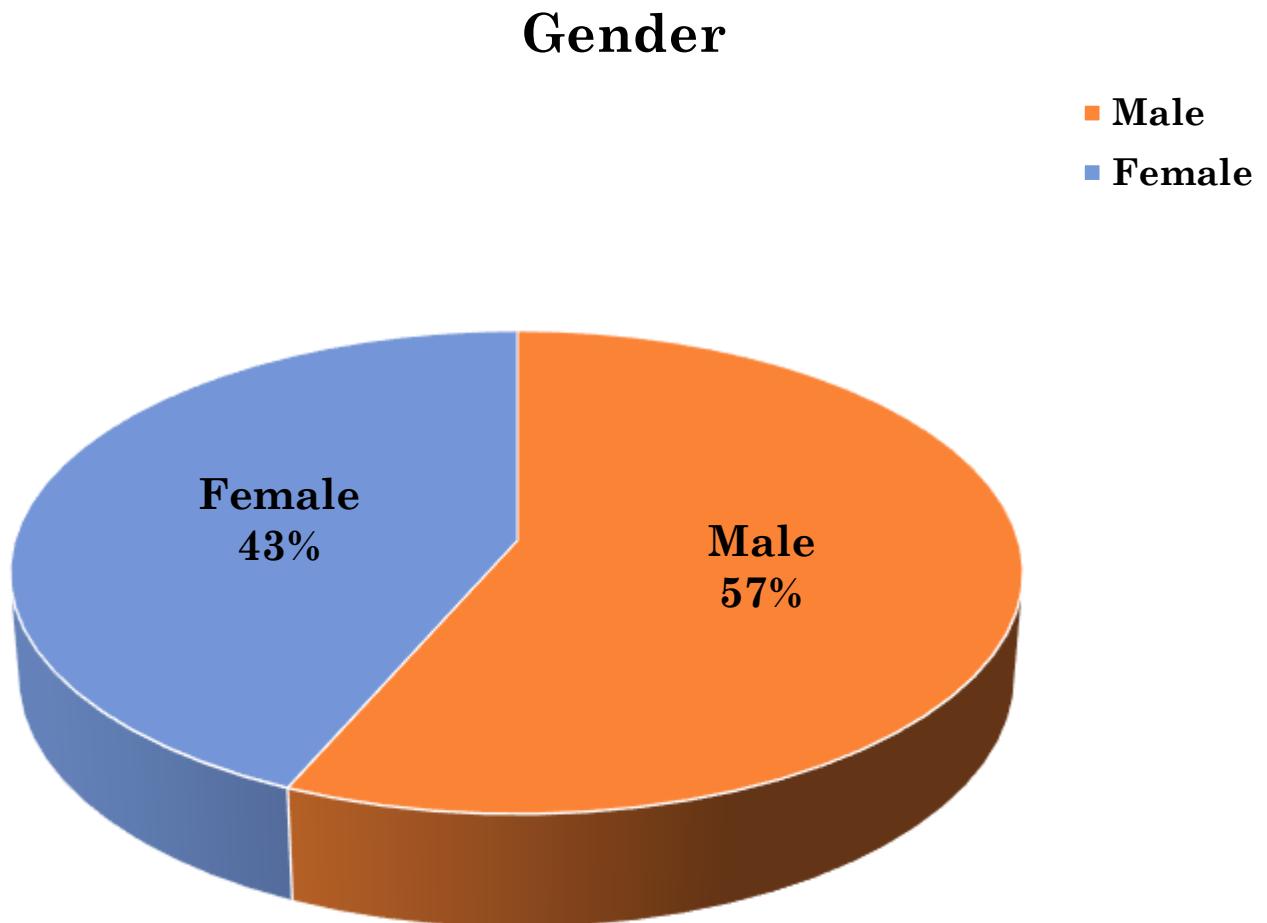
Upper GI bleed is the commonest emergency dealt by Gastroenterology team on floor, followed by encephalopathy and pain abdomen. ER mortality is about 2.2%.



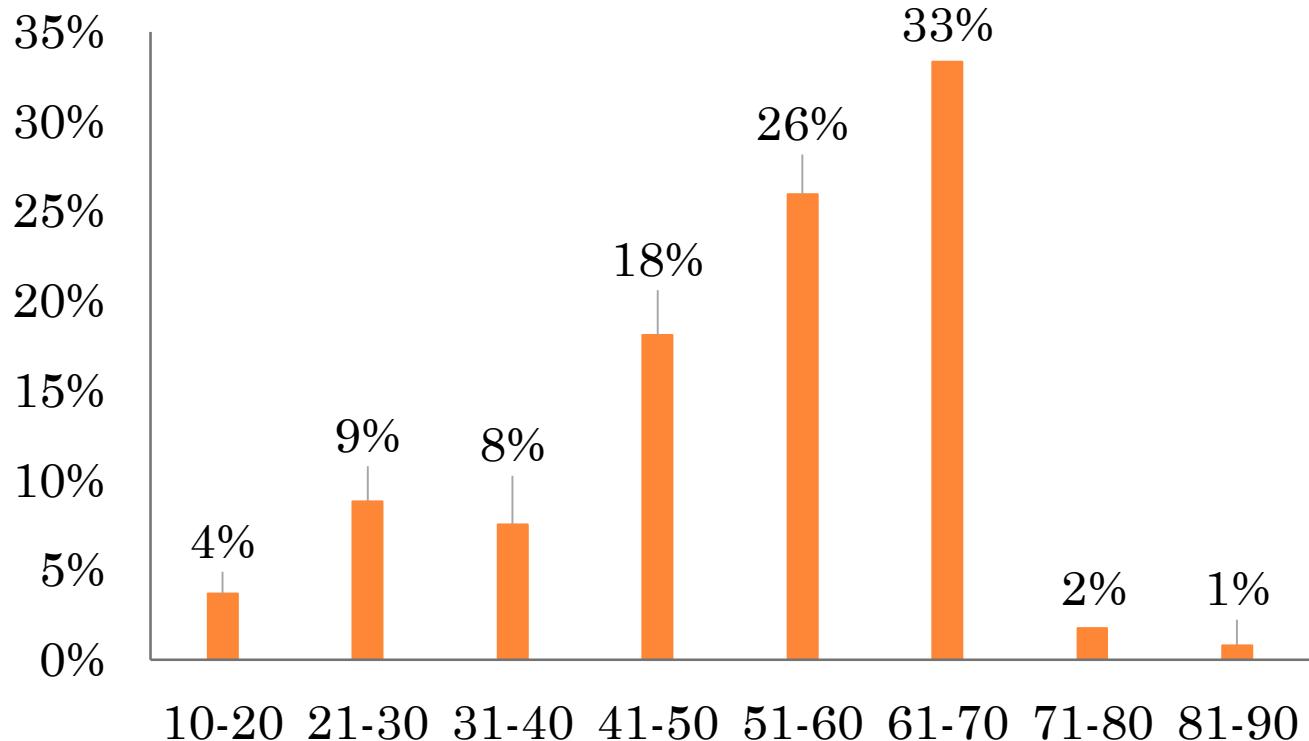
2020

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

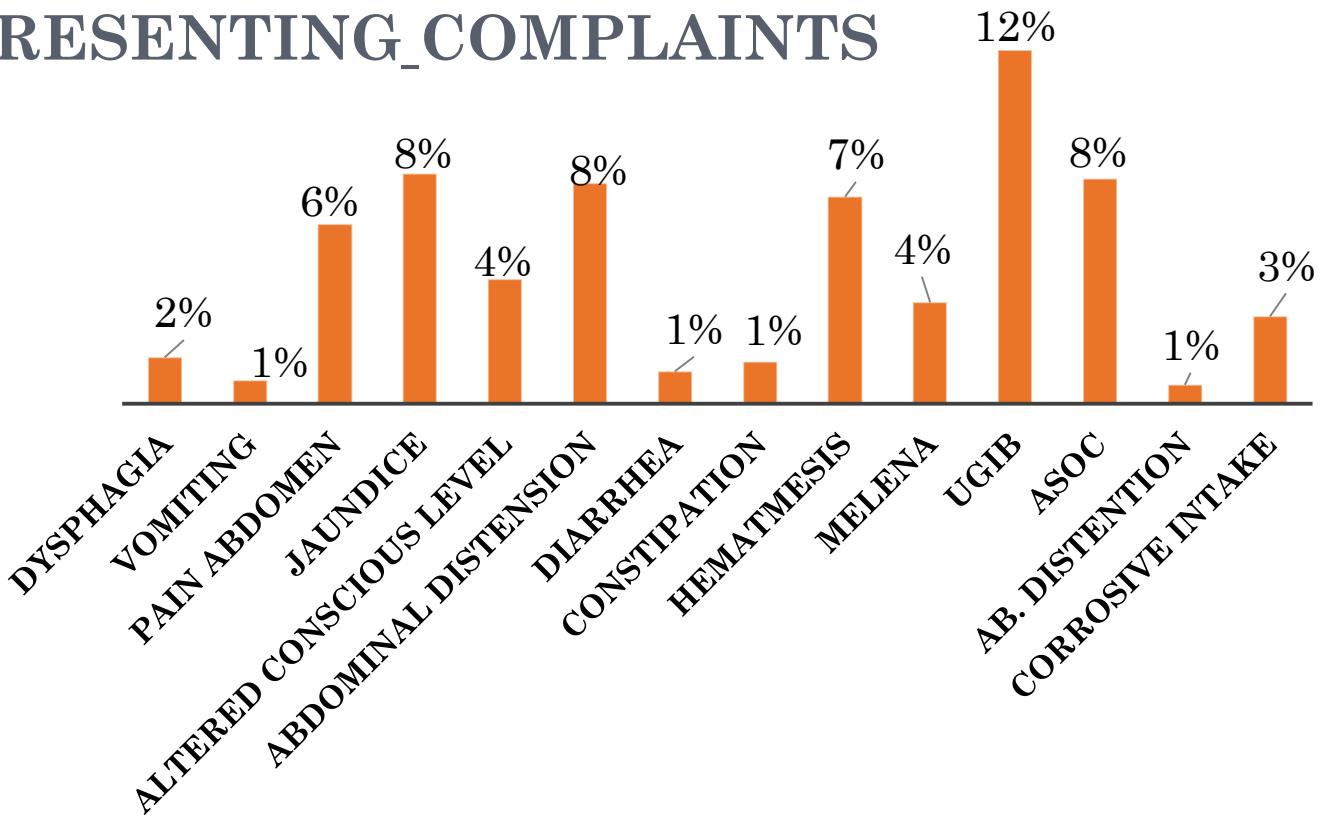
| | |
|----------------------|-----|
| Total No of Patients | 624 |
| Male | 353 |
| Female | 271 |



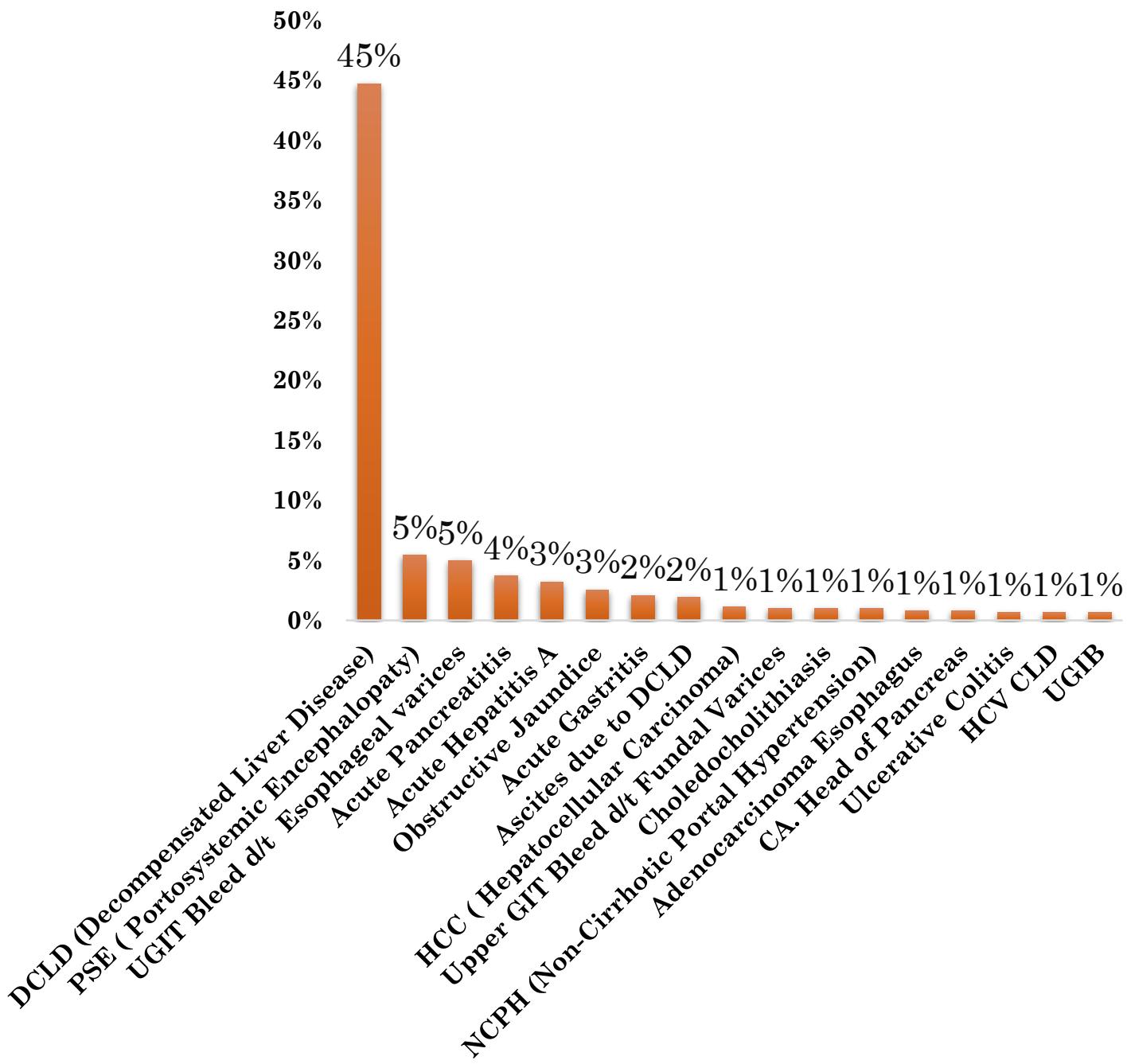
AGE WISE DISTRIBUTION



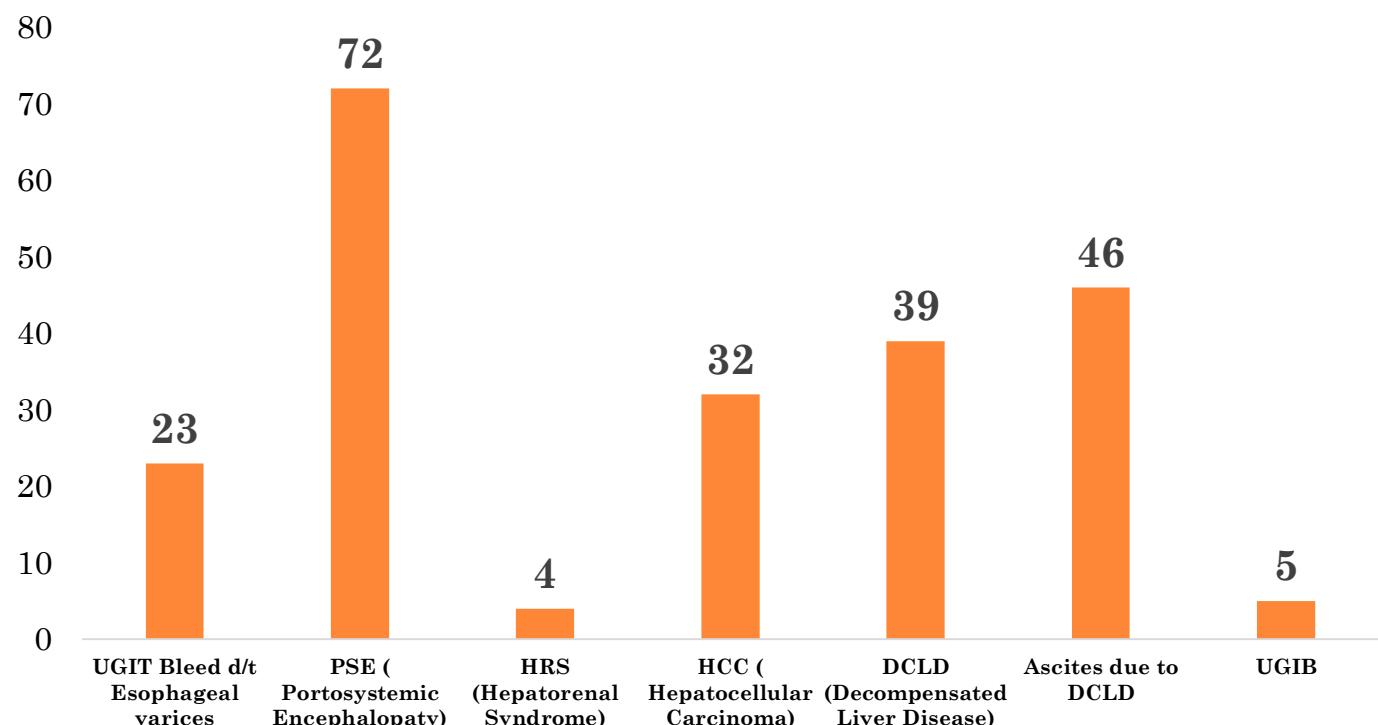
PRESENTING COMPLAINTS



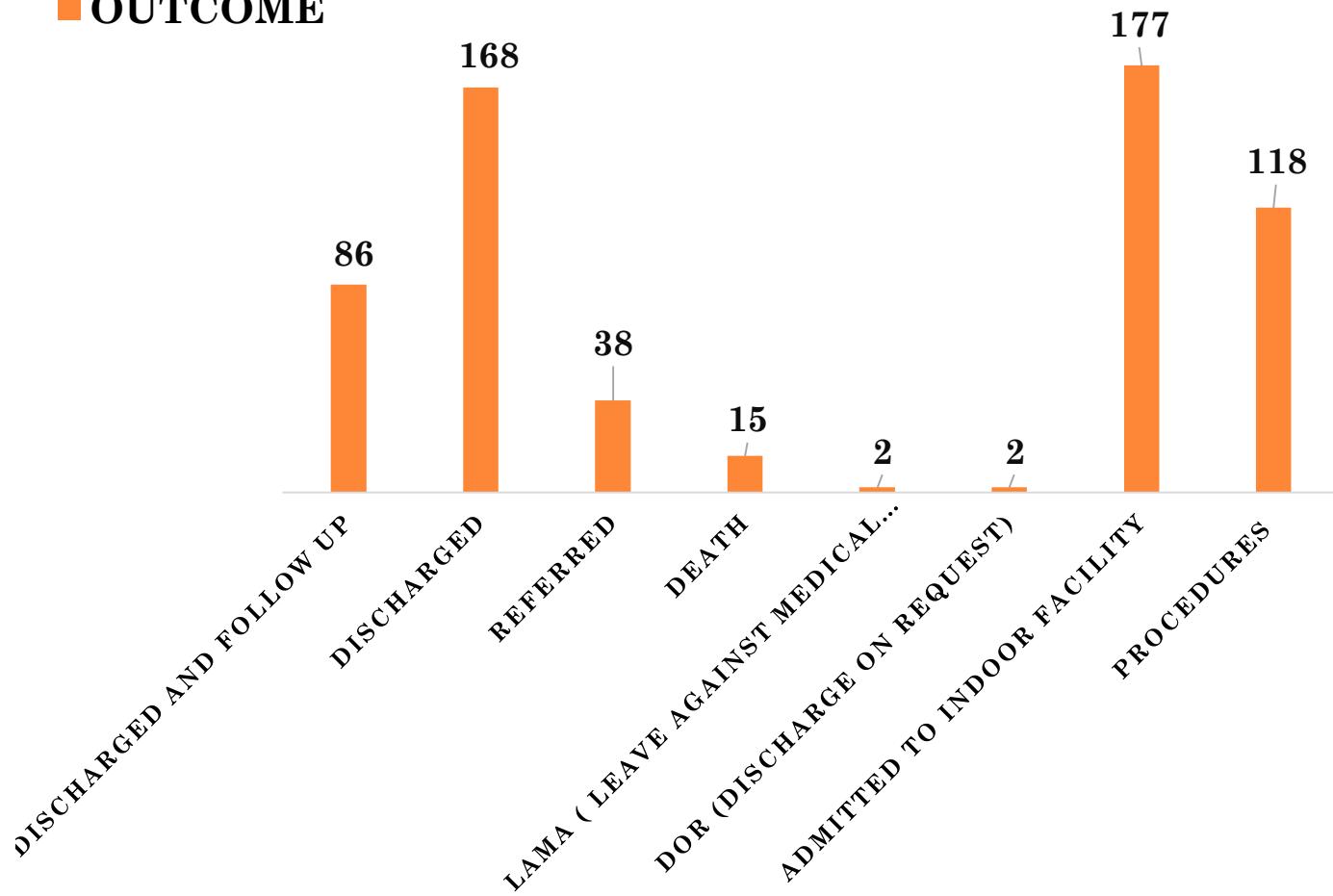
PRIMARY DAIGNOSIS



SECONDARY DIAGNOSIS



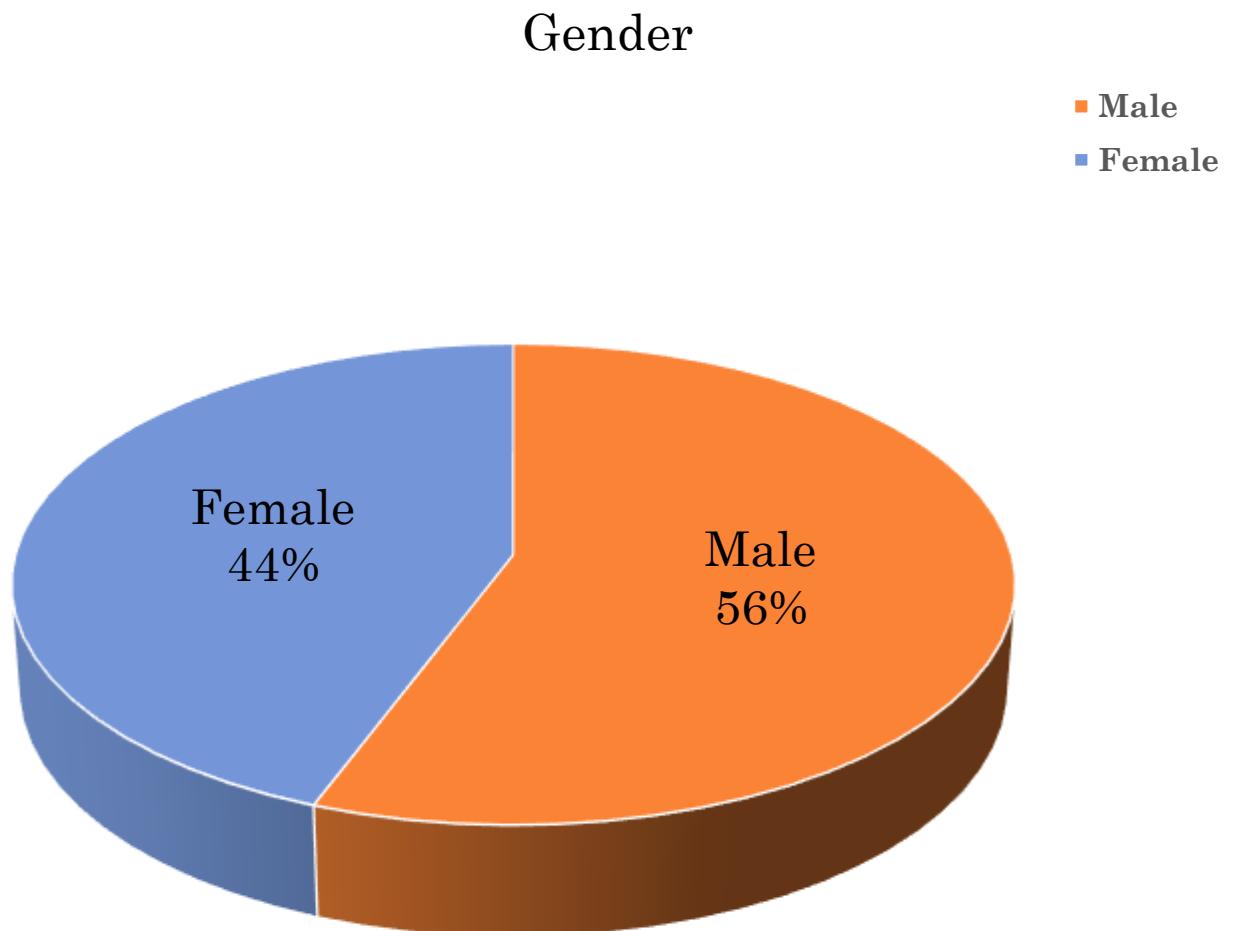
OUTCOME



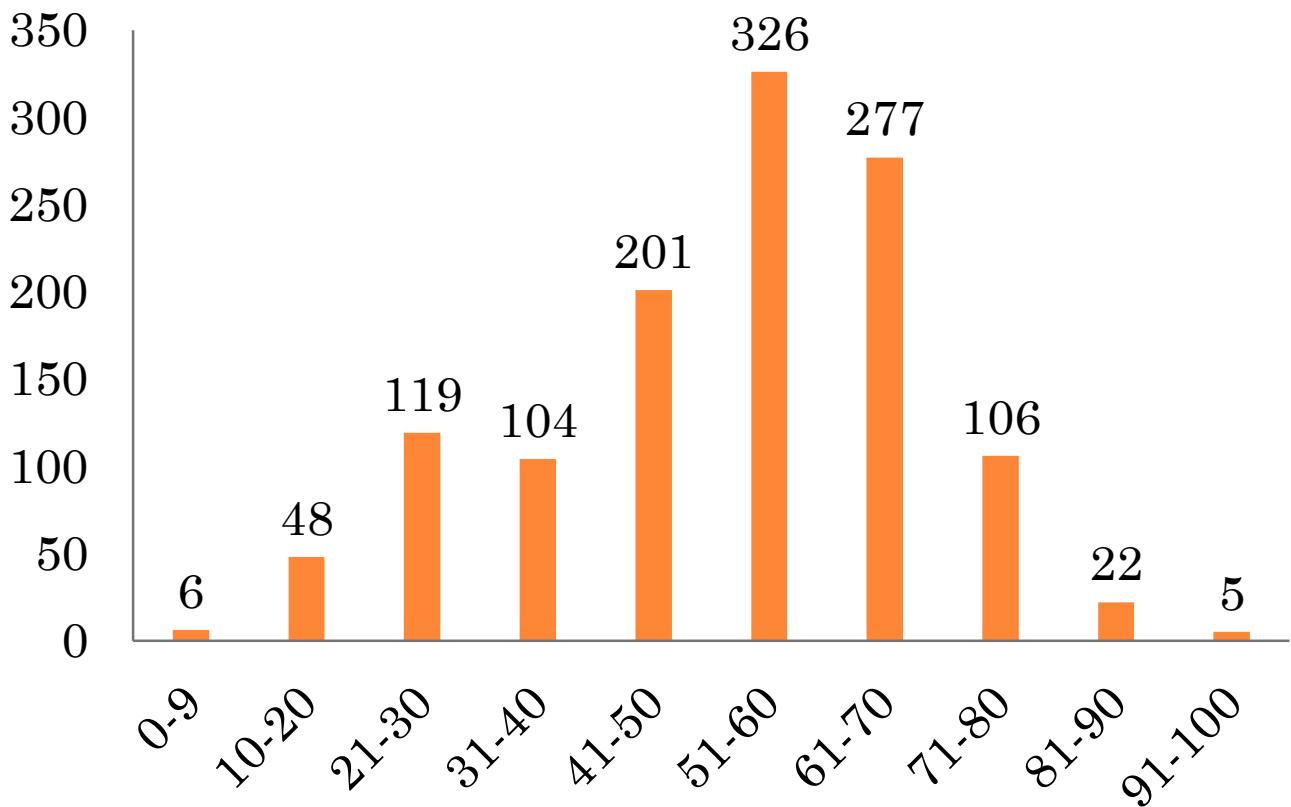
2021

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION

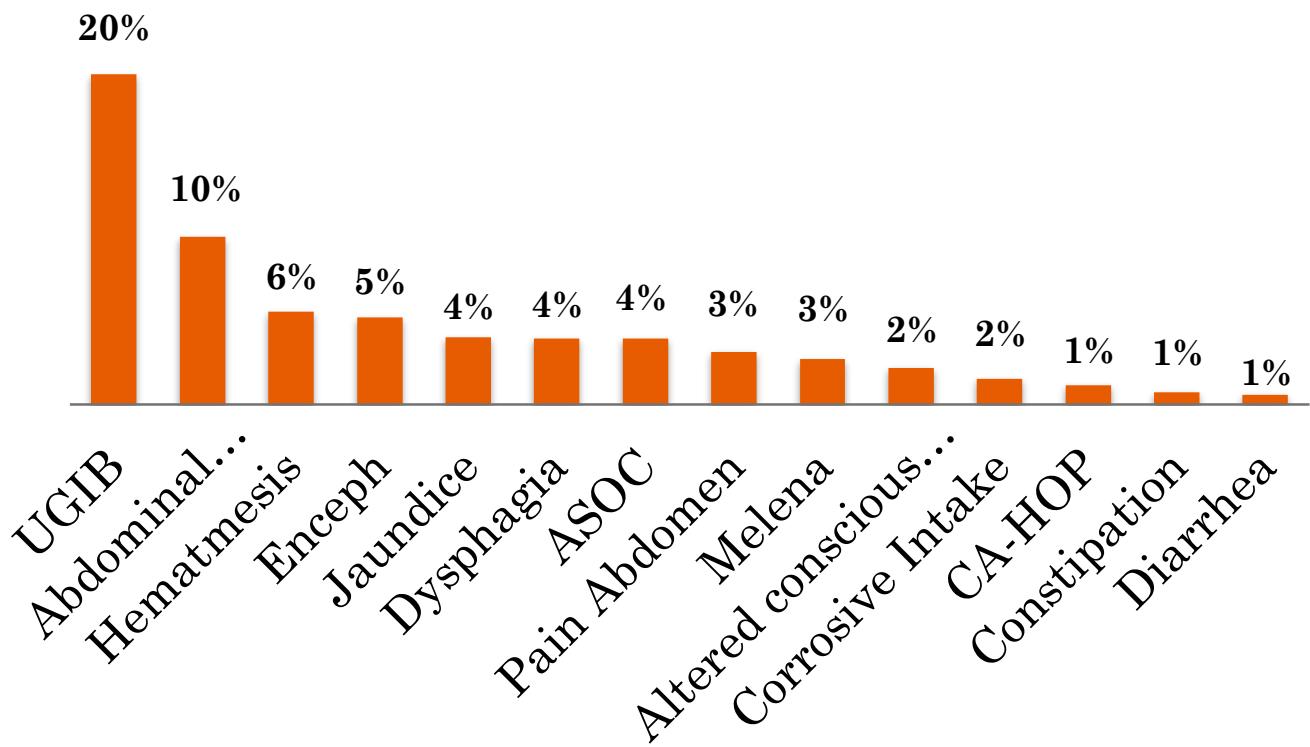
| | |
|----------------------|------|
| Total No of Patients | 1214 |
| Male | 677 |
| Female | 537 |



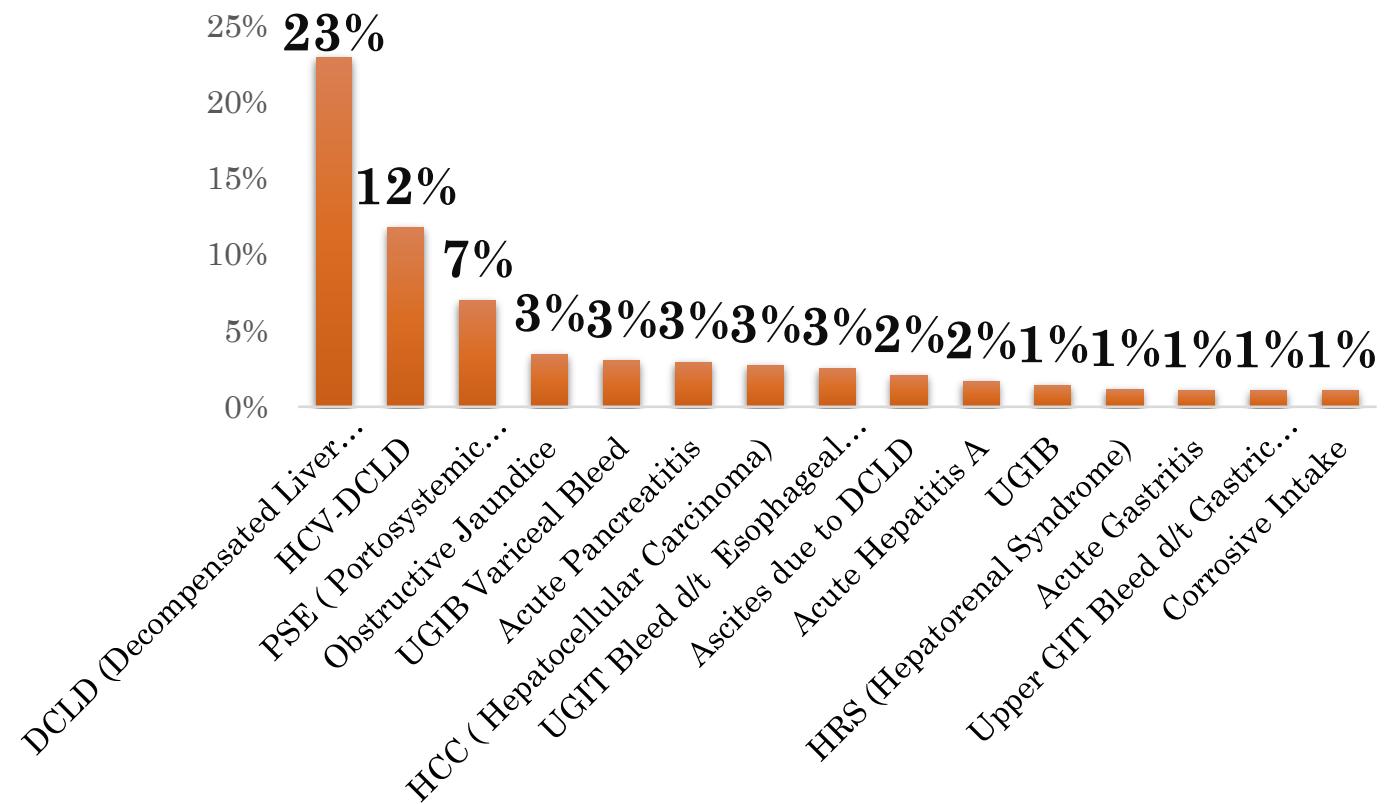
AGE WISE DISTRIBUTION



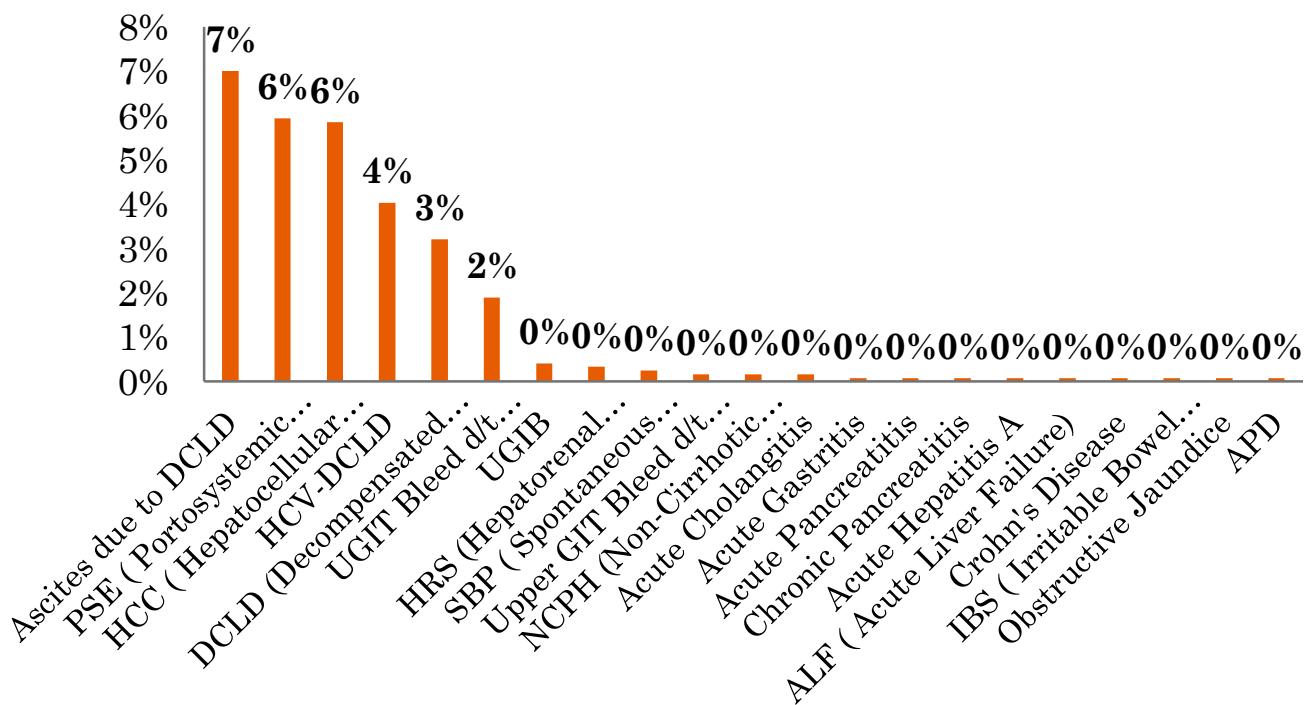
PRESENTING COMPLAINTS



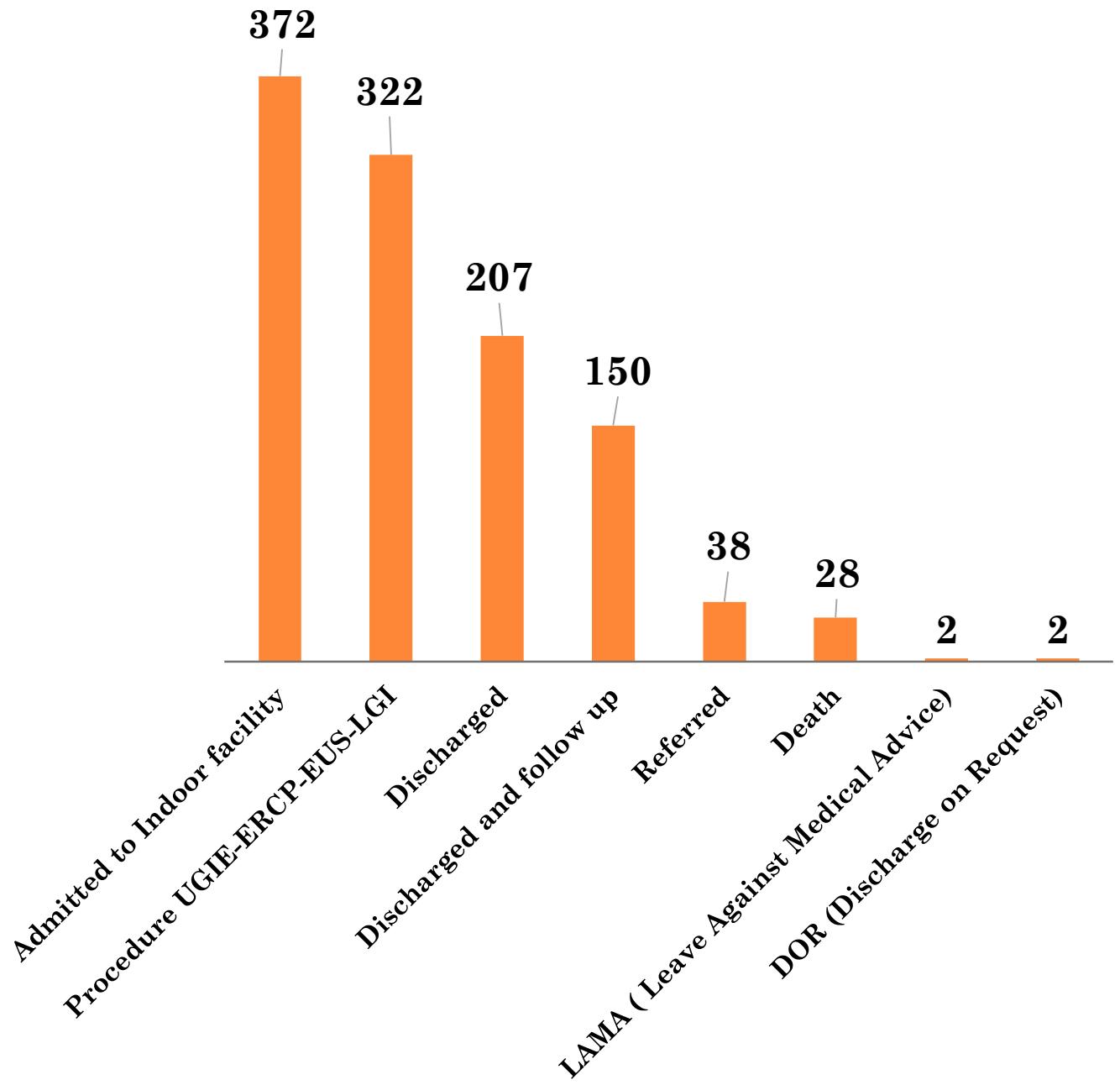
PRIMARY DIAGNOSIS



SECONDARY DIAGNOSIS



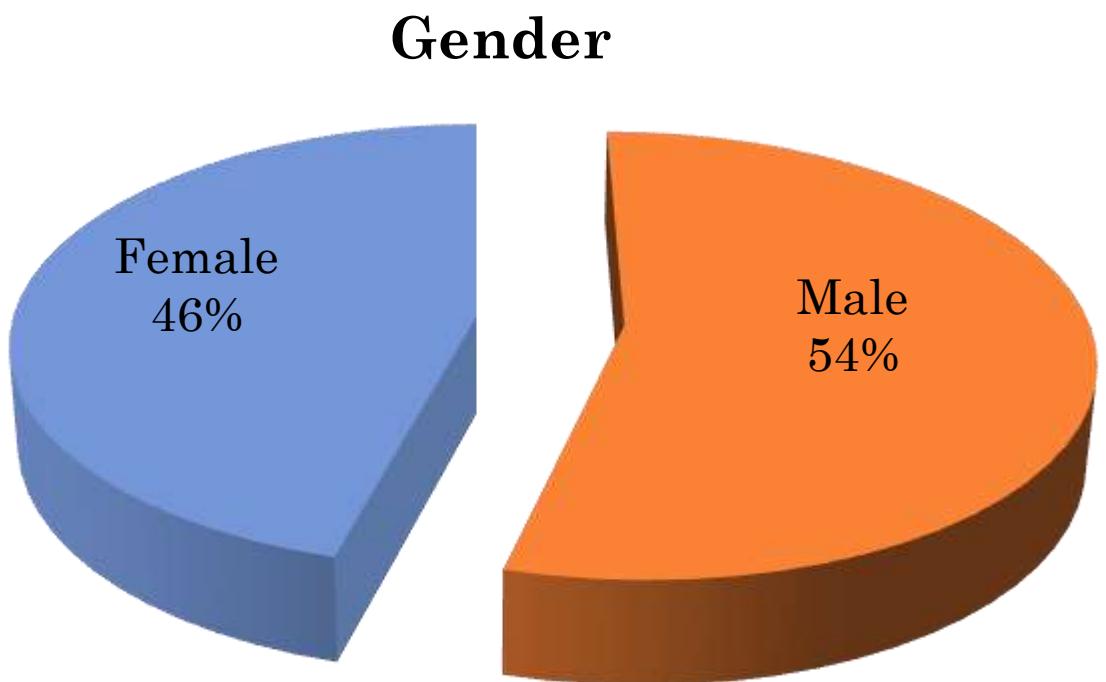
OUTCOME



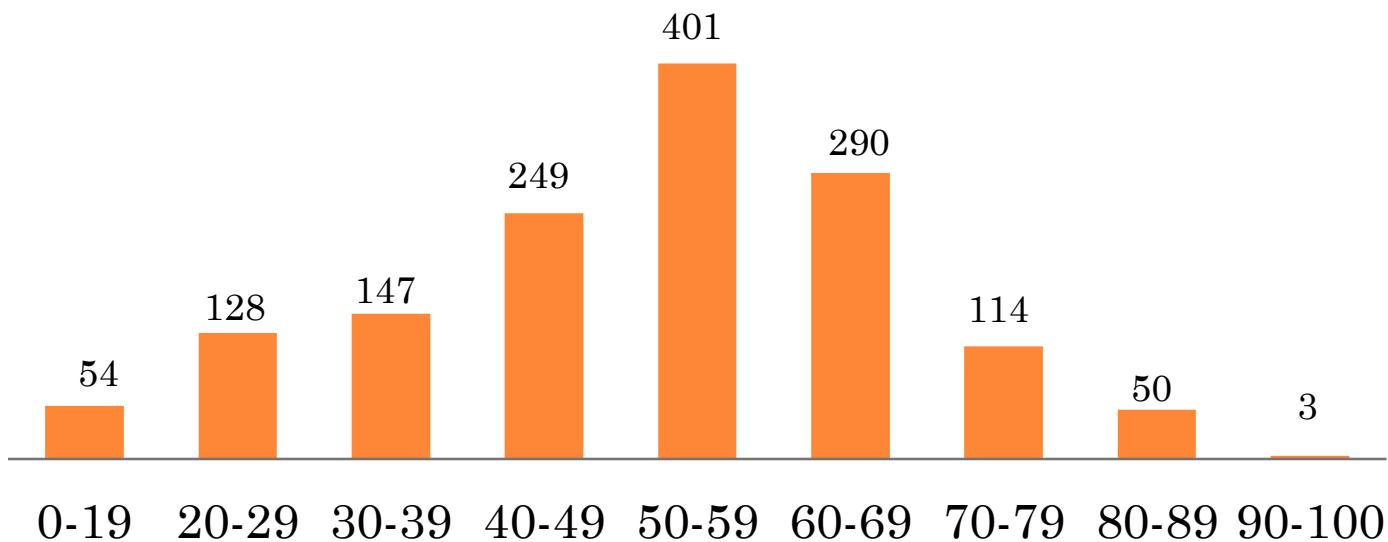
2022

TOTAL NUMBER OF PATIENTS WITH GENDER DISTRIBUTION.

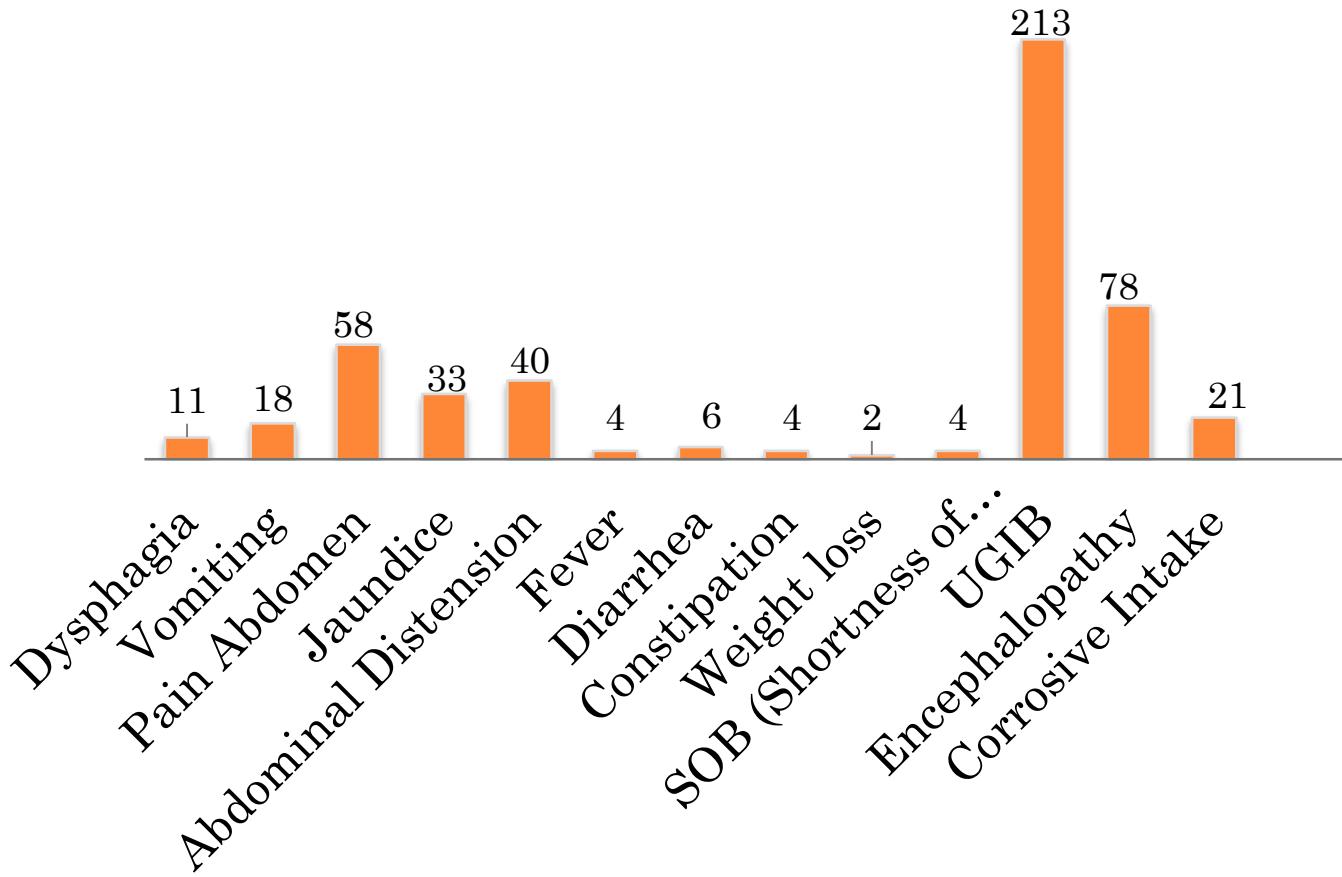
| | |
|-----------------------------|-------------|
| Total No of Patients | 1436 |
| Male | 780 |
| Female | 656 |



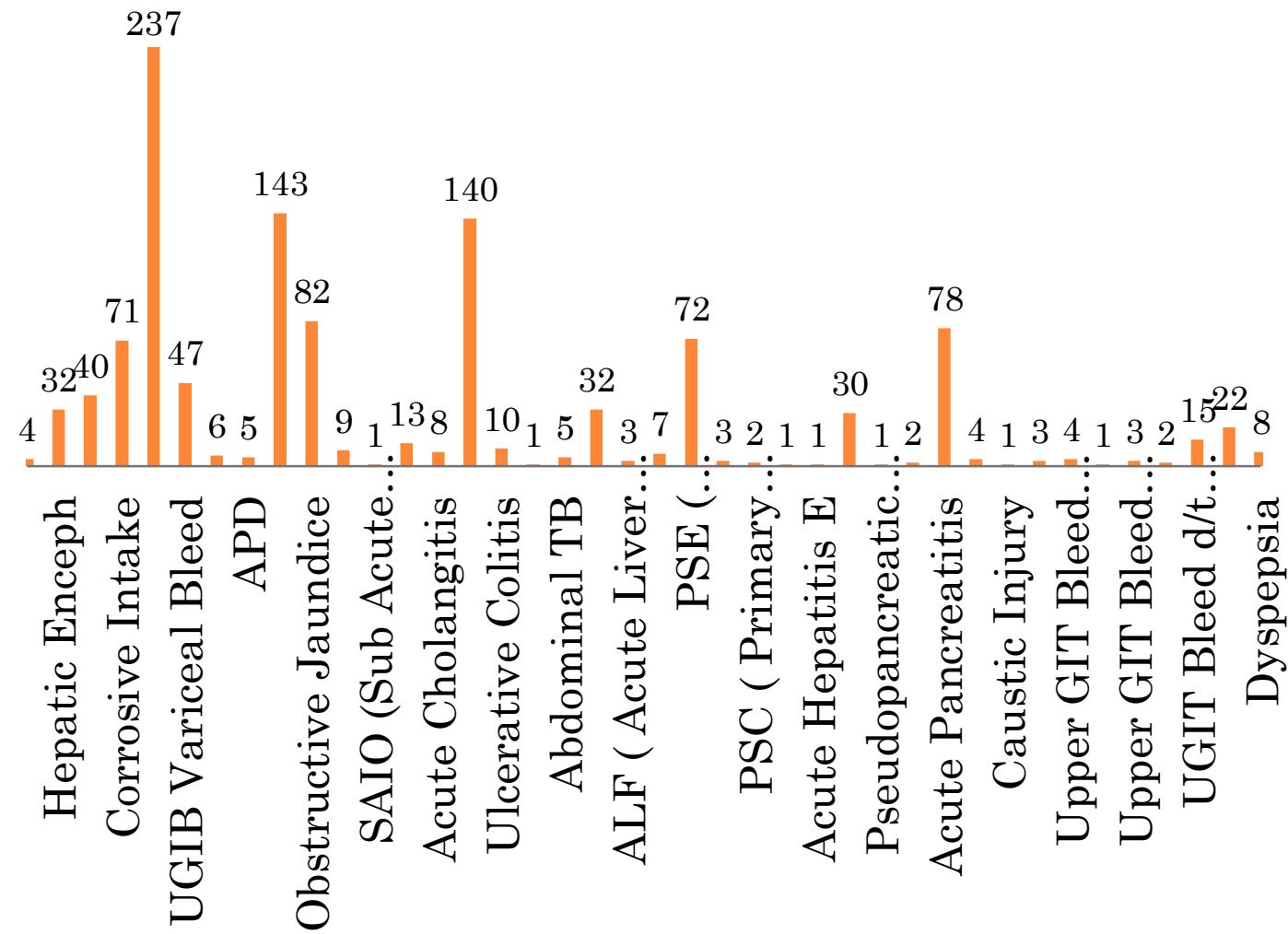
Age wise Distribution



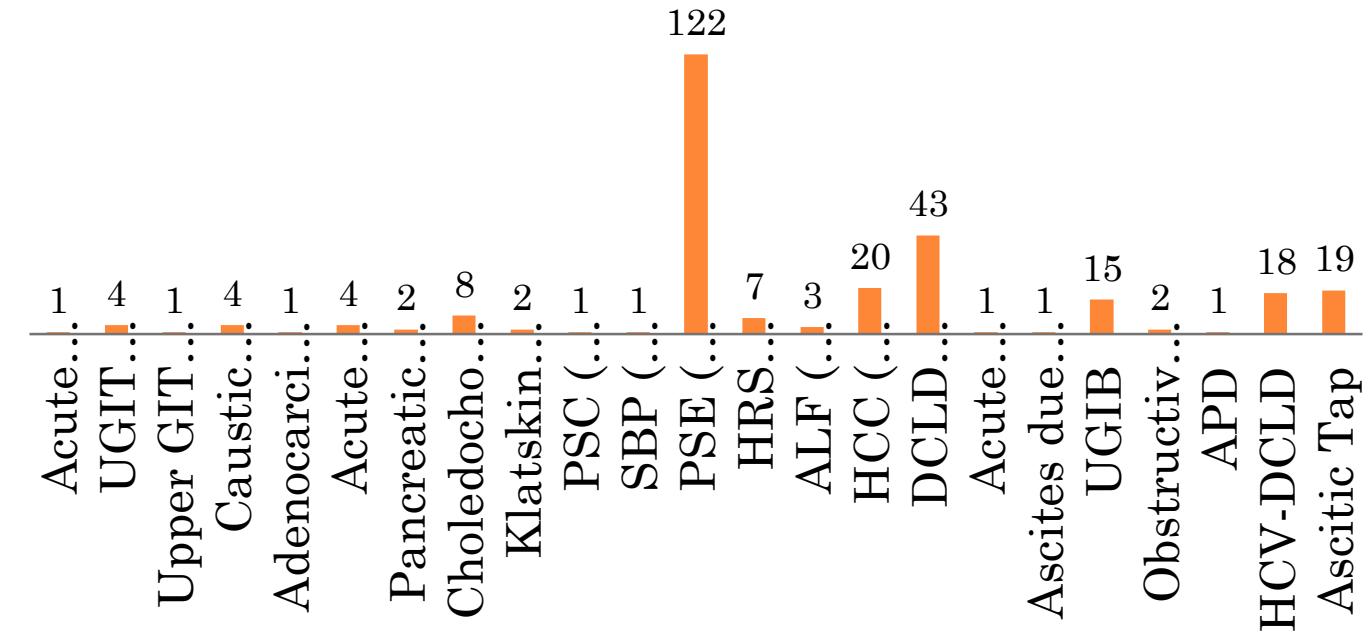
PRESENTING COMPLAINTS



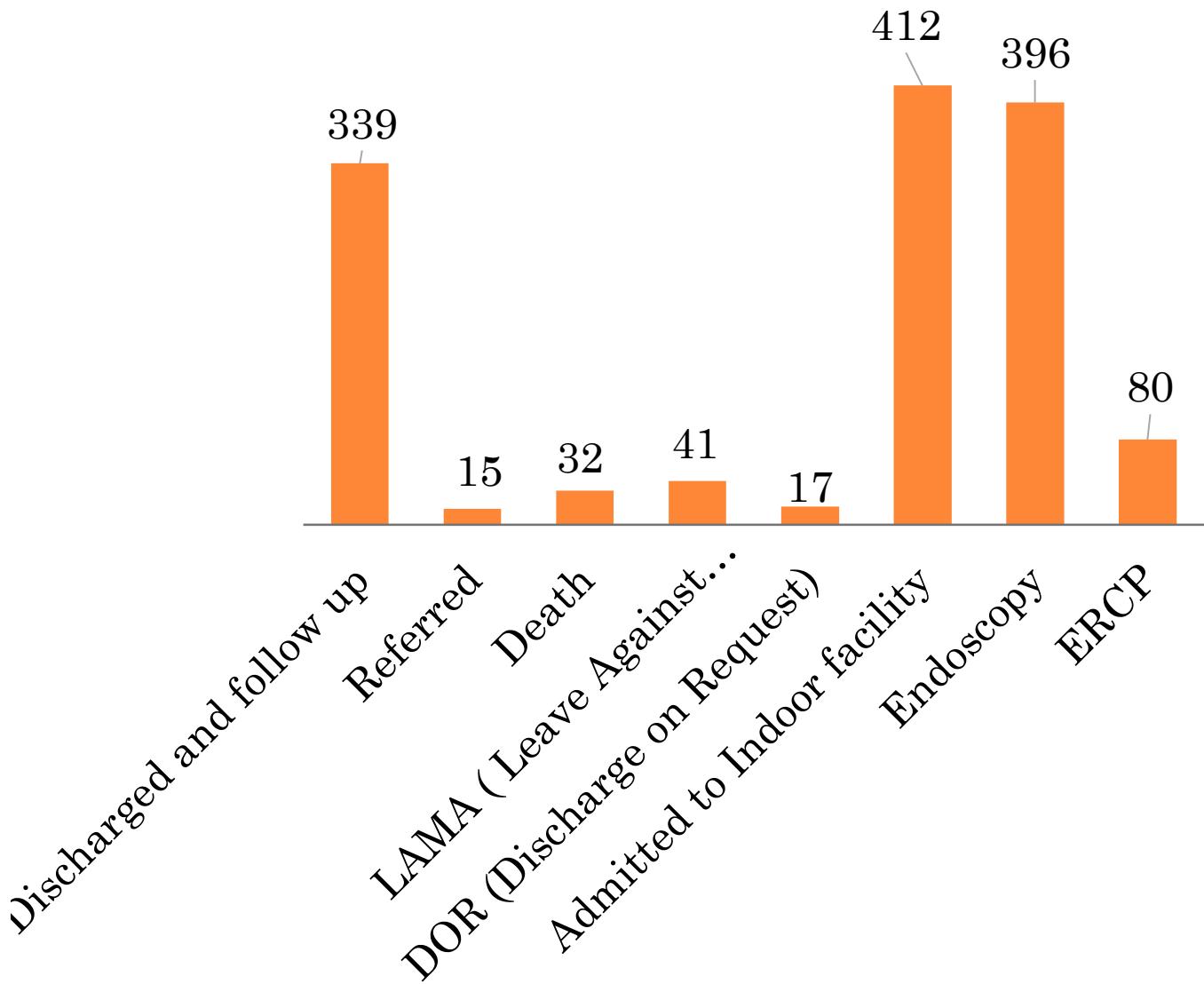
PRIMARY DIAGNOSIS



SECONDARY DIAGNOSIS



OUTCOME





DEPARTMENT OF GASTROENTEROLOGY

CENTER FOR LIVER AND DIGESTIVE DISEASE



Rawalpindi Medical University, Rawalpindi